

CALIFORNIA HIGHWAY PATROL  
**QUINCY AREA**  
**OFFICE REPLACEMENT PROJECT**

Draft Environmental Impact Report



February 2019

**CALIFORNIA HIGHWAY PATROL**

**Quincy Area Office Replacement Project**

**Initial Study/Mitigated Negative Declaration**

**Prepared for:**

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February 2019

Horizon Water and Environment. 2019.  
California Highway Patrol Quincy Area Office Replacement  
Project Initial Study/Mitigated Negative Declaration. February.  
(HWE 15.002) Oakland, CA.

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## ACRONYMS AND ABBREVIATIONS

AB	assembly bill
ADA	Americans with Disabilities Act
AFY	acre-feet per year
AGR	agricultural water supply
ALUC	Airport Land Use Commission
AP	agricultural preserve
APN	assessor's parcel number
AST	above-ground storage tank
ATCM	airborne toxic control measures
AVCSD	American Valley Community Services District
BAAQMD	Bay Area Air Quality Management District
bgs	below ground surface
BMP	best management practices
BP	before present
C&D	construction and demolition
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
Cal EMA	California Emergency Management Agency
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring Program
CBC	California Building Standards Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CEC	California Energy Commission
CEQA	California Environmental Quality Act

1	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (also known as the Superfund Act)
2		
3	CESA	California Endangered Species Act
4	CFGF	California Fish and Game Code
5	CFR	Code of Federal Regulations
6	CGS	California Geological Survey
7	CHHSL	California Human Health Screening Level
8	CHP	California Highway Patrol
9	CIWMA	California Integrated Waste Management Act
10	CIWMB	California Integrated Waste Management Board
11	CNDDDB	California Natural Diversity Database
12	CNEL	community noise equivalent level
13	CNPS	California Native Plant Society
14	CO	carbon monoxide
15	COLD	cold freshwater habitat
16	COS	conservation and open space
17	CO <sub>2</sub>	carbon dioxide
18	CO <sub>2</sub> e	carbon dioxide equivalent
19	CPRPD	Central Plumas Recreation and Park District
20	CRHR	California Register of Historical Resources
21	CRPR	California Rare Plant Rank
22	CUPA	Certified Unified Program Agency
23	CWA	Clean Water Act
24	cy	cubic yards
25		
26	dB	decibel
27	dBA	A-weighted decibel
28	DMV	California Department of Motor Vehicles
29	DOC	California Department of Conservation
30	DPM	diesel particulate matter
31	DPR	California Department of Parks and Recreation
32	DTSC	California Department of Toxic Substances Control
33	DUE	dwelling unit equivalent
34	DWR	California Department of Water Resources
35		
36	ESBSSA	Essential Services Buildings Seismic Safety Act
37	EIR	environmental impact report
38	EO	executive order
39	EQSD	East Quincy Services District
40	ESA	Endangered Species Act
41	ESL	environmental screening level

1		
2	FAA	Federal Aviation Administration
3	Farmland	Prime Farmland, Unique Farmland, or Farmland of
4		Statewide Importance
5	FCC	Federal Communications Commission
6	FEMA	Federal Emergency Management Agency
7	FERC	Federal Energy Regulatory Commission
8	FMMP	Farmland Mapping and Monitoring Program
9	ft	feet
10	ft <sup>2</sup>	square feet
11	FTA	Federal Transit Administration
12		
13	GHG	greenhouse gas
14	GSA	groundwater sustainability agency
15	GSP	groundwater sustainability plan
16		
17	HAP	hazardous air pollutant
18	HCP	habitat conservation plan
19	HI	hazard index
20	hp	horsepower
21	HRA	health risk assessment
22	HUC	hydrologic unit code
23	HVAC	heating, ventilation, and air conditioning
24	Hz	Hertz
25	H <sub>2</sub> S	hydrogen sulfide
26		
27	in/sec	inches per second
28	IND	industrial service supply
29	IS/MND	initial study/mitigated negative declaration
30		
31	KOP	key observation point
32	kVA	kilovolt-ampere
33	kW	kilowatt
34		
35	L <sub>dn</sub>	energy average of the A weighted sound levels occurring
36		during a 24 hour period
37	LEED	Leadership in Energy & Environmental Design
38	Leq	equivalent steady-state sound level
39	L <sub>max</sub>	maximum sound level
40	L <sub>min</sub>	minimum sound level
41	LOS	level of service

1	LUST	leaking underground storage tank
2	Lxx	sound level exceeded x percent of a specific time period
3		
4	MAP	Model Accreditation Plan
5	MBTA	Migratory Bird Treaty Act
6	MD	midday
7	MGY	million gallons per year
8	MLD	Most Likely Descendant
9	MMT	million metric tons
10	mph	miles per hour
11	MRZ	mineral resource zone
12	MTCO <sub>2e</sub>	metric tons of carbon dioxide equivalents
13	MUN	municipal water supply
14		
15	NAAQS	National Ambient Air Quality Standards
16	NAHC	Native American Heritage Commission
17	NCCP	Natural Communities Conservation Plan
18	NEIC	Northeast Information Center
19	NEHRP	National Earthquake Hazards Reduction Program
20	NESHAP	National Emissions Standards for Hazardous Air Pollutants
21	NHPA	National Historic Preservation Act
22	NHTSA	National Highway Traffic Safety Administration
23	NIST	National Institute of Standards and Technology
24	NMFS	National Marine Fisheries Service
25	NOD	Notice of Determination
26	NO <sub>x</sub>	oxides of nitrogen
27	NO <sub>2</sub>	nitrogen dioxide
28	NPDES	National Pollutant Discharge Elimination System
29	NPPA	Native Plant Protection Act of 1977
30	NRCS	Natural Resources Conservation Service
31	NRHP	National Register of Historic Places
32	NSAQMD	North Sierra Air Quality Management District
33	NSF	National Science Foundation
34	NSR	New Source Review
35	NWI	National Wetlands Inventory
36		
37	OEHHA	[California] Office of Environmental Health Hazard
38		Assessment
39	OSHA	Occupational Safety and Health Administration
40		
41	Pb	lead



1	PCBs	polychlorinated biphenyls
2	PCUSD	Plumas County Unified School District
3	PG&E	Pacific Gas & Electric Company
4	PM2.5	particulate matter of aerodynamic radius of 10 micrometers or less
5		
6	PM10	particulate matter of aerodynamic radius of 10 micrometers or less
7		
8	POW	hydropower generation
9	ppd	pounds per day
10	ppm	parts per million
11	PPV	peak particle velocity
12	PRC	Public Resources Code
13	Proposed Project	CHP Quincy Area Office Replacement Project
14	PSD	Prevention of Significant Deterioration
15	PST	Pacific Standard Time
16		
17	QCSD	Quincy Community Services District
18	QFPD	Quincy Fire Protection District
19		
20	RCRA	Resource Conservation and Recovery Act of 1976
21	REC1	water contact recreation
22	REC2	non-contact recreation
23	RF	radiofrequency
24	RMP	risk management plan
25	ROG	reactive organic gases
26	RWQCB	Regional Water Quality Control Board
27		
28	SB	senate bill
29	SGMA	Sustainable Groundwater Management Act
30	SHMA	Seismic Hazard Mapping Act
31	SHN	SHN Consulting Engineers and Geologists, Inc.
32	SMAQMD	Sacramento Metropolitan Air Quality Management District
33	SMARA	Surface Mining and Reclamation Act of 1975
34	SO2	sulfur dioxide
35	SPCC	Spill Prevention, Control, and Countermeasure
36	SPI	Sierra Pacific Industries
37	SPWN	spawning, reproduction, and/or early development
38	SR	State Route
39	SWPPP	stormwater pollution prevention plan
40	SWRCB	State Water Resources Control Board
41		

1	TAC	toxic air contaminant
2	TCP	traditional cultural property
3	TCR	tribal cultural resource
4		
5	UNFFR Project	Upper North Fork Feather River Hydroelectric Project
6	USC	U.S. Code
7	USACE	U.S. Army Corps of Engineers
8	USDA	U.S. Department of Agriculture
9	USEPA	U.S. Environmental Protection Agency
10	USFWS	U.S. Fish and Wildlife Service
11	USGBC	U.S. Green Building Council
12	USGS	U.S. Geological Survey
13	UST	underground storage tank
14		
15	VdB	vibration velocity in decibels
16		
17	WILD	wildlife habitat
18	Williamson Act	California Land Conservation Act of 1965
19	WR	Water Resources
20	WRCC	Western Regional Climate Center
21	WSRP	West Roseville Specific Plan
22	WWTP	wastewater treatment plant
23		
24	°F	degrees Fahrenheit
25	µg/m <sup>3</sup>	micrograms per cubic meter
26	§	section

1

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# Chapter 1

## INTRODUCTION

The California Highway Patrol (CHP) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction and operation of the proposed CHP Quincy Area Office Replacement Project (Proposed Project). The Proposed Project and its location are described in depth in Chapter 2, *Project Description*. This document was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines (14 California Code of Regulations [CCR] § 15000 *et seq.*).

### 1.1 INTENT AND SCOPE OF THIS DOCUMENT

This IS/MND has been prepared in accordance with CEQA, under which the Proposed Project is evaluated at a project level (CEQA Guidelines § 15378). CHP, as the lead agency under CEQA, will consider the Proposed Project's potential environmental impacts when considering whether to approve the Project. This IS/MND is an informational document intended for use in the planning and decision-making process for the Proposed Project and does not recommend approval or denial of the Proposed Project.

The site plans for the Proposed Project included in this IS/MND are conceptual. CHP anticipates that the final design for the Proposed Project would include some modifications to these conceptual plans, and the environmental analysis has been developed with conservative assumptions to accommodate some level of modification.

This IS/MND describes the Proposed Project; its environmental setting, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Proposed Project with regard to the following topics:

Aesthetics	Land Use and Planning
Agricultural/Forestry Resources	Mineral Resources
Air Quality	Noise
Biological Resources	Population and Housing
Cultural Resources	Public Services
Geology, Soils, and Seismicity	Recreation
Greenhouse Gas Emissions	Transportation and Traffic
Hazards and Hazardous Materials	Tribal Cultural Resources
Hydrology and Water Quality	Utilities and Service Systems

## 1.2 PUBLIC INVOLVEMENT PROCESS

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines § 15073 and § 15105(b) require that the lead agency designate a period during the IS/MND process when the public and other agencies can provide comments on the potential impacts of the Proposed Project. Accordingly, CHP is now circulating this document for a 30-day public and agency review period.

To provide input on this project, please send comments to the following contact:

Jennifer Parson, Senior Environmental Planner  
State of California Department of General Services  
Real Estate Services Division, Project Management & Development Branch  
Energy & Environmental Section  
707 Third Street, 4th Floor, MS 509  
West Sacramento, CA 95605  
Email: [quincy-comments@chp-ceqa.com](mailto:quincy-comments@chp-ceqa.com)

During its deliberations on whether to approve the Proposed Project, CHP will consider all comments received before 5:00 p.m. on the date identified in the Notice of Intent for closure of the public comment period.

## 1.3 ORGANIZATION OF THIS DOCUMENT

This IS/MND contains the following components:

Chapter 1, *Introduction*, provides a brief description of the intent and scope of this IS/MND, the public involvement process under CEQA, and the organization of and terminology used in this IS/MND.

Chapter 2, *Project Description*, describes the Proposed Project, including its purpose and goals, the site where the Proposed Project would be constructed, the construction approach and activities, operation-related activities, and related permits and approvals.

Chapter 3, *Environmental Checklist*, presents the checklist used to assess the Proposed Project's potential environmental effects, which is based on the model provided in Appendix G of the CEQA Guidelines. This chapter also includes a brief environmental setting description for each resource topic and identifies the Proposed Project's anticipated environmental impacts, as well as any mitigation measures that would be required to reduce any potentially significant impacts to a less-than-significant level.

Chapter 4, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this IS/MND.

## Appendices

Appendix A	<i>Local Laws, Regulations, and Policies</i>
Appendix B	<i>Air Quality Data</i>
Appendix C	<i>Health Risk Assessment Memorandum and Supporting Documentation</i>
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Appendix F	<i>Noise Analysis</i>
Appendix G	<i>Traffic Data</i>
Appendix H	<i>Mitigation Monitoring and Reporting Program</i>

## 1.4 IMPACT TERMINOLOGY

This IS/MND uses the following terminology to describe the environmental effects of the Proposed Project:

- A finding of *no impact* is made when the analysis concludes that the Proposed Project would not affect the particular environmental resource or issue.
- An impact is considered *less than significant* if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.
- An impact is considered *less than significant with mitigation* if the analysis concludes that no substantial adverse change in the environment would result with the inclusion of the mitigation measures described.
- An impact is considered *significant or potentially significant* if the analysis concludes that a substantial adverse effect on the environment could result.
- *Mitigation* refers to specific measures or activities that would be adopted by the lead agency to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.
- A *cumulative impact* refers to one that can result when a change in the environment would result from the incremental impacts of a project along with other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this IS/MND focuses on whether the Proposed Project's incremental contribution to significant cumulative impacts caused by the project in combination with past, present, or probable future projects is cumulatively considerable.
- Because the term "significant" has a specific usage in evaluating the impacts under CEQA, it is used to describe only the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" are used when not discussing the significance of an environmental impact.



1

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## **2.1 BACKGROUND AND NEED FOR THE PROJECT**

The California Highway Patrol (CHP) is the statewide law enforcement agency responsible for enforcing vehicular and traffic laws on state highways and freeways; regulating the transport of goods, including hazardous waste; and serving as emergency responders to incidents on the state's highway system. CHP's mission is to provide "the highest level of safety, service, and security to the people of California" (CHP 2018). To fulfill this mission, CHP has the following objectives:

- prevent loss of life, injuries, and property damage;
- maximize service to the public and assistance to allied agencies;
- manage traffic and emergency incidents;
- protect public and state assets; and
- improve departmental efficiency.

CHP law enforcement services are currently provided to Quincy and its surrounding areas via the CHP Northern Division's existing Quincy Area Office at 86 West Main Street, Quincy, California. An increasing number of CHP employees have been assigned to the Quincy area, and the existing facility's primary building and support structures are outdated and too small to support the additional staff and related equipment. Therefore, a new CHP facility is required in the Quincy area.

## **2.2 PROPOSED PROJECT PURPOSE AND OBJECTIVES**

The CHP Quincy Area Office Replacement Project (Proposed Project) is being constructed as part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the Proposed Project is to relocate the Quincy Area Office currently on Main Street and replace it with new upgraded facilities on Lee Road.

Specific project objectives are as follows:

- construct a facility that meets CHP's statewide programming requirements (e.g., provision of a citation clearance area and additional/separate locker rooms for female employees);
- construct a facility in the Quincy Area Office's service area that provides efficient access to the highway system;

- develop a CHP facility that is accredited under the U.S. Green Building Council's (USGBC) Leadership in Energy & Environmental Design (LEED) program at the "Silver" or better level of certification, as required by state law where economically feasible;
- meet the California Essential Services Buildings Seismic Safety Act requirements by designing and constructing a facility capable of providing essential services to the public after a disaster; and
- construct a facility that meets the standards of the Americans with Disabilities Act (ADA), California Green Code, and Title 24 energy and resource standards.

## 2.3 PROPOSED PROJECT LOCATION AND SETTING

The Proposed Project site is located north of the intersection of Lee Road and Alta Avenue in the community of Quincy in Plumas County, California (**Figures 2-1** and **2-2**). The Proposed Project site is approximately 0.1 mile north of State Route 70 and 2 miles east of the existing Quincy Area Office, which is located at 86 West Main Street in Quincy. The site has assessor parcel number (APN) 117-140-027-000 and is approximately 5 acres.

The site has a low slope and is undeveloped consisting of low grasses throughout. Fencing is located near a portion of the Project site's eastern and on its entire western and southern boundaries. An access gate is currently located at the southern boundary on Lee Road. A drainage starting from Lee Road near the southeast corner of the site runs in a northeasterly direction along the eastern side of the Project site. The site is currently used for livestock grazing.

Overhead Pacific Gas and Electric Company (PG&E) power lines and poles parallel the site's southern boundary along Lee Road. Currently, there are no domestic water, sewer or gas lines which are currently jurisdictionally available for use on the site (though they do exist within the Lee Road right-of-way), nor is there a municipal storm drain system serving the site.

Adjacent land uses include agricultural land to the north and east, residential uses on large parcels to the west. The parcel to the east of the site is currently occupied by a barn structure and water trough. An animal hospital, residences, a few dining areas, gas stations, and commercial uses are situated across Lee Road to the south of the Project site (SHN Consulting Engineers and Geologists, Inc. [SHN] 2017).

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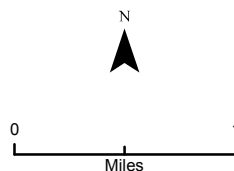


**Figure 2-1: Project Vicinity**

Prepared by:



Prepared for:  
California Highway Patrol



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**Figure 2-2  
Project Site**

Prepared by:



Prepared for:  
California Highway Patrol



0 250 500  
Feet

**Quincy Area Office Replacement Project  
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## 2.4 PROPOSED PROJECT CHARACTERISTICS

The Proposed Project involves the construction and operation of a replacement CHP Area Office and associated improvements. The conceptual site plan and building design for the CHP Area Office are shown in **Figure 2-3** and **Figure 2-4**, respectively. Note: The plans shown on Figure 2-3 and Figure 2-4 are conceptual; CHP anticipates that the final design for the Proposed Project would include modifications to these plans.

The Proposed Project would develop approximately 3.8 acres (approximately 163,500 square feet [ft<sup>2</sup>]) within the 5-acre site. Approximately 2.8 acres (approximately 122,000 ft<sup>2</sup>) of the developed project site would be new impervious surfaces; the remainder of the site would be unpaved, such as for landscaping or snow storage. These area quantities are subject to change pending final design.

This section continues with a discussion of the Project facilities, construction activities, and operational activities that would be part of the Proposed Project. The section also discusses the proposed changes from the existing CHP Quincy Area Office operations, to the extent they are relevant to the environmental analysis.

### 2.4.1 PROJECT FACILITIES

The Proposed Project would include occupied structures, a radio tower, secured and visitor parking areas, enclosures and storage areas/spaces, a fuel island with above-ground fuel tank, utility improvements, and other ancillary improvements. Conceptual locations of Project facilities are indicated on Figure 2-3.

#### **Structures**

Structures that would be part of the Proposed Project include a main office building, an automobile service building, a radio vault building, and a secured storage building. A general description of each structure is provided below. Details of the site preparation work are provided in Section 2.4.2, "Construction."

**Main Office Building:** The main office building would likely be a single-story building of approximately 19,200 ft<sup>2</sup>. The facility would be built to meet California Green Code and Title 24 resource standards and achieve a USGBC LEED Silver or higher accreditation. The USGBC grants LEED certification based on a scoring system related to eight major categories: location and transportation; sustainable sites; water efficiency; energy and atmosphere; materials and resources; indoor environmental quality; innovation; and regional priority (USGBC 2018).

The main building would include:

- offices and work stations;
- break room/conference room;
- interview rooms;
- briefing/training room;
- armory;



- gun cleaning room with gun cleaners/solvents and materials storage;
- issue room (for officer patrol equipment storage);
- evidence processing, logging, and storage areas;
- men's/women's restrooms, locker rooms, and showers;
- "physical means of arrest" training room and storage;
- lactation room;
- rain gear lockers;
- voice/data room; and
- janitorial, mechanical, and electrical rooms

**Automobile Service Building:** The automobile service building would be a single-story building totaling approximately 5,400 ft<sup>2</sup> that would include an office, two auto service bays, a car wash bay, a vehicle service equipment area, new tire storage area, vehicle parts storage room, restroom, and an air compressor room. This structure may be attached or in very close proximity to the main office building. Quart containers of new oil and one 275-gallon used oil tank would be stored in or adjacent to the automobile service building. The automobile service bays would have vehicle lifts for servicing and maintaining CHP vehicles.

**Radio Vault Building:** The one-story radio vault building would be approximately 750 ft<sup>2</sup> and would include a radio vault room and an equipment storage space.

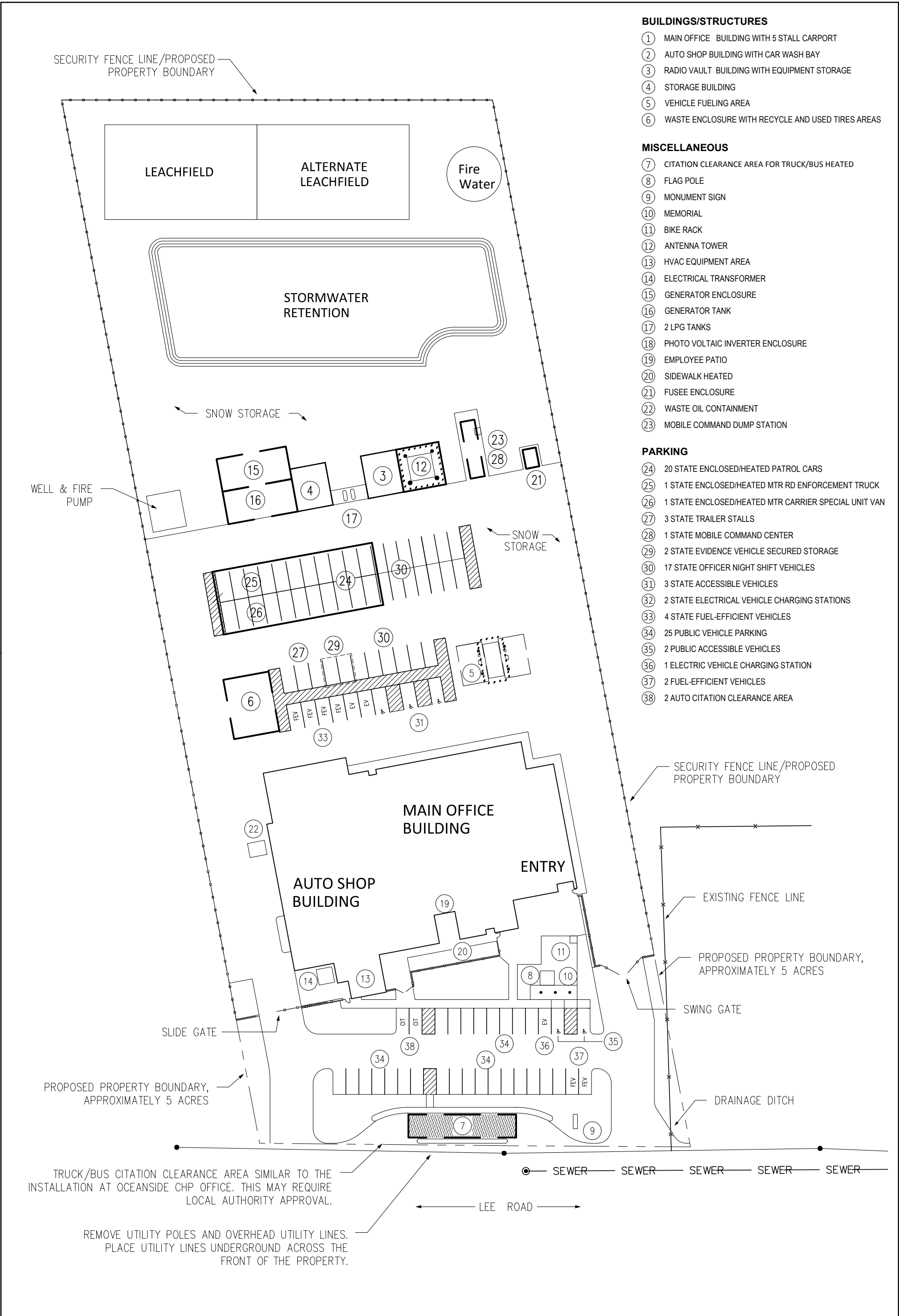
**Property Storage Building:** The one-story property storage building would include a bulk evidence and property storage area and a secured storage area. The building would be heated to prevent degradation of stored equipment. The total size of the building would be approximately 750 ft<sup>2</sup>. This use could be combined with the radio vault building.

### ***Miscellaneous Site Elements***

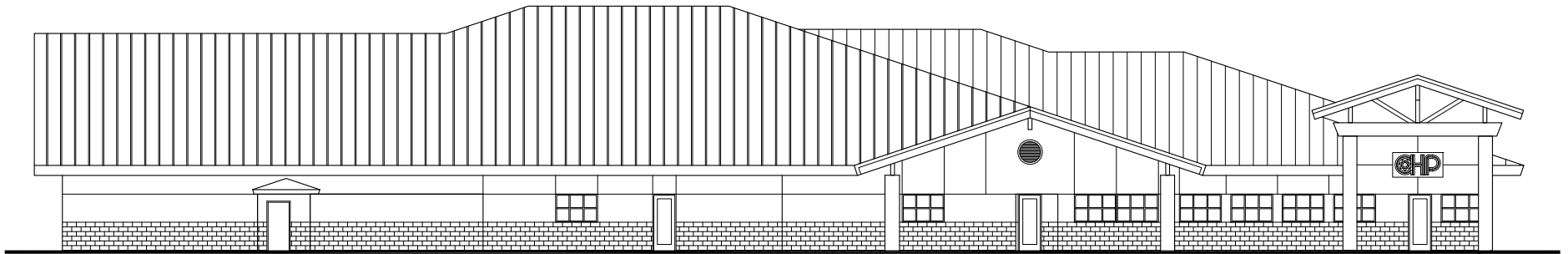
**Vehicle Fueling Area:** The vehicle fueling area would include an approximately 12,000-gallon aboveground fuel storage tank with two mechanized dispensers, a canopy over the fueling area, and temporary parking for a fuel tanker truck while refilling the gasoline tank, covering an area of approximately 3,300 ft<sup>2</sup>. The fuel storage tank would have self-integrated secondary containment. Gasoline stored in the fuel island would be used to supply CHP vehicles. The vehicle fueling area would have protection against freezing for equipment and water ponding near the fuel island.

**Radio Tower:** The radio tower would consist of a 120-foot-tall steel lattice communications tower and a 20-foot-tall mast supporting a 4- to 8-foot-long lightning rod: comprising a total height of up to 148 feet. The total area at the tower base would be approximately 625 ft<sup>2</sup>. No tower lighting or markings are required by the Federal Aviation Administration at this time.

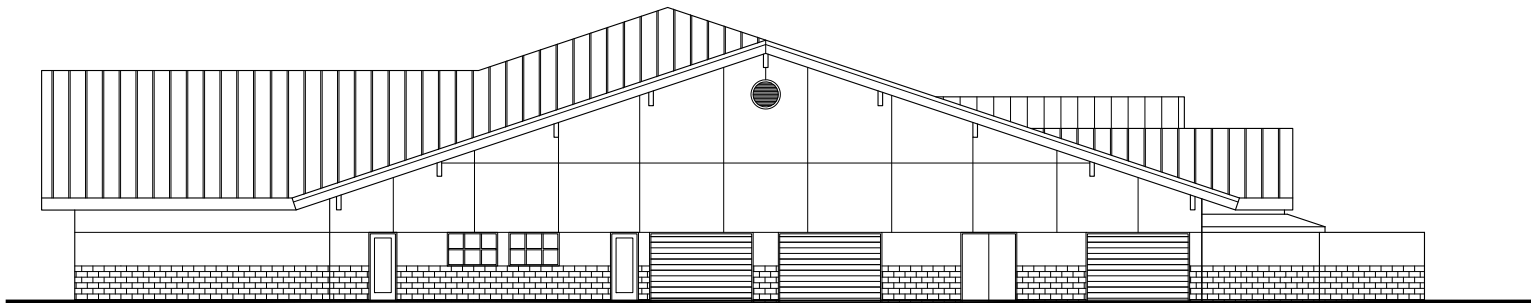
**Waste Enclosure:** A waste enclosure would be constructed on the Project site. The enclosure would contain covered areas for two trash dumpsters, used-tire racks, and recycling bins. The waste enclosure would be approximately 1,300 ft<sup>2</sup>.



1 *This page intentionally left blank*



SOUTH  
NO SCALE



WEST  
NO SCALE

Prepared by:

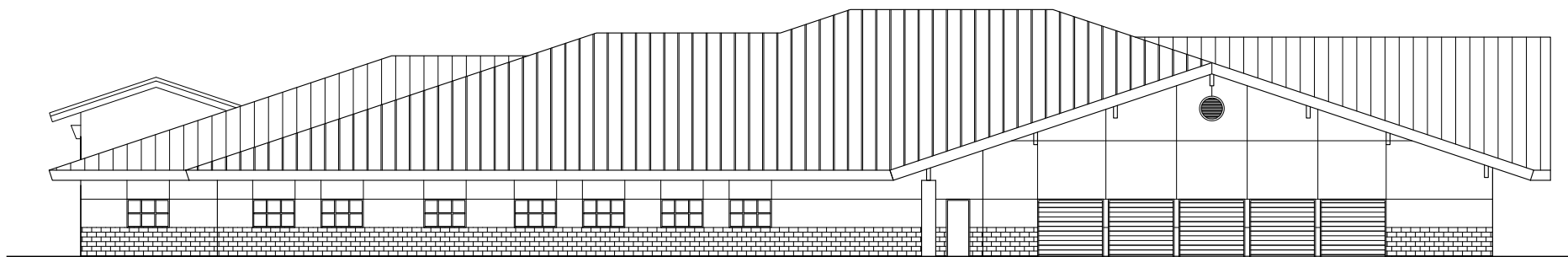


Prepared for:  
California Highway Patrol

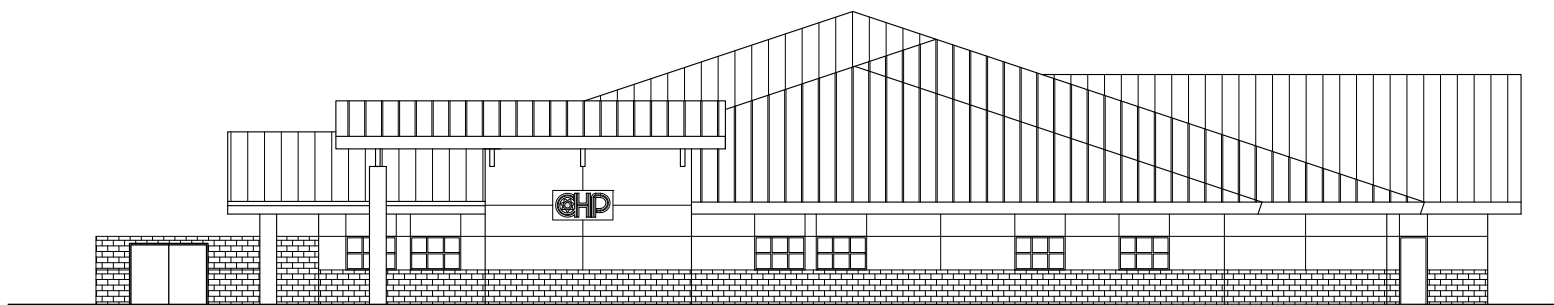
Source: DGS 2018

**Figure 2-4.**  
**Conceptual General Building Design (1 of 2)**

**Quincy Area Office Replacement Project**  
**Initial Study/Mitigated Negative Declaration**



NORTH  
NO SCALE



EAST  
NO SCALE

Prepared by:



Prepared for:  
California Highway Patrol

Source: DGS 2018

**Figure 2-4.**  
**Conceptual General Building Design (2 of 2)**

**Quincy Area Office Replacement Project**  
**Initial Study/Mitigated Negative Declaration**

**Waste Oil Containment:** Up to an approximately 275-gallon waste oil tank would be located in an area near the automobile service building and that area would be approximately 120 ft<sup>2</sup>.

**Heating, Ventilation, and Air Conditioning Equipment Area:** The heating, ventilation, and air conditioning (HVAC) system would be approximately 800 ft<sup>2</sup>. The HVAC system would provide fully automated and continuous space heating, ventilation and cooling to all areas of the office building and automobile service building that would be designed for occupancy. The HVAC equipment would be protected from weather conditions.

**Emergency Generator and Tank Area:** The partially-walled generator area would contain an emergency diesel generator, exhaust system, cooling system, diesel fuel supply and storage systems, engine control system, and miscellaneous cables and equipment to support the generator's operation. The emergency generator's capacity would be between 250 and 300 kilowatts (kW). Aboveground diesel fuel tanks would hold minimum 96 hours of fuel supply for continuous full-load operation, which would equate to approximately 4,000 gallons. The emergency generator would be used as a power source for the Area Office facilities, as necessary, if primary power sources were to fail. The total area of the generator and tank area would be approximately 2,240 ft<sup>2</sup>.

**Fusee Enclosure:** Fusees (flares) would be stored within a steel container inside this three-sided, non-flammable enclosure (approximately 200 ft<sup>2</sup>).

### ***Parking and Citation Clearance Area***

**Parking and Carport Areas:** The Proposed Project would have a visitor parking area and a secured parking area for CHP vehicles and equipment. The secured and visitor parking areas would provide approximately 86 parking spaces and total approximately 33,400 ft<sup>2</sup>; within this area, approximately 4,400 ft<sup>2</sup> would be a heated and ventilated enclosure. The visitor parking area would have approximately 25 spaces, two spaces for handicap-accessible parking (includes one for van parking), two spaces for fuel-efficient vehicles, one space for an electric vehicle, and two spaces for automobiles associated with the citation clearance area described below, for a total of 32 spaces. An electric vehicle charging station would be located in the electric vehicle parking space. The secured parking area would have approximately 54 total spaces. Within this parking area, the patrol, motor road enforcement, and motor carrier specialist vehicles parking spaces would be inside a heated and ventilated enclosure. The secured parking area also includes space for trailers, a mobile command center, officer and non-uniformed employee personal vehicles, electric and fuel-efficient vehicles, and handicap-accessible vans.

**Citation Clearance Area:** Citation clearance parking areas would be provided for verifying correction of citations and processing for standard passenger vehicles as well as larger commercial vehicles, such as buses. The citation clearance parking areas would total approximately 4,800 ft<sup>2</sup>. Citations issued to passenger and commercial vehicles may include violations for outdated registration tags, missing license plates, missing mirrors, malfunctioning engine or exhaust systems, and other vehicle violations ("fix-it tickets"). The purpose of the citation clearance area at the CHP Quincy Area Office is to provide space in which officers can safely determine whether violations have been addressed. For citation clearance involving passenger vehicles, the driver parks in the appropriate designated citation clearance parking area and requests verification of citation correction from an officer on duty. These verifications occur throughout the day and typically take less than 5 minutes.



Following a satisfactory verification of citation, the citation is cleared and the driver leaves the site. For citation clearance checks involving commercial vehicles, an appointment with the CHP Commercial Unit officer is required. The commercial vehicle parks in the larger designated citation clearing area for the verification. Commercial vehicle verifications for correction of citations are scheduled several times per week; they take more time than passenger vehicle checks and may require multiple engine shut-downs and periods of engine idling.

### ***Ancillary Improvements***

**Fencing and Gates:** The Proposed Project's secured areas would be surrounded by a 6-foot-high concrete-block masonry fence with 2-foot metal pickets. Access-controlled metal rolling gates would be installed at the authorized vehicle entrances/exits to/from the secured parking area. Associated with each of the rolling vehicle access gates would be a metal personnel-gate with access control measures.

**Fire Hydrants:** Fire hydrants would be installed in accordance with applicable requirements of the Office of the State Fire Marshal and local fire department.

**Landscape and Irrigation:** Landscaping requiring minimal maintenance and an automatic irrigation system would be installed on the Project site. Plants selected would be freeze-hardy and able to withstand the weight of snow for months at a time. The irrigation system installed would have protection against freezes.

**Exterior Lighting:** Exterior lighting would be installed throughout the site for security purposes; lighting would be located along the site perimeter, but it would be directed downward and shielded to reduce light dispersion. Lighting must meet CHP safety protocols, which require 24-hour lighting of the facility. Entrances would have brighter lighting than the parking areas and office building. Flagpoles would have lighting which may be directed upward or downward, pending final design.

**Flagpoles and Monument:** Three metal flag poles, each 30 feet high, would be installed in front of the CHP office building near the visitor parking area. A CHP monument sign would be installed near the visitor parking area.

**Snow Considerations:** The Proposed Project would include design considerations for snow conditions, because snow may remain on the site for several months each year. Site considerations include providing for regular snowplowing of parking areas and inclusion of on-site areas to store excess plowed snow, as shown in Figure 2-3. Sidewalks (approximately 7,000 ft<sup>2</sup>) would include active in-slab snow melt systems. Salt would be used sparingly to de-ice any remaining walkway slippery areas. All site utilities and water sources would have freeze protection. Site walls and fences would be designed for extended periods of snowpack load to one side. In addition, all building entrances would have roof coverage above doorways to direct roof snow away from adjacent walking and parking areas. Main entry points would have additional protection against blown snow.

### ***Utilities and Stormwater Drainage***

**Utilities:** The Project site will have immediate access to utilities, including water, sewer, electricity, natural gas, and communications infrastructure which are located below and

along Lee Road. However, the site is currently not connected to any of these utility infrastructure lines. **Table 2-1** lists anticipated utility agencies that would serve the Proposed Project.

Note that the site is in unincorporated Plumas County and is currently not within the American Valley Community Services District, the primary provider of water and sanitary sewer services in the Quincy area. As part of the Proposed Project's planning process, the State has applied for annexation of the Proposed Project site into the Town of Quincy. In the event that the annexation process is successful, water and sanitary sewer services would be provided by American Valley Community Services District. However, if the annexation process is not successful, a septic system and water supply system would be installed on the Proposed Project site (shown on Figure 2-3). The septic system would consist of a belowground 3,750-gallon septic tank and two leach fields (each approximately 7,000 ft<sup>2</sup>). The water system would include a well (approximately 20 feet deep), domestic water pump, fire pump, and a 280,000-gallon water tank dedicated for domestic uses with 255,000 gallons dedicated to fire flow uses. The domestic water pump would likely be comprised of an electric, 2 horsepower (hp) pump, and the fire protection system pump would likely be comprised of a 50-hp diesel pump. The maximum height of the water tank would be 40 feet aboveground.

**Table 2-1. Local Utility Agencies in the Project Area**

Utility Service	Utility Agency
Water Supply	American Valley Community Services District (previously East Quincy Services District)
Sanitary Sewer	American Valley Community Services District
Electrical and Gas Service	PG&E
Data and Phone Service	HughesNet

As part of the Proposed Project, it is anticipated the existing aboveground electric power lines and telecommunication lines located along the Project site's southern boundary and Lee Road would be relocated below ground. This is to provide a more secure means of vehicular ingress/egress from/to Lee Road.

**Stormwater Drainage:** As shown in Figure 2-3, a drainage originating from Lee Road, parallels the Project site's eastern boundary side and flows in a northeasterly direction. There is no municipal storm drain system that serves the site. Site runoff from the Project site would be directed north-northeast to a stormwater management area in the northern portion of the Project site. Site runoff would be managed and discharged according to post-construction stormwater requirements issued by the State Water Resources Control Board.

## 2.4.2 CONSTRUCTION

### ***Construction Methods***

**Site Preparation and Earthwork:** Site preparation would include clearing and grubbing; fence removal; removal of the utility poles and relocation of power and telecommunication

lines belowground along Lee Road; excavation, import, and placement of fill; and compacting the fill and other materials. Clearing and grubbing would be conducted using standard excavators, bulldozers, and hand labor. As there are no trees on the Project site, no tree removal would occur.

To the extent feasible, excavated soil may be reused on-site. Fill would be delivered to the building sites by conventional haul trucks (approximately 15 cubic yards [cy] per load). Fill material would be placed with an excavator and compacted with a compactor/roller. To allow proper drainage on the Project site, the Project footprint may need to be raised by about 2 feet, which would require up to approximately 12,260 cy of fill.

In the event that a septic system is installed on-site, the tank would require excavation of up to 12 feet and the leach field would involve excavation of up to 4 feet. Similarly, in the event that a groundwater well gets constructed, the well would require up to 20 feet of excavation pending depth of access to adequate groundwater.

**Table 2-2** provides the anticipated number of potential worker- and construction-related trips for the Proposed Project's various construction phases.

**Table 2-2. Worker and Construction Trips During Various Construction Phases for the Proposed Project**

Construction Phase	Worker Trips	Vendor Trips	Hauling Trips	Total One-Way Trips by Construction Phase
Demolition	0	0	0	0
Site Preparation	90	0	1,532	1,622
Grading	120	0	0	120
Construction	11,270	4,600	0	15,870
Paving	360	0	0	360
Coating	180	0	0	180

**Buildings and Structures:** Construction of buildings and structures will include the following activities:

- delivery of pre-cast concrete wall panels or concrete masonry units for walls and/or concrete delivery, forming, and placement, and rebar placement;
- structural steel work (erection/assembly, welding and bolting);
- installation of electrical/instrumentation work;
- masonry or pre-cast concrete wall construction;
- installation of mechanical equipment and piping; and

- installation of interior and exterior finish materials and assemblies (doors, windows, etc.).

**Pipelines and Underground Utilities:** Drainage, water supply, wastewater pipelines, electric lines along Lee Road, and other underground utilities would be installed in open trenches, typically using conventional cut-and-cover construction techniques. The first step in the construction process would be surface preparation, including removing any structures, pavement, or vegetation from the surface of the trench area using jackhammers, graders, pavement saws, mowing equipment, bulldozers, front-end loaders, and/or trucks. A backhoe, track-mounted excavator, or similar equipment would then be used to dig trenches for pipelines or installation of underground utility equipment. The width of the trench would generally vary between 3 and 5 feet and the depth would be approximately three times the pipeline diameter. The diameter of pipelines would vary by service flow requirements, material type, and purpose.

In most locations, trenches would likely have vertical sidewalls to minimize the amount of soil excavated and the area needed for the construction easement. Soil excavated from the trench would be stockpiled alongside the trench or in staging areas for later reuse in backfilling the trench, or for fill at other on-site locations, if appropriate. Native soil would be reused for backfill to the greatest extent possible; however, it may not have the properties necessary for compaction and stability. If not reusable, the soil would be hauled off site for disposal at an appropriate disposal site.

The final step in the installation process is to restore the ground surface. Site restoration would generally involve paving, installing landscaping, or installing erosion controls, as necessary.

### ***Construction Equipment***

The main pieces of equipment that may be used are as follows:

- |                           |   |
|---------------------------|---|
| ▪ track-mounted excavator | ▪ compactor   |
| ▪ small crane             | ▪ front-end loader  |
| ▪ end dump truck          | ▪ water truck   |
| ▪ 10-wheel dump truck     | ▪ forklift  |
| ▪ paving equipment        | ▪ compressor/jack hammer                                    |
| ▪ flat-bed delivery truck | ▪ mowing equipment (e.g., weed eater, commercial lawnmower) |
| ▪ concrete truck          | ▪ boom truck  |
| ▪ grader                  |   |
| ▪ bulldozer               |   |
| ▪ backhoe                 |   |

### ***Construction Fencing***

The construction area would be fenced for safety and security purposes.

### ***Decommissioning of Existing Facility***

The existing CHP Quincy Area Office at 86 West Main Street would be decommissioned to allow for future use as a State-owned surplus building. If the State determines that there is

no other State use for the property, the property would be included in the annual omnibus surplus legislation and, upon enactment, would be sold pursuant to Government Code Section 11011 *et seq.*

### ***Construction Schedule***

Construction of the Proposed Project is anticipated to last for approximately 18 months, beginning in 2021, with completion in 2022. Within this timeframe, the majority of construction work involving use of operating equipment would be performed within a 15-month period. Construction activities would typically be performed Monday through Friday between 7 a.m. and 6 p.m. After-hours work and work on Saturdays, Sundays, and state holidays may be permitted at the discretion of the State of California.

## **2.4.3 EXISTING AND PROPOSED OPERATIONS**

### ***Existing Operations***

The existing CHP Quincy Area Office located at 86 West Main Street in Quincy comprises an office building (3,250 ft<sup>2</sup>), secured and visitor parking and driveway (7,622 ft<sup>2</sup>), communications tower mounted on the office building roof, and vehicle maintenance building (1,250 ft<sup>2</sup>). The site has a 107-hp emergency generator that is permitted to operate up to 100 hours per year. The existing facility uses electricity provided by PG&E and propane provided by Suburban Propane. Water supply services and sanitary sewer services are provided by East Quincy Services District (now American Valley Community Services District). Stormwater generated at the existing site gets conveyed to Plumas County's storm drainage system.

The existing Quincy Area Office is staffed by 27 uniformed CHP officers and 5 non-uniformed support personnel, and is operated 7 days per week, 24 hours per day by shift employees. Shifts generally run from 6:00 a.m. to early afternoon, from early afternoon to 10:00 p.m., and from 10:00 p.m. to 6:00 a.m. Most non-uniformed staff are present from 8:00 a.m. to 5:00 p.m., Monday through Friday. Approximately 13 employees typically work between the hours of 7:00 a.m. and 6:00 p.m.

### ***Proposed Project Operations***

#### **Employees and Vehicle Equipment Use**

To fulfill its law enforcement and public safety activities at all times, the proposed CHP facility would be utilized 7 days per week, 24 hours per day, by shift employees, with shifts similar to those of the existing area office.

The Proposed Project is projected to have 37 employees comprised of 30 uniformed CHP officers and 7 non-uniformed support personnel. While on duty, approximately 4 to 9 uniformed CHP personnel would patrol local highways and respond to assistance calls during day shifts. The average vehicle miles traveled by each CHP staff person at the Project site would remain approximately the same as for the existing area office. Overall, average vehicle miles traveled would incrementally increase based on the increased number of staff persons employed at the new office. **Table 2-3** compares the number of employees associated with the existing and proposed facilities.

**Table 2-3.** Comparison of Staffing Levels at Existing and Proposed Quincy Area Offices

	Existing CHP Area Office	Proposed CHP Area Office
Employees (Total)	32	37
Uniformed Officers	27	30
Other Staff	5	7

### Facility Operation

Operation of the CHP Quincy Area Office would require periodic deliveries of automotive service equipment/materials (e.g., oil, lubricants, tires, etc.), fuel, office supplies and other equipment. Fuel would be delivered on an approximate monthly basis. Hazardous materials stored on-site (e.g., used oil and used tires) would be transported approximately once per month to an appropriate hazardous waste facility for disposal or recycling. Other hazardous material (e.g., oil) would generally be delivered quarterly, or as needed. If a septic system is installed on-site, solids in the septic tank would generally be cleaned out and removed on an annual basis.

Similar to the existing CHP Quincy Area Office operations, Proposed Project operations would include periodic office building alarm tests and vehicle siren tests during daily shift changes. Shift change tests are a mandatory practice that involves testing sirens, vehicle lights, and the vehicle camera. In general, as shifts change, CHP vehicle sirens would be tested briefly to ensure functionality before vehicles leave the Project site. The office building alarm would be a part of the fire protection system for the facility and would always be active. The alarm would be tested every 6 months and emit a loud alert, typically lasting 30 seconds. In addition, the emergency generator would be tested periodically. For the purposes of this analysis, it is assumed that the emergency generator would be 400 horsepower and in operation for 1 hour over 100 days per year. This assumption allows for short weekly and longer monthly test periods that are required for the CHP facility.

## 2.5 PERMITS AND APPROVALS

Because the project site is owned by the State, local regulations do not apply to the Proposed Project. Local regulations may apply to off-site activities (e.g., connections to existing infrastructure in the public right of way). Local regulations are described by resource topic in **Appendix A**. **Table 2-4** describes the permits and regulatory compliance requirements, along with the responsible or permitting agency, for the Proposed Project.

**Table 2-4.** Applicable Permit and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/ Authorization Type
Central Valley Regional Water Quality Control Board	Clean Water Act Section 402	National Pollutant Discharge Elimination System (NPDES) program regulates discharges of pollutants	NPDES General Construction Permit Notification

<b>Regulatory Agency</b>	<b>Law/Regulation</b>	<b>Purpose</b>	<b>Permit/ Authorization Type</b>
Central Valley Regional Water Quality Control Board	Porter-Cologne Water Quality Control Act	Regulates discharges of materials to land and protection of beneficial uses of waters of the state	Waste Discharge Requirement (WDR), if required
Central Valley Regional Water Quality Control Board	Onsite Wastewater Treatment System Policy	Requires notification if a new septic system does not meet the conditions set forth in Plumas County's Local Agency Management Program	WDR, if required
Northern Sierra Air Quality Management District	Rules 102 and 110	Stationary Source Permits for Emergency Generator, Refueling Station, Storage Tanks	Permit to Construct and Permit to Operate
California Department of Fish and Wildlife	Fish and Game Code Section 1602	Applies to activities that will substantially modify a river, stream, or lake; includes reasonable conditions to protect those resources	Streambed Alteration Agreement, if required
PG&E	PG&E Easement Requirements	Establish compliance with PG&E's right-of-way/easement requirements to remove utility poles and relocate overhead power lines belowground	Encroachment Permit, if necessary, or compliance letter
Plumas County Department of Public Works	Plumas County Encroachment Permit	Potential encroachment into county right-of-way	Encroachment Permit, if necessary
Plumas County Department of Public Works	Plumas County Stormwater Permit	Potential impacts to the drainage and/or culvert that traverses underneath Lee Road	Stormwater permit, if necessary
Plumas County Environmental Health Department	Sewage Disposal System Permit	Applies to construction of new septic systems	Permit to construct a sewage disposal system, if necessary
American Valley Community Services District	American Valley Community Services District Easement Requirements	Establish compliance with American Valley Community Services District's right-of-way/easement requirements	Encroachment Permit, if necessary, or compliance letter
American Valley Community Services District	New water supply and sewer connection	Obtain water supply and sewer main connections at the project site	Connection permits, if annexation process is successful

## Chapter 3

### ENVIRONMENTAL CHECKLIST

- |  |   |
|--|---|
| <b>1. Project Title</b>  | CHP Quincy Area Office Replacement Project  |
| <b>2. Lead Agency Name and Address</b>                                 | California Highway Patrol<br>601 N. Seventh Street, Building<br>Sacramento, California 95811  |
| <b>3. Contact Person, Phone Number and Email</b>                       | Chuck King, Chief<br>quincy-comments@chp-ceqa.com   |
| <b>4. Project Location and Assessor's parcel number (APN)</b>          | Lee Road and Alta Avenue in the community of Quincy, California. The project would develop one parcel (APN 117-140-027-000).  |
| <b>5. Property Owner(s)</b>  | State of California   |
| <b>6. General Plan Designation</b>                                     | Agricultural Preserve   |
| <b>7. Zoning</b>   | Agricultural Preserve   |
| <b>8. Description of Project</b>                                       | See Chapter 2, <i>Project Description</i>   |
| <b>9. Surrounding Land Uses and Setting</b>                            | The site is currently used for grazing and does not contain any structures. Residences on large parcels of land are located to either side of the Proposed Project site; open grazing land is north of the property. Light industrial businesses are located on the south side of Lee Road, opposite the Project area, as are some residences. Light industry is mixed with residences all along Lee Road and on Alta Avenue in the Project Vicinity. |
| <b>10. Other Public Agencies whose Approval or Input May Be Needed</b> | Central Valley Regional Water Quality Control Board (RWQCB), Northern Sierra Area Air Quality Management District (NSAQMD), California Department of Fish and Wildlife (CDFW), Pacific Gas & Electric Company (PG&E), Plumas County Department of Public Works, Plumas County Environmental Health Department, American Valley Community Services District  |
| <b>11. Hazards or Hazardous Materials</b>                              | The project site is not located on the lists enumerated under Section 65962.5 of the Government Code, including, but not limited to, lists of hazardous waste facilities.   |



This chapter of the Initial Study/Mitigated Negative Declaration (IS/MND) assesses the environmental impacts of the California Highway Patrol (CHP) Quincy Area Office Replacement Project (Proposed Project) based on the environmental checklist provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section (3.1 through 3.18) provides a brief overview of regulations and regulatory agencies that address the resource and describes the existing environmental conditions for that resource to help the reader understand the conditions that could be affected by the Proposed Project. Relevant local laws, regulations, and policies are described in Appendix A. In addition, each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question. For environmental impacts that have the potential to be significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

## Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by the Proposed Project, as indicated by the checklist on the following pages.

- |   |  |
|---|--|
| <input type="checkbox"/> Aesthetics                                 | <input type="checkbox"/> Land Use/Planning                             |
| <input type="checkbox"/> Agriculture and Forestry Resources         | <input type="checkbox"/> Mineral Resources                             |
| <input checked="" type="checkbox"/> Air Quality                     | <input type="checkbox"/> Noise   |
| <input checked="" type="checkbox"/> Biological Resources            | <input type="checkbox"/> Population/Housing                            |
| <input checked="" type="checkbox"/> Cultural Resources              | <input type="checkbox"/> Public Services                               |
| <input checked="" type="checkbox"/> Geology/Soils                   | <input type="checkbox"/> Recreation                                    |
| <input type="checkbox"/> Greenhouse Gas Emissions                   | <input checked="" type="checkbox"/> Transportation/Traffic             |
| <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Hydrology/Water Quality                    | <input type="checkbox"/> Utilities/Service Systems                     |
|   | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## 1 Determination

2 The conclusions and recommendations contained herein are professional opinions derived  
3 in accordance with current standards of professional practice. They are based on a review of  
4 sources of information cited in this document, and the comments received, conversations  
5 with knowledgeable individuals; the preparer's personal knowledge of the area; and, where  
6 necessary, a visit to the site.

7 On the basis of this initial evaluation:

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

Signature

Date

Name: <sup>Asst.</sup> Chuck King, Chief

California Highway Patrol

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## 3.1 AESTHETICS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 3.1.1 REGULATORY SETTING

#### ***Federal Laws, Regulations, and Policies***

No federal regulations are applicable to aesthetics in relation to the Proposed Project.

#### ***State Laws, Regulations, and Policies***

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (California Department of Transportation [Caltrans] 2018a). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

California State Route (SR) 70 and SR 89 in the vicinity of the Project site are eligible State scenic highways (Caltrans 2018b). SR 70 extends from just north of Sacramento to U.S. Route 395, primarily along the Feather River. SR 89 runs northwest from U.S. Route 395 near Topaz Lake, through several mountain communities, to Interstate 5 near the base of Mount Shasta. The two routes overlap in the portion running through American Valley and the communities of Quincy and East Quincy. For the purposes of this analysis, the portion that runs through Quincy and East Quincy is referred to as SR 70.

### 3.1.2 ENVIRONMENTAL SETTING

The Proposed Project is located in American Valley in the vicinity of East Quincy, Plumas County, California, which is in the northeast portion of California at the far northern end of

the Sierra Nevada mountain range. The region is marked by rugged, mountainous terrain. The Plumas National Forest land is located more than 2 miles north of the Project site.

The Project site is located to the north of the Lee Road and Alta Avenue intersection in East Quincy (see Figure 2-1). The Project site is located on an undeveloped and a gently sloped parcel consisting of low grasses throughout with fencing bordering the majority of the site. Utility poles and power lines border the site to the south along Lee Road. The site is currently used for grazing purposes. Land uses surrounding the Project site include agricultural land to the north and east, residential and industrial uses to the west, and a combination of residential and commercial uses to the south. More specifically, an animal hospital and a few residences are located immediately south of the site along Lee Road. A barn and water trough are located just southeast of the site. Industrial uses including a couple of storage facilities are located west of the Project site. A California Department of Motor Vehicles (DMV) facility, fire station, a few dining areas, and gas stations are located farther south of the Project site.

The following sections provide further details on the existing visual setting and viewer groups near the Project site.

### ***Visual Character and Quality of the Site***

The Project site is a relatively flat and approximately 5-acre parcel. The property is currently comprised of low grasses with fencing surrounding the site, and utility poles and transmission lines located along the site's southern border. The site is largely characterized by agricultural uses as the Project site is currently used for grazing and an adjacent barn and trough are located nearby. A few mature trees are visible along the site's western and northern borders.

The dominant visual features surrounding the site are agricultural land to the north and east, residential and light industrial development to the west, and residential and commercial uses to the south. The forested mountains located farther north and south of Quincy are also visible from the Project vicinity. While the Project site has an agricultural character, the site is also influenced by surrounding residential, commercial, and industrial uses. The visual quality of the site is considered moderate.

### ***Light and Glare***

Nighttime lighting is necessary to provide and maintain safe environments. Light that falls beyond the intended area of illumination is referred to as "light trespass." The most common cause of light trespass is spillover light, which occurs when a lighting source illuminates surfaces beyond the intended area, such as when building security lighting or parking lot lights shine onto neighboring properties. Spillover light can adversely affect light-sensitive uses, such as residences, at night. Both light intensity and fixtures can affect the amount of light spillover. Modern, energy-efficient fixtures that face downward, such as shielded light fixtures, are typically less obtrusive than older, upward-facing light fixtures.

Glare is caused by light reflections from pavement, vehicles, and building materials, such as reflective glass, polished surfaces, or metallic architectural features. During daylight hours, the amount of glare depends on the intensity and direction of sunlight.

The most notable lighting in or near the Project site is from streetlights and vehicle headlights along Lee Road, as well as lighting from the business and residences surrounding the Project site.

### ***Scenic Highways and Corridors***

California SR 70 and SR 89 are eligible State scenic highways in the vicinity of the Project site. These two routes coincide as they pass through American Valley, East Quincy, and Quincy. As previously indicated, the portion of highway that passes near the Project site is referred to as SR 70 throughout this document. The highway is approximately 500 feet south of the Project site along East Main Street in East Quincy, then passes to the west through Quincy, and finally turns north to northeast extending through the Plumas National Forest more than 2 miles northwest of the Project site. In general, with the exception of brief views accessible from East Main Street at Alta Avenue, existing development blocks most views of the Project site from SR 70. In addition, mature trees line the highway within Plumas National Forest and block all external views from the highway. Motorists' views of the Project site from SR 70 are also limited given the short duration of view (seconds) and their focus on driving.

### ***Scenic Vistas***

A scenic vista is generally defined as a designated viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Views looking north toward the Plumas National Forest from the general direction of the Project site could be considered a local scenic vista, as it is a relatively uninterrupted view of open space with a backdrop of dense National Forest land. The Project site is not considered a scenic vista, and there are no other designated scenic vistas in the region.

### ***Viewer Sensitivity***

Viewer sensitivity is another consideration in assessing the effects of visual change. Sensitivity is a function of factors such as the visibility of resources in the landscape, proximity of viewers to the visual resource, elevation of viewers relative to the visual resource, frequency and duration of views, number of viewers, and types and expectations of individuals and viewer groups.

Photos of the Project site and surrounding area were captured to provide existing views and conditions of the Project site. A location map identifying where the key observation point (KOP) photos were taken is provided in **Figure AES-1**. Five KOPs, as shown in **Figures AES-2 through AES-4**, were selected as being representative of the typical public views of the Project site and the types of visual resources that are present in the vicinity of the Project site. While some of these KOPs provide existing views looking in the direction of the Project site from locations with limited views or no view, they are considered KOPs due to the sensitivity that viewers may have to their surroundings from these locations.

Existing views of the Project site and vicinity from each of these viewpoints are described as follows:

- **KOP 1:** This KOP shows the view from Lee Road near the residence to the west of the Project site, looking northeast (**Figure AES-2**, top photo). This KOP represents views from the perspective of a motorist traveling east along Lee Road. This view also

represents a typical view from the residence located just west of the Project site. A few trees and a power line are located along the road, which partially obscure direct views of the site. Shrubbery, dried grasses, and fencing are visible in the foreground. The hillsides and mountains of Plumas National Forest can also be seen in the distance.

- **KOP 2:** This KOP shows a northwest facing view of the Project site from Lee Road (Figure AES-2, bottom photo). This KOP represents views from the perspective of a motorist traveling west along Lee Road and a typical view from the residence located just south of this viewpoint on Lee Road. From this viewpoint, expansive views of the dried grasses and fencing along the Project site's border can be seen. Mature trees lining the Project site's western border, a residence, and industrial buildings can be seen beyond the Project site.

- **KOP 3:** This KOP shows a north facing view of the Project site from the SR 70 and Alta Avenue intersection (**Figure AES-3**, top photo). This viewpoint is located roughly 500 feet south of the Project site. From this perspective, primary views consist of a few commercial businesses including a carpet store, auto collision repair shop, a fire station, power lines, and some mature trees. The Project site can be seen in the middle ground beyond Lee Road.

- **KOP 4:** This KOP shows another northwest facing view of the Project site from Lee Road (Figure AES-3, bottom photo). This viewpoint is located immediately southeast of the nearby barn. This is a representative view from the perspective of a motorist traveling west on Lee Road and also shows a typical view from the nearby residence located just south of the viewpoint. The barn dominates views from this perspective. Other visible elements include power lines, trees, shrubs and grasses along Lee Road. The forested mountains and hillsides are visible in the background.

- **KOP 5:** This KOP shows a distant south-facing view from Carol Lane W. looking toward the Project site (**Figure AES-4**). This viewpoint is located approximately 0.4 mile north of the Project site, representing typical views from the perspective of residents located along Carol Lane W. From this KOP, dominant views include open space grasslands in the foreground and the expansive forested mountains in the background. In the vicinity of the Project site, storage buildings and other development in East Quincy are somewhat visible but the view is dominated by the mountains in the background and grasslands in the foreground.

### **Viewer Groups**

Viewer groups in the vicinity of the Project site and their sensitivity to visual changes are described below. Viewer groups with visual access to the Project site are divided into the categories of motorists, patrons of nearby businesses, and residents. Viewer sensitivity is often correlated to existing land use patterns and some viewer groups are considered more sensitive to change than others.

#### **Motorists**

Motorists traveling on Lee Road have close-up views of the Project site (KOPs 1, 2, and 4). Motorists' views would be short in duration due to the speed of travel. Such viewers have

1 limited expectations of the setting, though the site's undeveloped nature and views of  
2 surrounding mountains are visually appealing. Motorists in this area would most likely be  
3 employees of the surrounding businesses including the nearby lumber mill (Sierra Pacific  
4 Industries), storage and other industrial facilities, and residents. Travelers along SR 70, an  
5 eligible scenic highway, may have very brief views of the Project site as they pass by Alta  
6 Avenue (KOP 3), but due to the presence of various commercial buildings, restaurants, and  
7 gas stations along the highway, distance, and speed of travel, the Project site is barely visible.  
8 In general, as a viewer group, motorists in the area would have moderate sensitivity to the  
9 surrounding viewshed.

### 10 **Patrons and Employees of Nearby Businesses**

11 Businesses in the area surrounding the Project site include an animal hospital, storage  
12 facilities, and a mixture of industrial and commercial buildings to the south. As mentioned  
13 above, a large lumber mill is located to the west of the Project site. Patrons of these businesses  
14 likely visit on an infrequent and temporary basis, with limited expectations of the  
15 surrounding setting. Employees working at the animal hospital and nearby storage facility  
16 would have a higher sensitivity due to their frequency and duration of views. However, since  
17 these employees are expected to be focused on their work, their viewer sensitivity is  
18 considered low to moderate.

### 19 **Residents**

20 The Project site is immediately visible from several residences located adjacent to the site to  
21 the west and across Lee Road to the south (KOPs 1, 2, and 4). In general, as a viewer group,  
22 residents have a heightened sensitivity to the surrounding viewshed because they have high  
23 frequency and duration of views, as well as an expectation of a consistent setting. Some  
24 mature trees and the electric transmission lines partially obstruct views of the Project site,  
25 though the majority of the site is clearly visible. The residents to the north of the Project site  
26 (along Carol Lane W.) have very distant views of the Project site and, since views are  
27 dominated by the open space in the foreground and mountains in the background, residents  
28 located on Carol Lane W. have a low viewer sensitivity.

### 29 **Recreational**

30 Recreational users to natural areas have a heightened sensitivity to their surroundings and  
31 have an expectation of a consistent setting. Plumas National Forest is located to the north of  
32 the Project site and includes several trails and camping areas. However, the Project site is not  
33 visible from the primary route in this area due to distance and the extensive vegetation and  
34 mature trees lining the roadway.



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**Figure AES-1**  
**Viewpoints Surrounding Proposed Project Site**

Prepared by:



Prepared for:  
California Highway Patrol



0 250 500  
Feet

**Quincy Area Office Replacement Project**  
**Initial Study/Mitigated Negative Declaration**





**KOP 1:** Existing view of the Project site looking northeast from Lee Road near the residence to the west of the project site.



**KOP 2:** Existing view of the Project site looking northwest from Lee Road.

Prepared by:



Prepared for:  
California Highway Patrol

**Figure AES-2.**  
**Existing Views from KOPs 1 and 2**

**Quincy Area Office Replacement Project**  
**Initial Study/Mitigated Negative Declaration**





**KOP 3:** Existing view looking north toward the Project site from the Alta Avenue and SR 70 intersection.



**KOP 4:** Existing view of the Project site and nearby barn structure looking northwest from Lee Road.

Prepared by:



Prepared for:  
California Highway Patrol

**Figure AES-3.**  
**Existing Views from KOPs 3 and 4**

**Quincy Area Office Replacement Project**  
**Initial Study/Mitigated Negative Declaration**





**KOP 5:** Existing distant view looking south toward the Project site from Carol Lane W.

Prepared by:



Prepared for:  
California Highway Patrol

**Figure AES-4.**  
**Existing View from KOP 5**

**Quincy Area Office Replacement Project**  
**Initial Study/Mitigated Negative Declaration**

### 3.1.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Adverse effects on scenic vistas—*Less than Significant*

A scenic vista is generally considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. No scenic vistas have been officially designated for the project site or vicinity in the Plumas County General Plan (Plumas County 2013).

Construction activities associated with the Proposed Project would cause some temporary visual changes at the Project site. A variety of construction equipment, as listed in Section 2.4.2, "Construction," would be present during construction. The temporary presence of this equipment and associated construction activities would be out of character for the area given that the site is currently undeveloped and used for grazing purposes. No construction equipment would be present on the Project site after the completion of the construction phase of the Proposed Project. Because construction would be temporary and the site is not located within a scenic vista, construction impacts would be less than significant.

The Proposed Project would result in aboveground physical changes to the viewshed, including the presence of:

- buildings and enclosures,
- aboveground tanks,
- parking areas,
- 6-foot-tall concrete-block masonry fence with 2-foot metal pickets along with metal rolling gates,
- 24-hour exterior lighting meeting CHP safety protocols,
- three metal flagpoles, each 30 feet high,
- CHP monument sign near the visitor parking area,
- vehicle fueling area that would include a canopy over the fueling area, and
- 148-foot-tall communications tower.

In addition, in the event that the Project site does not get annexed into the Town of Quincy and the Project cannot hook up to American Valley Community Services District's water and sanitary sewer services, a 40-foot-tall aboveground water storage tank would be installed and would be partially visible.

Figure 2-3 shows the Project's conceptual site plan, and Figure 2-4 shows conceptual cross-section views of the replacement CHP Area Office. The Proposed Project would result in a visual change as the site is currently undeveloped. The CHP offices would be one-story buildings. Motorists traveling on Lee Road and Alta Avenue would have clear but fleeting

views of the CHP Area Office. Residents and employees and patrons of nearby businesses would have close-up views of the CHP Area Office's fencing, parking area, and main office building. The communications tower would also be visible, though the bottom portion would be partially blocked by existing facility structures and facility fencing.

The 148-foot-tall communications tower would be the most prominent visual feature on the Project site. The specific tower location on the Project site is unknown at this time and will be identified during final design but, due to the tower's height, it would likely be visible from all KOPs. The tower would be the tallest structure in the Project area and would likely be seen from a wide area around the Project site including KOP 5 (from Carol Lane W.). However, as stated above, the tower is not projected to block or alter scenic vistas. Visitors and employees of the commercial and retail businesses to the south of the Project site have reduced sensitivity to the surrounding viewshed due to the limited number of windows exposed to the Project site.

Although the CHP Area Office would be visible to nearby businesses, passerby motorists, and residents, the facility would be generally consistent in character with nearby industrial facilities to the west of the Project site and public facilities (e.g., the DMV facility and fire station) to the south.

These changes would not substantially affect the quality of views for these viewer groups. Moreover, there are no designated scenic vistas in the Project area that would be affected by the Proposed Project. Therefore, this impact would be **less than significant**.

**b. Damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway—  
*Less than Significant***

The Project site is not visible from any officially designated scenic highway and does not include any scenic resources within the area of a designated state scenic highway. SR 70, which travels through East Quincy and Quincy to the south of the Project site, is eligible for designation as a State scenic highway. As shown in Figure AES-3, top photo, the Project site is visible at the SR 70 and Alta Avenue intersection. While the CHP Area Office buildings, communications tower, and other proposed aboveground structures may be partially visible at this intersection, due to the speed of travel along this highway and distance from the Project site, such views would be fleeting. The presence of other buildings and mature trees along SR 70 also obstruct views of the Project site from other sections along SR 70. Therefore, this impact would be **less than significant**.

**c. Changes to existing visual character or quality—*Less than Significant***

The Project site's existing visual character is agricultural, represented primarily by the low grasses throughout the property, perimeter fencing, few trees located along the Project site boundary, and transmission lines to the south of the site along Lee Road. The site's visual character is also influenced by surrounding land uses including open space agricultural land to the north, residential uses to the west and south, the animal hospital immediately south, and the barn structure to the east of the site. Other surrounding land uses include industrial development and storage facilities to the west, a fire station and DMV facility to the south along Alta Avenue, and commercial uses farther south (near SR 70).

Construction activities associated with the Proposed Project could result in temporary changes to the visual character of the area due to the presence of construction crews and heavy equipment. The duration of construction would be temporary and the scale of changes in views would be limited to the surrounding businesses and residents, and passerby motorists on Lee Road. Views of the Project site from KOP 5 (along Carol Lane W.) would be obscured due to distance. Therefore, during construction, this impact would be less than significant.

Figure 2-3 and Figure 2-4 show conceptual site plans and cross-sectional views of the replacement CHP Area Office. As described in impact discussion "a," structures that may be most prominent include the main office building, parking lot, and communications tower. In the event that the Project site does not get annexed by the Town of Quincy and a water storage tank gets built, the tank would also be prominently visible. With the exception of the communications tower and potential water storage tank, the other facilities would be generally compatible in scale and type with the surrounding commercial and industrial facilities. The new communications tower would be the most prominent structure visible to nearby residents, motorists, and other nearby viewers. However, views of the forested mountains and hillsides in the background would still be visible beyond the tower and other CHP facilities. Thus, despite the Project area's moderate visual quality, introduction of the tower and other CHP facilities would not substantially degrade the site and surrounding area's visual character or quality. Therefore, this impact would be **less than significant**.

**d. New sources of light or glare—*Less than Significant***

The most notable lighting in the project site vicinity is from street lighting and vehicle headlights from cars driving along Lee Road, as well as lighting from other businesses surrounding the Project site. The shop building and some of the materials and equipment on site have the potential for producing some glare from sunlight reflecting off of the rooftop of the shop building and from the metal equipment.

Operation of the Proposed Project would include the use of nighttime security lighting throughout the site. This would include lighting dispersed throughout the facilities, as well as in the parking area, illuminating on-site flag poles, and illuminating the CHP monument sign. Aside from the flag pole, all exterior lighting would be shielded and directed downward to minimize off-site glare. The flag poles require specialized lighting because of their height and may utilize either downward or upward lighting. However, the flagpoles are located near the front of the office building within the interior of the site, so in the event that upward lighting is used, the lighting would not spill over onto adjacent properties, and would not create a substantial visual contrast with the night sky.

1 Nighttime lighting at the Project site could be visible to motorists driving by. However, all  
2 lighting except for possibly the flagpole lighting would be directed downward, thereby  
3 minimizing light from falling onto surrounding properties.

4 The windows and buildings of the new structures and steel material of the communications  
5 tower could create new sources of glare. Daytime glare can cause an annoyance for viewers  
6 and a potential safety hazard for motorists. However, the proposed buildings and ancillary  
7 structures would not significantly affect viewers or motorists because they would be located  
8 away from roadways behind the perimeter wall and fencing and would not generate  
9 substantial glare. The communications tower is not anticipated to represent a source of glare  
10 that would be substantial enough to create annoyance relative to existing conditions. As a  
11 result, the impacts related to glare and nighttime lighting would be **less than significant**.



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## 1 **3.2 AGRICULTURE AND FORESTRY RESOURCES**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment that, because of their location or nature, could result in a conversion of Farmland to a nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2 **3.2.1 REGULATORY SETTING**

#### 3 ***Federal Laws, Regulations, and Policies***

4 No federal laws, regulations, or policies apply to agricultural and forestry resources and the  
5 Proposed Project.

#### 6 ***State Laws, Regulations, and Policies***

##### 7 **Farmland Mapping and Monitoring Program**

8 The Farmland Mapping and Monitoring Program (FMMP), administered by the California  
9 Department of Conservation (CDOC), produces maps and statistical data for use in analyzing  
10 impacts on California's agricultural resources (CDOC 2017a). FMMP rates and classifies

agricultural land according to soil quality, irrigation status, and other criteria. Important farmland categories are as follows (CDOC 2017b):

**Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

**Farmland of Statewide Importance:** Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

**Unique Farmland:** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

**Farmland of Local Importance:** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

### California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDOC 2017c). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

### 3.2.2 ENVIRONMENTAL SETTING

The approximately 5-acre Project site is comprised of fenced undeveloped land with some low-lying grasses. Some grazing occasionally occurs on the project site. The site has been continuously used as a ranching operation since the late 1800's aside from its temporary use as an airstrip in the 1930s and 1940s (SHN Consulting Engineers & Geologists, Inc 2017). The 5-acre site is a State-owned parcel that originated from two parcels that have areas of approximately 220 acres and 8 acres, and are designated for agricultural uses. Grazing occurs on these two original parcels.

The Project site is designated as Agricultural Preserve (AP) in the Plumas County General Plan and zoned as AP (Plumas County 2013; Plumas County 2018). However, the Project site is not under a Williamson Act contract (CDOC 2013) and is not considered Important Farmland by CDOC. Plumas County is not mapped in the FMMP, and the soils are rated as Class 4 and 6, which do not meet the criteria for Prime Farmland under CEQA (USDA 1961 and USDA 2018).

The existing Quincy Area Office (which would be replaced by the Proposed Project) is located approximately 2 miles west of the Proposed Project site. This existing facility appears to be on land designated for commercial use and has no existing agricultural or forestry resources/activity (Plumas County 2013).

### 3.2.3 DISCUSSION OF CHECKLIST RESPONSES

#### **a, e. Convert Farmland to non-agriculture use; Result in other changes that could result in the conversion of Farmland to non-agricultural use—*No Impact***

No land within or adjacent to the Project site is classified as Important Farmland by the CDOC. Although grazing / ranching occasionally occurs on the site, and has historically taken place on the site, the site is not considered Farmland by CDOC. Therefore, construction and operation of the Proposed Project would not result in the loss or conversion of lands designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland to non-agricultural use.

No agricultural or forestry activity is present on the existing Quincy Area Office CHP facility property, so decommissioning and transfer of this existing facility to the state surplus would not result in the conversion of farmland to non-agricultural use. Overall, **no impact** would occur.

#### **b. Conflict with existing zoning for agriculture use or a Williamson Act Contract—*Less than Significant***

As described in Section 3.2.3 above, the Project site is designated as AP in the County's general plan and is zoned as AP (Plumas County 2013; Plumas County 2018). The AP designation in the General Plan serves to preserve agricultural uses, and the zoning code implements the General Plan. Permitted uses in the AP Zone include agricultural and forestry-related uses, single dwelling units, and child day care homes (Plumas County Code Sec. 9-2.3002). Other types of uses are permitted subject to issuance of a special use permit, such as public utility facilities, transport stations, and recreational uses. Generally, the minimum gross lot area in the AP Zone is 80 acres (Plumas County Code Sec. 9-2.3004).

While the Proposed Project would be a public service facility, it likely would not be considered a public utility facility. In addition, the Proposed Project site would be approximately 5 acres, which is less than the typical minimum gross lot area of 80 acres. However, the Proposed Project site is owned by the State of California, which is not subject to local land use laws, such as county general plan land use designations and zoning. In addition, the Proposed Project site is located along a road at the edge of the two parcels from which it originated, and would not impair the use of those parcels for agricultural purposes, particularly the larger parcel of more than 200 acres. As a result, the Proposed Project would not conflict with the existing zoning for agricultural use. Therefore, this impact would be less than significant.

Because the Project site is not under a Williamson Act contract, the Proposed Project would not conflict with any Williamson Act contracts. The existing Quincy Area CHP facility is not zoned for agricultural use or on land enrolled in a Williamson Act contract. Therefore,

1 transfer of this property to the state surplus would not result in conflicts with such uses.  
2 Overall, this impact would be **less than significant**.

3 **c, d. Conflict with existing zoning for forest land or timberland zoned**  
4 **Timberland Production; Result in the loss of forest land or conversion**  
5 **of forest land to non-forest use—*No Impact***

6 There are no trees on the Proposed Project site, and existing land cover at the Project site is  
7 not considered forest. Likewise, the site is not zoned as forest land or included in a  
8 Timberland Production Zone. Therefore, construction and operation of the Proposed Project  
9 would not result in loss of forest land or conversion of forest land to non-forest use. **No**  
10 **impact** would occur.

### 1 3.3 AIR QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 2 3.3.1 REGULATORY SETTING

##### 3 *Federal and State Laws, Regulations, and Policies*

4 The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and  
 5 sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria  
 6 pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM<sub>10</sub>),  
 7 particulate matter of aerodynamic radius of 2.5 micrometers or less (PM<sub>2.5</sub>), carbon  
 8 monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ground-level ozone, and lead. Of these criteria  
 9 pollutants, particulate matter and ground-level ozone pose the greatest threats to human  
 10 health.

11 The California Air Resources Board (CARB) sets standards for criteria pollutants in California  
 12 that are more stringent than the NAAQS and include the following additional contaminants:  
 13 visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The Proposed  
 14 Project is located within the Mountain Counties Air Basin and managed by the Northern  
 15 Sierra Air Quality Management District (NSAQMD). NSAQMD manages air quality in the  
 16 Nevada, Plumas, and Sierra counties' portion of the Mountain Counties Air Basin for

- 1 attainment and permitting purposes. **Table AQ-1** provides the attainment status of the  
 2 Mountain Counties Air Basin in the Quincy area for the federal and state standards.

3 **Table AQ-1.** Attainment Status of the State and Federal Ambient Air Quality Standards

Contaminant	Averaging Time	Concentration	State Standards Attainment Status <sup>1</sup>	Federal Standards Attainment Status <sup>2</sup>
Ozone (O <sub>3</sub> )	1-hour	0.09 ppm	U	See footnote 3
	8-hour	0.070 ppm	U	
		0.075 ppm		A See footnote 3
CO	1-hour	20 ppm	A	
	8-hour	35 ppm		U/A
		9.0 ppm	A	U/A
NO <sub>2</sub>	1-hour	0.18 ppm	A	
		0.100 ppm <sup>5</sup>		U/A
	Annual arithmetic mean	0.030 ppm	A	
		0.053 ppm		U
Sulfur Dioxide (SO <sub>2</sub> )	1-hour	0.25 ppm	A	
		0.075 ppm		U
	24-hour	0.04 ppm	A	
		0.14 ppm		U
	Annual arithmetic mean	0.030 ppm		U
Particulate Matter (PM <sub>10</sub> )	24-hour	50 µg/m <sup>3</sup>	N	
		150 µg/m <sup>3</sup>		U
	Annual arithmetic mean	20 µg/m <sup>3</sup>	N	
Fine Particulate Matter (PM <sub>2.5</sub> )	24-hour	35 µg/m <sup>3</sup>		U/A
	Annual arithmetic mean	12 µg/m <sup>3</sup>	U	U/A
Sulfates	24-hour	25 µg/m <sup>3</sup>	A	
Lead (Pb) <sup>6</sup>	30-day average	1.5 µg/m <sup>3</sup>	A	
Hydrogen Sulfide (H <sub>2</sub> S)	1-hour	0.03 ppm	U	
Vinyl Chloride <sup>6</sup> (chloroethene)	24-hour	0.010 ppm	U	

Contaminant	Averaging Time	Concentration	State Standards Attainment Status <sup>1</sup>	Federal Standards Attainment Status <sup>2</sup>
Visibility-Reducing Particles	8 hour (10:00 to 18:00 PST)	See footnote 4	U	

A – attainment  
N – non-attainment  
U – unclassified

ppm – parts per million  
µg/m<sup>3</sup> – micrograms per cubic meter

#### Notes:

- California standards for ozone, carbon monoxide, sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM<sub>10</sub>, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average (i.e., all standards except for lead and the PM<sub>10</sub> annual standard), then some measurements may be excluded. In particular, measurements that are excluded include those that the California Air Resources Board (CARB) determines would occur less than once per year on average.
- National standards shown are the “primary standards” designed to protect public health. National air quality standards are set by USEPA at levels determined to be protective of public health with an adequate margin of safety. National standards other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once per year. The 1-hour ozone standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.075 ppm (75 parts per billion) or less. The 24-hour PM<sub>10</sub> standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m<sup>3</sup>. The 24-hour PM<sub>2.5</sub> standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m<sup>3</sup>. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM<sub>10</sub> is met if the 3-year average falls below the standard at every site. The annual PM<sub>2.5</sub> standard is met by spatially averaging annual averages across officially designated clusters of sites and then determining if the 3-year average of these annual averages falls below the standard.
- The national 1-hour ozone standard was revoked by USEPA on June 15, 2005. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 ppm to 0.070 ppm. An area meets the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. This table provides the attainment statuses for the 2015 standard of 0.070 ppm.
- Statewide Visibility-Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per km when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment resulting from regional haze and is equivalent to a 10-mile nominal visual range.
- To attain this standard, the 3-year average of the ninety-eighth percentile of the daily maximum 1-hour average at each monitoring station within an area must not exceed 0.100 ppm (effective January 22, 2010).
- CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure below which there are no adverse health effects determined.

Sources: CARB 2018, USEPA 2018a, USEPA 2018b

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications. Airborne toxic control measures (ATCMs), including the following relevant measures, are implemented to address sources of TACs:



- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines Standards for Non-vehicular Diesel Fuel
- ATCM for Stationary Compression Ignition Engines
- ATCM for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities

### ***Local Laws, Regulations, and Policies***

Local laws, regulations, and policies are provided in **Appendix A**. The analysis below references NSAQMD rules, regulations, and plans.

NSAQMD has established mass emission thresholds of significance (NSAQMD 2009). NSAQMD developed a tiered approach to significance levels as shown in **Table AQ-2**. The threshold tiers are accompanied by a list of suggested mitigation measures depending on the threshold tier. If emissions for oxides of nitrogen (NO<sub>x</sub>), reactive organic gases (ROG), and PM<sub>10</sub> exceed 136 pounds per day (ppd) (i.e., fall into Threshold Tier Level C), then there would be a potentially significant impact. Additional guidance on the applicability of these levels is provided in Appendix A.

**Table AQ-2.** NSAQMD Thresholds of Significance

Threshold Tier	NO <sub>x</sub> (ppd)	ROG (ppd)	PM <sub>10</sub> (ppd)
Level A	<24	<24	<79
Level B	24-136	24-136	79-136
Level C	>136	>136	>136

*Source: NSAQMD 2009*

### **3.3.2 ENVIRONMENTAL SETTING**

The Project site is located in the town of Quincy in Plumas County, California, in the Mountain Counties Air Basin. The Mountain Counties Air Basin encompasses approximately 4,549 square miles and includes Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, Mariposa and portions of Placer and El Dorado Counties. Within this air basin, Plumas County's varying topography of mountain peaks and high-elevation valleys creates diverse precipitation patterns between the western and eastern portions of the county. Western areas of the county, such as the City of Portola, experience a rain shadow effect from the Sierra Nevada Crest (Plumas County 2012). The Quincy and East Quincy areas, including the Project site, are located in the American Valley, which is surrounded by rugged, mountainous terrain.

The Quincy area has a temperate climate with moderate temperature fluctuations and high amounts of precipitation. Average monthly temperatures in the Quincy area range from an

average minimum of 23.5 degrees Fahrenheit (°F) to an average maximum of 89.5 °F (Western Regional Climate Center [WRCC] 2018). Average annual precipitation in the Quincy area is approximately 40 inches, with precipitation occurring as rain or snow primarily from October through April (WRCC 2018.)

Plumas County, in the Quincy area, is designated as a state non-attainment area for PM<sub>10</sub>. The primary causes of PM<sub>10</sub> in the county are road dust and wildfires (Plumas County 2012). It is in attainment or unclassified for all other federal and state criteria air pollutants, as shown in Table AQ-1.

The Project site is generally open land. Some residential, commercial, industrial, and recreational areas are located near the Project site. The closest residence is approximately 135 feet (41 meters) southwest of the project site. Quincy Elementary School is the nearest school located approximately 940 feet (289 meters) to the southwest of the site. The closest daycare and preschool are at Head Start (Sierra Cascade Family Opportunities) located about 1,430 feet (436 meters) to the northwest. The recreational area nearest to the Project site, the Plumas County Fairgrounds, is 3,270 feet (997 meters) to the west. All measurements are from the nearest Project site boundary, and actual sources of air emissions may be further away than this distance.

### 3.3.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Conflict with or obstruct implementation of the applicable air quality plan—*Less than Significant*

Apart from one criteria pollutant (PM<sub>10</sub>), the Quincy area, including the Project site, is in attainment or unclassified for all state and federal ambient air quality standards. The Quincy area is in non-attainment for the state's PM<sub>10</sub> ambient air quality standards. Although the NSAQMD has limitations and prohibitions related to fugitive dust, there are no NSAQMD or other regional air quality plans that are relevant to the Proposed Project. The Proposed Project would comply with the NSAQMD's recommended fugitive dust emission control measures and would be consistent with all general plan policies for air quality that are relevant to the Proposed Project, as described in Appendix A, *Local Laws, Regulations and Policies*. In addition, the Proposed Project would follow all federal, state, and local regulations related to stationary and area sources of air pollutants, and in particular, the chemical storage tanks, refueling pumps, and emergency generator. Therefore, the Proposed Project would be consistent with all applicable air quality plans, and the impact would be **less than significant**.

#### b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation—*Less than Significant with Mitigation*

During construction of the Proposed Project, the combustion of fossil fuels for operation of fossil-fueled construction equipment, material hauling, and worker trips would result in construction-related criteria air pollutant emissions. These emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 with default assumptions for a 3.8-acre developed site. The Proposed Project's criteria air pollutant emissions during construction are shown in **Table AQ-3**. CalEEMod modeling results for the Proposed Project are provided in **Appendix B**.

1 **Table AQ-3. Criteria Pollutant Emissions during Construction**

Year	Total Construction Emissions (tons)							
	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>
2021	0.24	2.08	1.93	0.004	0.14	0.09	0.06	0.08
2022	0.57	0.72	0.86	0.002	0.03	0.03	0.007	0.03
Total	0.81	2.80	2.79	0.006	0.17	0.12	0.07	0.11
Peak Daily	Peak Daily Emissions (pounds/day)							
	53.3	139.5	39.5	0.28	23.8	2.5	11.5	2.3
NSAQMD Threshold of Significance (pounds/day or ppd)								
Level A	<24	<24	—	—	<79		—	—
Level B	24-136	24-136	—	—	79-136		—	—
Level C	>136	>136	—	—	>136		—	—
Project's Threshold Level	B	C	—	—	A		—	—

**Notes:**

CO = carbon monoxide  
 NOx = oxides of nitrogen

PM<sub>10</sub> = particulate matter 10 microns or less in diameter  
 PM<sub>2.5</sub> = fine particulate matter 2.5 microns or less in diameter  
 ROG = reactive organic gases  
 SO<sub>2</sub> = sulfur dioxide

2 *Source: CalEEMod modeling results are provided in Appendix B.*

3 Operational criteria air pollutant emissions would be generated by fossil-fueled equipment  
 4 and motor vehicles, building energy use, and an on-site refueling pump. Most of the Proposed  
 5 Project's operational emissions were estimated using default assumptions in CalEEMod  
 6 version 2016.3.2. Mobile-source emissions were estimated by adjusting the trip rate to 137  
 7 daily trips, with 10 percent of the trips from non-uniformed worker commute trips. The  
 8 worker trip length was set to approximately 42 miles based on an estimated 2,500 miles per  
 9 month for patrol workers. The default trip length was used for all other workers and visitors.  
 10 Vehicle idling emissions were estimated by conservatively assuming that two worker  
 11 vehicles would be idling 24 hours per day, and trucks visiting the citation clearance areas  
 12 were assumed to idle for an average of 1 hour per day. The idling emission factors were taken  
 13 from the EMFAC 2014 emissions model to be consistent with CalEEMod emission factors for  
 14 a "light-duty truck 1" vehicle class and "heavy, heavy duty truck" vehicle class. The emergency  
 15 generator was assumed to be 400 horsepower and operate for 100 hours per year for testing.  
 16 The refueling pump station emissions were estimated assuming a 50,000-gallon annual  
 17 throughput and emission factors from the California Air Pollution Control Officers  
 18 Association's (CAPCOA's) *Gasoline Service Station Industrywide Risk Assessment Guidelines*  
 19 (1997) for a Phase II vapor recovery system with vents. The Proposed Project's criteria air  
 20 pollutant emissions during operations are shown in **Table AQ-4**.

1 **Table AQ-4. Criteria Pollutant Emissions during Operations**

Operational Source	Operational Emissions (tons/year)							
	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>
Area	0.205	0.00001	0.0012	0	--	0	--	0
Energy Use	0.0021	0.02	0.016	0.00012	--	0.0015	--	0.0015
Mobile	0.085	0.38	1.12	0.0023	0.17	0.0031	0.046	0.003
Vehicle Idling	0.051	0.074	0.11	--	--	0.00017	--	0.002
Refueling Pump	0.038	--	--	--	--	--	--	--
Emergency Generator	0.0192	0.008	0.071	0.00016	--	0.00026	--	0.00026
<b>Total</b>	<b>0.40</b>	<b>0.48</b>	<b>1.32</b>	<b>0.003</b>	<b>0.17</b>	<b>5.04E-03</b>	<b>0.05</b>	<b>0.01</b>
<b>Maximum Pounds per Day</b>								
Area	1.12	0.0001	0.013	0	--	0.00005	--	0.00005
Energy Use	0.012	0.106	0.0889	0.0006	--	0.008	--	0.008
Mobile	0.518	2.16	6.5	0.014	0.98	0.017	0.2626	0.016
Vehicle Idling	0.28	0.63	4.42	--	--	0.01	--	0.01
Refueling Pump	0.208	--	--	--	--	--	--	--
Emergency Generator	0.38	0.17	1.41	0.0032	--	0.005	--	0.005
<b>Total</b>	<b>2.52</b>	<b>3.06</b>	<b>12.43</b>	<b>0.02</b>	<b>0.98</b>	<b>0.04</b>	<b>0.26</b>	<b>0.04</b>
<b>NSAQMD Threshold of Significance (pounds/day)</b>								
Level A	<24	<24	--	--	<79		--	--
Level B	24-136	24-136	--	--	79-136		--	--
Level C	>136	>136	--	--	>136		--	--
Project's Threshold Level	A	A	--	--	A		--	--

**Notes:**

CO = carbon monoxide

NO<sub>x</sub> = oxides of nitrogenPM<sub>10</sub> = particulate matter 10 microns or less in diameterPM<sub>2.5</sub> = fine particulate matter 2.5 microns or less in diameter

ROG = reactive organic gases

SO<sub>2</sub> = sulfur dioxide

"--" = no emissions or no emissions calculated as de minimis.

Source: CalEEMod modeling results and inputs are provided in Appendix B, Air Quality and Greenhouse Gas Emissions Calculations.

Some criteria air pollutants are important at a local level with CO, PM<sub>10</sub>, and PM<sub>2.5</sub> being the most important of those associated with this Project, and the Proposed Project would result

in an increase in these emissions near the Project site and key intersections. These increases in emissions are anticipated to be small and would not cause any localized exceedances of emission standards (known as “hot spots”) because of the small numbers of motor vehicles at intersections in the Project area, low incidence of vehicle idling, and use of emission control equipment on emergency generators and refueling pumps.

Under Rule 226, Dust Control, NSAQMD requires implementation of best management practices (BMPs) to minimize potential fugitive dust-related impacts from all construction projects. Construction emissions, in particular fugitive dust emissions, are also controlled by implementation of construction BMPs as required by **Mitigation Measure AQ-1**.

With the exception of NO<sub>x</sub> during construction, the construction and operation mass emissions would be within the Level A or B mass emission thresholds established by NSAQMD, which would be less than significant. Emissions of NO<sub>x</sub> during construction would be Level C, a potentially significant impact. **Mitigation Measure AQ-2** implements mitigation measures suggested by NSAQMD for sources classified as Level C.

Implementation of **Mitigation Measure AQ-3** would drop the maximum daily NO<sub>x</sub> emissions to below 136 pounds per day. This can be achieved by limiting the amount of vehicle idling, limiting the amount of material hauling truck trips to approximately 295 one-way trips per day, or by using more recent model year material hauling trucks which emit substantially less NO<sub>x</sub> per trip.

By implementing **Mitigation Measures AQ-1, AQ-2, and AQ-3**, the Proposed Project’s impacts would be **less than significant with mitigation**.

#### **Mitigation Measure AQ-1: Implement Best Management Practices for Construction Air Quality**

The State or its designee shall implement the following BMPs to reduce fugitive dust emissions and construction equipment emissions to the extent feasible:

- All exposed areas of bare soil (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered once per day or as needed to minimize fugitive dust emissions.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13 California Code of Regulations Section 2485). Clear signage regarding this requirement shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- The contractor shall use construction equipment that minimizes air emissions by using to the extent feasible so that overall fleet emissions are equal to or less than emissions compared to the most recent CARB fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- A publicly visible sign shall be posted with the name and telephone number of the contact person at the State regarding dust complaints. This person shall respond to any complaints and take corrective action within 48 hours. The NSAQMD phone number shall also be visible to ensure compliance with applicable regulations.

#### **Mitigation Measure AQ-2: Implement Mitigation for Construction Air Quality**

The Contractor shall implement, as applicable, the following NSAQMD-recommended mitigations for Level C emission sources:

- Alternatives to open burning of vegetative material will be used unless otherwise deemed infeasible by the NSAQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel.
- Grid power shall be used (as opposed to diesel generators) for job site power needs where feasible during construction.
- Temporary traffic control shall be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.
- Construction activities shall be scheduled to direct traffic flow to off-peak hours as much as practicable.
- During initial grading, earth moving, or site preparation, larger projects may be required to construct a paved, coarse gravel or dust palliative treated apron, at least 100 feet in length, leading onto the paved road(s).
- Wheel washers shall be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads on larger projects. Vehicles and/or equipment will be washed prior to each trip, if necessary.
- All self-propelled off-road diesel-powered equipment and vehicles greater than 25 horsepower shall be equipped with an engine meeting at least Tier 1 emission standards (typically manufactured 1996 or later).

**Mitigation Measure AQ-3: Material Hauling NOx Control Measures**

The Contractor shall implement any combination of the following measures to reduce NOx emissions to below 136 pounds per day:

- a. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- b. Limit the number of daily one-way material hauling trips to less than 295.
- c. Use newer model year material hauling vehicles that emit less NOx emissions per trip.

**c. Cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area—*Less than Significant with Mitigation***

As shown in Table AQ-1, the Project site is in a region that is designated in non-attainment for state standards of PM<sub>10</sub>. It is assumed that projects that conform to the General Plan and do not have mass emissions exceeding the screening level significance thresholds would not create a cumulatively considerable net increase in emissions. Therefore, with implementation of mitigation, the Proposed Project would have a **less than significant impact**.

**d. Expose sensitive receptors to substantial pollutant concentrations—*Less than Significant***

***Construction***

During Project construction, diesel particulate matter (DPM) and gasoline fuel combustion emissions that are classified as TACs could be emitted from construction equipment. Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically operating within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Chronic and cancer-related health effects estimated over short periods are uncertain. Cancer potency factors are based on animal lifetime studies or worker studies with long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from exposure that would last only a small fraction of a lifetime. Some studies indicate that the dose rate may change the potency of a given dose of a carcinogenic chemical. In others words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (California Office of Environmental Health Hazard Assessment [OEHHA] 2015). Furthermore, construction impacts are most severe adjacent to the construction area and decrease rapidly with increasing distance. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005).

Given the short duration of construction, the fact that TAC concentrations would quickly be reduced away from the active construction site, and the uncertainties in modeling such emissions, the Proposed Project's effect on nearby sensitive receptors due to construction-related air pollutant emissions would be **less than significant**.

## **Operation**

During Proposed Project operations, DPM could be emitted from the diesel-powered emergency generator. In addition, various gasoline-related TACs would be emitted by the refueling station and vehicles idling in the parking lots. TACs could include such chemicals as benzene, toluene, ethylbenzene, 1,3-butadiene, acrolein, and xylenes.

Several types of sensitive receptors are present in the Project area. To evaluate the impacts of DPM and TACs on nearby sensitive receptors, a screening-level quantitative health risk assessment (HRA) was conducted consistent with OEHHA guidance (OEHHA 2015) for determining local community risks and hazards. The HRA evaluated the Proposed Project's emissions associated with testing of the diesel-powered emergency generator, refueling pump station, and vehicle idling. Detailed information on the methodology and data used to conduct the HRA is described in **Appendix C**. The screening-level health risk assessment involved estimating emissions of DPM and TACs, then conducting screening-level air dispersion modeling to estimate ambient air concentrations at various distances from the source. Once the ambient air concentrations were determined, these were combined with exposure parameters and toxicity information to determine health impacts. **Table AQ-5** shows the results of the HRA for the Proposed Project.

Health impacts resulting from emissions at the proposed CHP Quincy Area Office would be less than the significance thresholds commonly used by other air districts and state agencies of 10 in a million excess cancer risks, below the chronic hazard index of less than 1, and below the acute hazard index of less than 1 at all sensitive receptor locations near the Project site. The HRA analysis (Appendix C) indicates that operational sources would be below the significance thresholds for health impacts. Therefore, operational impacts to sensitive receptors would be **less than significant**.

For the overall impact of the Proposed Project's construction and operational impacts, this impact would be **less than significant**.

### **e. Create objectionable odors affecting a substantial number of people— *Less than Significant***

Diesel exhaust from construction activities may temporarily generate odors while construction of the Proposed Project is underway. Once construction activities have been completed, these odors would cease. Operational activities would also generate odors, mainly associated with gasoline and diesel fuel and exhaust and other oils and lubricants used for automobile repair; these odors would be short-lived and would occur intermittently. Odors from gasoline refueling would be minimized with the use of required vapor recovery systems. Vehicle idling at the site would be minimized to the extent feasible and so would not be likely to cause odor issues for nearby sensitive receptors. Based on observations of odorous evidence at another CHP facility visited by the document authors in March 2015, odors from evidence would not be detectible outside of the evidence storage area. Impacts related to potential generation of objectionable odors are thus expected to be **less than significant**.



1 **Table AQ-5.** Results of Air Quality Health Risk Assessment for the Proposed Project

Emission Source	Resident	Daycare	Preschool	Elementary School	Middle School	High School	Recreation (Child)	Recreation (Adult)
<b>Cancer Risk</b>								
Emergency Generator Small	6.37E-08	5.78E-09	6.76E-10	2.24E-09	8.15E-10	5.43E-10	4.02E-09	2.14E-09
Vehicle Idling	3.14E-06	5.63E-08	6.59E-09	3.93E-08	1.44E-08	9.61E-09	2.57E-08	1.37E-08
Truck Idling	1.45E-06	2.59E-08	3.04E-09	1.81E-08	6.64E-09	4.43E-09	1.19E-08	6.31E-09
Refueling-Loading	1.23E-08	3.96E-10	4.63E-11	2.09E-10	7.05E-11	4.70E-11	1.45E-10	7.72E-11
Refueling-Breathing	1.55E-09	4.99E-11	5.85E-12	2.64E-11	8.89E-12	5.93E-12	1.83E-11	9.75E-12
Refueling-Refueling	2.58E-08	8.36E-10	9.78E-11	4.41E-10	1.49E-10	9.91E-11	3.18E-10	1.69E-10
Refueling-Spillage	8.03E-08	2.63E-09	3.08E-10	1.38E-09	4.67E-10	3.11E-10	1.01E-09	5.39E-10
<b>Total</b>	<b>4.77E-06</b>	<b>9.19E-08</b>	<b>1.08E-08</b>	<b>6.18E-08</b>	<b>2.26E-08</b>	<b>1.50E-08</b>	<b>4.31E-08</b>	<b>2.30E-08</b>
<b>Chronic Hazard Index</b>								
Emergency Generator Small	1.39E-05	3.63E-06	3.63E-06	5.01E-06	4.50E-06	4.50E-06	3.09E-06	3.09E-06
Vehicle Idling	8.60E-03	4.45E-04	4.45E-04	1.11E-03	9.98E-04	9.98E-04	2.48E-04	2.48E-04
Truck Idling	3.16E-04	1.63E-05	1.63E-05	4.06E-05	3.66E-05	3.66E-05	9.11E-06	9.11E-06
Refueling-Loading	4.91E-05	4.57E-06	4.57E-06	8.59E-06	7.12E-06	7.12E-06	2.04E-06	2.04E-06
Refueling-Breathing	6.20E-06	5.76E-07	5.76E-07	1.08E-06	8.99E-07	8.99E-07	2.58E-07	2.58E-07
Refueling-Refueling	1.03E-04	9.64E-06	9.64E-06	1.81E-05	1.50E-05	1.50E-05	4.48E-06	4.48E-06
Refueling-Spillage	3.08E-04	2.91E-05	2.91E-05	5.45E-05	4.53E-05	4.53E-05	1.37E-05	1.37E-05
<b>Total</b>	<b>9.39E-03</b>	<b>5.08E-04</b>	<b>5.08E-04</b>	<b>1.23E-03</b>	<b>1.11E-03</b>	<b>1.11E-03</b>	<b>2.81E-04</b>	<b>2.81E-04</b>

Emission Source	Resident	Daycare	Preschool	Elementary School	Middle School	High School	Recreation (Child)	Recreation (Adult)
	Acute hazard Index							
Emergency Generator Small	4.88E-04	1.28E-04	1.28E-04	1.76E-04	1.58E-04	1.58E-04	1.08E-04	1.08E-04
Vehicle Idling	1.04E-02	5.37E-04	5.37E-04	1.34E-03	1.21E-03	1.21E-03	3.00E-04	3.00E-04
Truck Idling	7.58E-02	3.92E-03	3.92E-03	9.75E-03	8.79E-03	8.79E-03	2.19E-03	2.19E-03
Refueling-Loading	5.45E-05	5.07E-06	5.07E-06	9.54E-06	7.92E-06	7.92E-06	2.27E-06	2.27E-06
Refueling-Breathing	6.88E-06	6.40E-07	6.40E-07	1.20E-06	9.99E-07	9.99E-07	2.87E-07	2.87E-07
Refueling-Refueling	1.15E-04	1.07E-05	1.07E-05	2.01E-05	1.67E-05	1.67E-05	4.97E-06	4.97E-06
Refueling-Spillage	3.16E-04	2.98E-05	2.98E-05	5.59E-05	4.65E-05	4.65E-05	1.40E-05	1.40E-05
<b>Total</b>	<b>8.71E-02</b>	<b>4.63E-03</b>	<b>4.63E-03</b>	<b>1.13E-02</b>	<b>1.02E-02</b>	<b>1.02E-02</b>	<b>2.62E-03</b>	<b>2.62E-03</b>

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## 1 3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted habitat conservation plan (HCP); natural community conservation plan; or other approved local, regional, or state HCP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2 3.4.1 REGULATORY SETTING

#### 3 *Federal Laws, Regulations, and Policies*

#### 4 **Endangered Species Act**

5 The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq.*; 50 Code of  
6 Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are  
7 endangered or threatened throughout all or a substantial portion of their range, as well as  
8 protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS)  
9 and the National Marine Fisheries Service (NMFS) share responsibility for implementing the

1 ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages  
2 marine and anadromous species.

3 Section 9 of the ESA and its implementing regulations prohibit the “take” of any fish or wildlife  
4 species listed under the ESA as endangered or threatened, unless otherwise authorized by  
5 federal regulations. The ESA defines the term “take” to mean “harass, harm, pursue, hunt,  
6 shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16  
7 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq.*) outlines the procedures  
8 for federal interagency cooperation to conserve federally listed species and designated  
9 critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal  
10 entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful  
11 activities that incidentally may result in “take” of endangered or threatened species, subject  
12 to specific conditions. A habitat conservation plan (HCP) must accompany an application for  
13 an incidental take permit.

#### 14 **Migratory Bird Treaty Act**

15 The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory  
16 birds. Most actions that result in take of, or the permanent or temporary possession of, a  
17 migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of  
18 occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

#### 19 **Bald and Golden Eagle Protection Act**

20 The Bald and Golden Eagle Protection Act (16 USC Section 668; 50 CFR Part 22) prohibits  
21 take of bald and golden eagles and their occupied and unoccupied nests. Under this act, the  
22 term “take” is defined as to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect,  
23 molest or disturb” (16 USC Section 668c). USFWS administers the Bald and Golden Eagle  
24 Protection Act.

#### 25 **Clean Water Act**

26 Clean Water Act (CWA) section 404 regulates the discharge of dredged and fill materials into  
27 waters of the U.S., which include all navigable waters, their tributaries, and some isolated  
28 waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section  
29 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage  
30 and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or  
31 ponds used for irrigation or stock watering, small artificial waterbodies such as swimming  
32 pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the  
33 regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of  
34 Engineers (USACE) under the provisions of CWA Section 404. Construction activities  
35 involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE  
36 through permit requirements. No USACE permit is effective in the absence of state water  
37 quality certification pursuant to Section 401 of CWA.

38 Section 401 of the CWA requires an evaluation of water quality when a proposed activity  
39 requiring a federal license or permit could result in a discharge to waters of the U.S. In  
40 California, the State Water Resources Control Board (SWRCB) and its nine Regional Water  
41 Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is  
42 responsible for implementing Section 401 in compliance with the CWA and its water quality  
43 control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct

activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

## ***State Laws, Regulations, and Policies***

### **California Fish and Game Code**

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code subsection (§§) 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code §§ 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or threatened, or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code §§ 3503 and 3513 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, §§ 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, §5515 lists fully protected fish, §4700 lists fully protected mammals, and §5050 lists fully protected amphibians.

## ***Local Laws, Regulations, and Policies***

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the Project site (e.g., connections to infrastructure within the public right-of-way). Local laws, regulations, and policies applicable to the Proposed Project are listed in Appendix A.

### **3.4.2 ENVIRONMENTAL SETTING**

The Project site is biogeographically situated along the southern margins of American Valley in the upper reaches of the Feather River watershed at the northern end of the Sierra Nevada Mountains. The Project vicinity mostly contains lands dominated by industrial, commercial, residential, and agricultural uses.

A reconnaissance-level biological site assessment was conducted by a qualified Horizon biologist on June 28, 2018. The purpose of the assessment was to characterize existing conditions and assess the site's potential to support special-status species.

The Project site consists of an approximate 5-acre parcel of undeveloped land currently used for grazing. The site is currently divided into two parcels; however, once the site is owned by the State (California Highway Patrol [CHP]), a new parcel number will be established. Agricultural land is located to the north and east of the site; further north and east is montane

1 hardwood-conifer forest. Large parcels with residences are located to the west. Lee Road is  
2 located directly south of the site, and further south are Highway 70 and commercial and  
3 residential properties.

4 The elevation on the Project site ranges from approximately 3,465 to 3,485 feet above mean  
5 sea level. Topography is generally flat and slightly slopes to the north-northeast. A drainage  
6 is located in the southeast portion of the Project site that conveys seasonal stormwater to a  
7 culvert under Lee Road. The drainage (described in an upstream direction) flows toward Lee  
8 Road from the northeast, where it traverses the Project site. At its deepest and widest  
9 segment near Lee Road, the drainage is approximately 2 to 3 feet deep from the bottom to the  
10 top of the bank and approximately 4 to 5 feet wide. In this segment, the drainage contains  
11 evidence of scour. The drainage becomes a swale as it continues northeast and beyond the  
12 site boundaries. Just outside of the site boundaries, the drainage swale flattens and  
13 disappears at an old unpaved access road. On the north side of the access road, a slight swale  
14 forms again and eventually flattens out and appears to discontinue. No riparian or wetland  
15 vegetation occurs in or along the drainage, as only sparse ruderal vegetation is present.  
16 Stormwater on the Project site dissipates over adjacent land into this drainage and continues  
17 northeast via overland flow to an unnamed ephemeral channel (U.S. Geological Survey [USGS]  
18 2015). Stormwater is then conveyed to Thompson Creek, which flows northwest to converge  
19 with Spanish Creek and out of the American Valley.

20 The Project site is undeveloped and contains mostly ruderal vegetation (i.e., disturbed  
21 nonnative annual grassland). Approximately 8 ponderosa pines (*Pinus ponderosa*) and one  
22 blue elderberry shrub (*Sambucus nigra* ssp. *caerulea*) are located on the western side of the  
23 western property fence line. One apple tree (*Malus domestica*) is located on the eastern side  
24 of the eastern property fence line. The ponderosa pines and apple tree will not need to be  
25 removed. One ornamental tree that may need to be removed is located directly east of the  
26 southeast boundary of the site. No nest structures were observed in any of these trees during  
27 the June 28, 2018, site reconnaissance. Montane hardwood-conifer forest composed of  
28 ponderosa pine, Douglas fir (*Pseudotsuga menziesii*), and black oak (*Quercus kelloggii*) is  
29 located approximately 0.30 mile east of the site. This adjacent forest is characterized by a  
30 dense understory and relatively low canopy closure.

31 No native vegetation communities occur on the Project site. Remnants of a pole barn are  
32 visible near the eastern edge of the Project site. The remnants do not provide suitable habitat  
33 for nesting birds or roosting bats. No other structures are located on the site.

34 The Project site contains mostly ruderal, disturbed vegetation. These areas are dominated by  
35 yellow starthistle (*Centaurea solstitialis*), short-pod mustard (*Hirschfeldia incana*), dog fennel  
36 (*Anthemis cotula*), and occasional grasses (e.g., *Hordeum* sp.). Other nonnative plants, such as  
37 field bindweed (*Convolvulus arvensis*) and English plantain (*Plantago lanceolata*), were also  
38 observed. Native plants, such as showy milkweed (*Asclepias speciosa*) and tufted eschscholzia  
39 (*Eschscholzia caespitosa*), were located in a few isolated patches throughout the Project site.

40 During the site reconnaissance, signs of deer (*Odocoileus hemionus californicus*) were  
41 observed on the Project site. This is probably a result of the Project site being located along  
42 the southern margins of American Valley, where suitable habitat for deer is present.  
43 Occasional ground squirrel (*Otospermophilus beecheyi*) burrows were observed, primarily in  
44 less disturbed portions and along the fence lines of the Project site where soil compaction

was less evident. No larger mammal burrows were observed on the Project site during site reconnaissance.

No USFWS-designated critical habitat is located within or adjacent to the Project site. Critical habitat for the Sierra Nevada yellow-legged frog is approximately 5 miles southwest of the Project site.

### ***Special-Status Species***

For the purposes of this assessment, special-status species are those that are listed as rare, species of concern, fully protected, candidate, threatened, or endangered by USFWS, NMFS, or the CDFW. Special-status plant and animal species with the potential to occur in the Project area were identified through a review of the following resources:

- USFWS Information for Planning and Consultation Report (USFWS 2018a),
- California Natural Diversity Database (CNDDDB) queries for the nine USGS 7.5-minute quadrangles containing and surrounding the Proposed Project site: *Twain, Crescent Mills, Taylorsville, Spring Garden, Quincy, Meadow Valley, Dogwood Peak, Onion Valley, and Blue Nose Mountain*, all areas surrounding the Project site (CDFW 2018), and
- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California query for the nine USGS 7.5-minute quadrangles containing and surrounding the Project site (CNPS 2018).

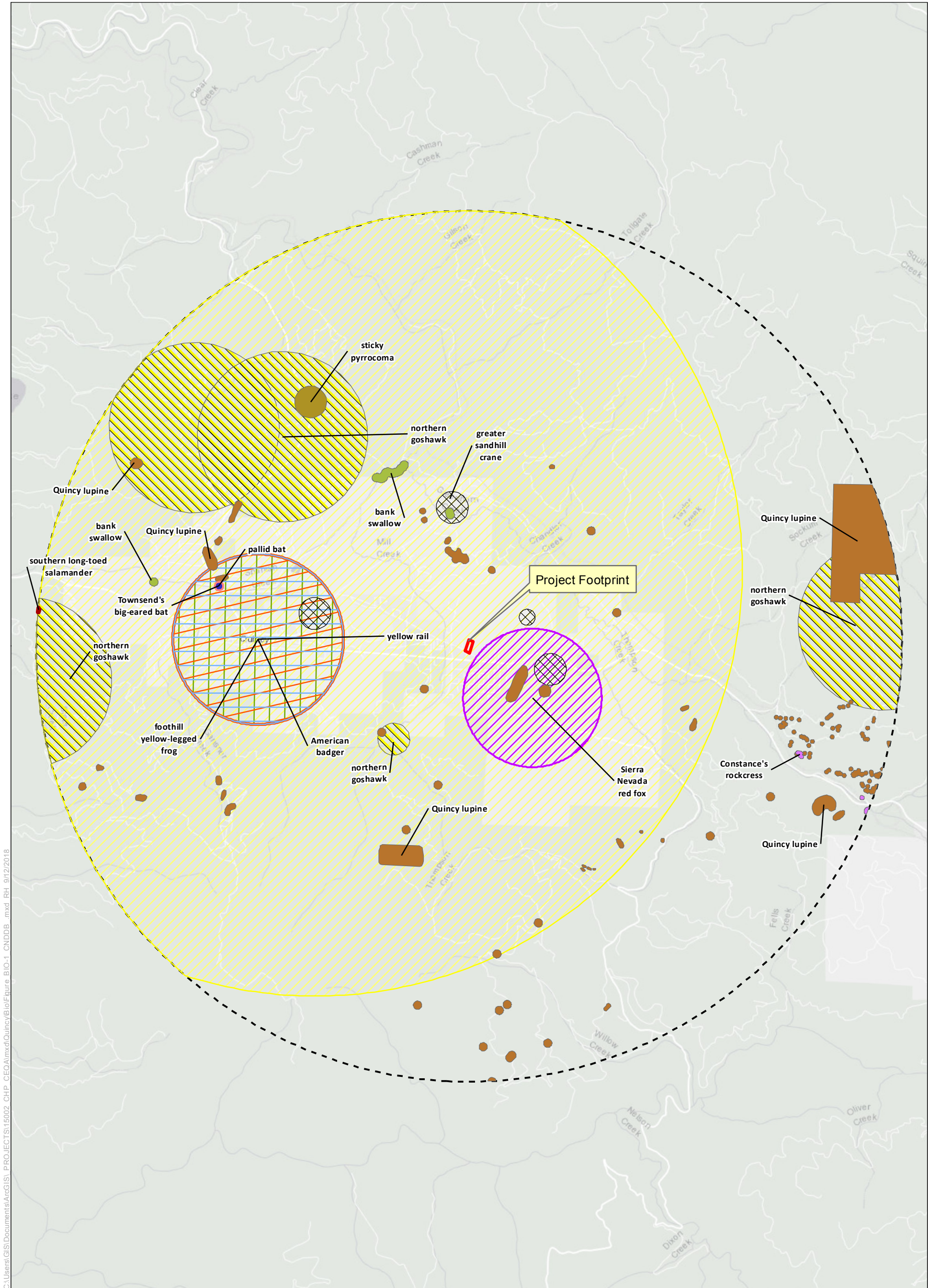
Eighty-eight sensitive species comprising 65 plant species, one fish species, four amphibian species, one reptile species, nine bird species, and eight mammals, were identified through a search of the above-listed resources, including records in the CNDDDB as being historically reported to occur within 5 miles of the Project site (CDFW 2018, CNPS 2018, USFWS 2018a). A list of these species is provided in **Appendix D**, Table D-1. **Figure BIO-1** shows all CNDDDB-recorded occurrences within 5 miles of the Project site. **Figure BIO-2** shows all critical habitat within 5 miles of the Project site. The potential for special-status species to occur on the Project site was determined through an evaluation of site-specific habitat conditions conducted by a Horizon biologist during a reconnaissance-level site visit on June 28, 2018. The potential for special-status species to occur in areas affected by the Project was evaluated according to the following criteria:

- **None:** indicates that the area lacks suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.
- **Not Expected:** indicates situations where suitable habitat or key habitat elements may be present but are of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.
- **Possible:** indicates the presence of suitable habitat or key habitat elements that could potentially support the species.



- 1                   ▪ **Present:** indicates that either the target species was observed directly or its presence  
2                   was confirmed by diagnostic signs (i.e., tracks, scat, burrows, carcasses, castings, prey  
3                   remains) during field investigations or in previous studies in the area.

4                   During the reconnaissance-level site visit on June 28, 2018, the Horizon biologist identified  
5                   vegetation and conditions on the Project site and conducted searches for active nests and  
6                   inactive nest structures, as well as for burrows that could provide den sites for special-status  
7                   species.

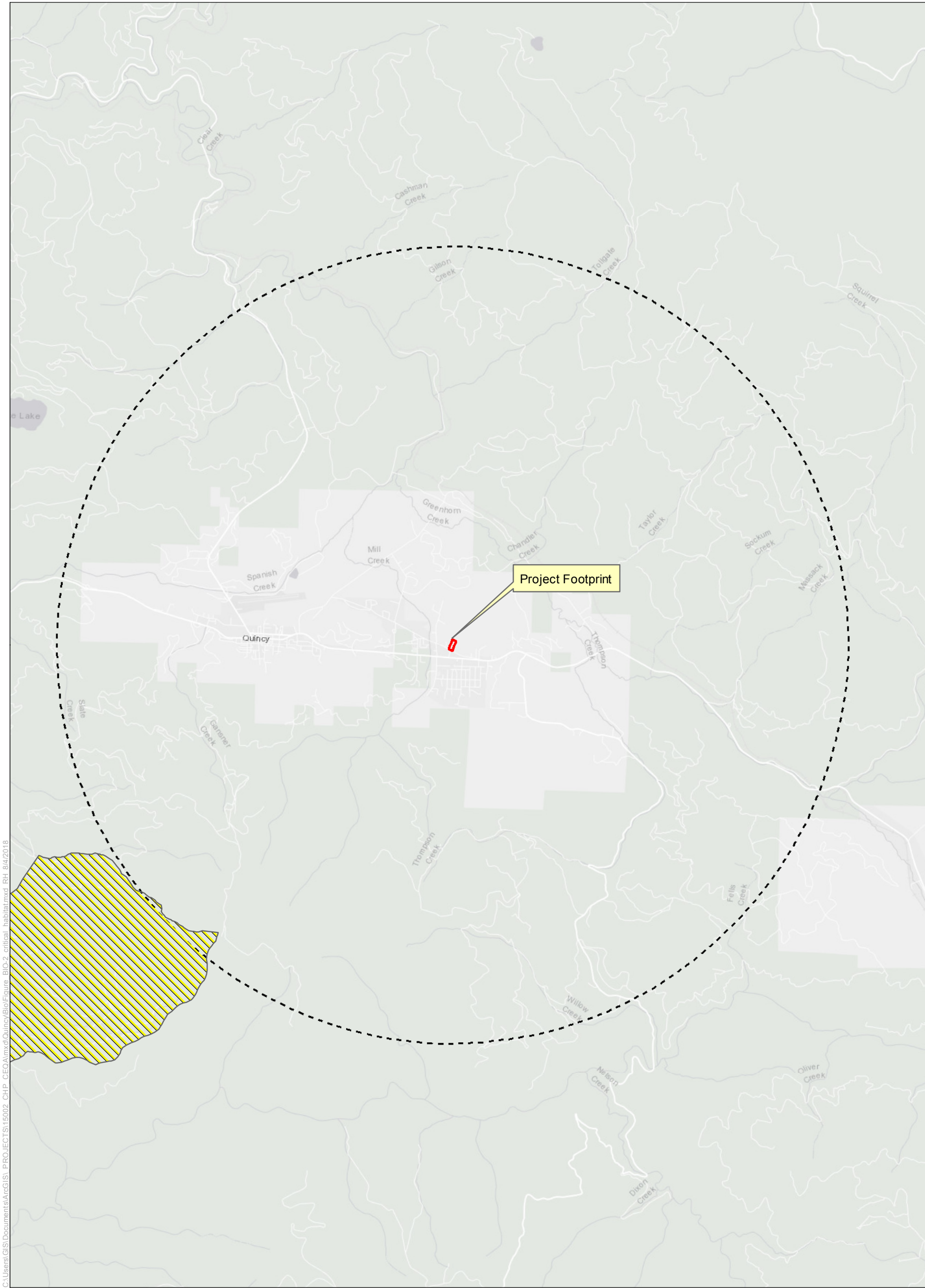


C:\Users\GIS\Documents\ArcGIS\PROJECTS\15002\_CHP\_CEQ\mxd\Quincy\Bio\Figure BIO-1\_CNDDB.mxd RH 9/12/2018



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C:\Users\GIS\Documents\ArcGIS\PROJECTS\15002 CHP\_CEQ\mxd\Quincy\Bio\Figure BIO-2 critical habitat.mxd RH 8/4/2018

**Figure BIO-2. Critical Habitat within 5 miles of the Proposed Project**



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### 3.4.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species—*Less than Significant with Mitigation*

##### ***Special-status Plant Species***

Based on searches of the CNDDDB, USFWS Information for Planning and Consultation Report, and the CNPS Inventory of Rare and Endangered Plants, 65 sensitive plant species were identified as historically occurring within 5 miles of the Project site or with potential to occur in the Project site vicinity (CDFW 2018, USFWS 2018a, CNPS 2018). Of these, only 12 plant species have a potential to occur on site due to the presence of marginally suitable habitat, none of which are federally or state-listed species. The Project site does not contain suitable habitat for the remaining 53 plant species. The Project site is not within critical habitat for any plant species.

No special-status plant species were observed by the Horizon biologist during the reconnaissance-level site visit, and none are anticipated to occur at the project site. Although suitable habitat exists in the nearby conifer forest for many special-status plants, the Project site itself provides only marginal habitat for a limited number of CNPS rare plant species (see Appendix D, Table D-1). The Project site lacks native vegetation communities and contains mostly ruderal vegetation. Additionally, current agricultural practices (grazing) impede the establishment of special-status plant species on site. Thus, there would be a less than significant potential for adverse impacts to special-status plant species. This impact would be **less than significant**.

##### ***Special-status Wildlife Species***

Twenty-three special-status wildlife species (including one fish, four amphibians, one reptile, nine birds, and eight mammals) were identified in database searches associated with the Project (CDFW 2018, USFWS 2018a) and are documented in Appendix D, Table D-1, including their potential for occurrence on the Project site. Of these, only seven wildlife species have a potential to occur on site due to the presence of marginally suitable habitat. The Project site is not within critical habitat for any wildlife species.

No special-status wildlife species were observed by the Horizon biologist during the reconnaissance-level site visit; however, no focused or protocol-level wildlife surveys have been conducted for the Project site.

##### ***Special-status Aquatic Wildlife Species, Amphibians and Reptiles***

No suitable habitat for special-status fish (delta smelt), amphibians (southern long-toed salamander, foothill yellow-legged frog, California red-legged frog, Sierra Nevada yellow-legged frog), or reptiles (western pond turtle) is present on or adjacent to the Project site. All of these species are dependent upon aquatic habitats that do not occur on or adjacent to the Project site. The Project would have no impact on special-status fish, amphibian, and reptile species.

## Special-status Birds

Of the nine special-status bird species considered in this document (northern goshawk, golden eagle, yellow rail, willow flycatcher, bald eagle, greater sandhill crane, osprey, bank swallow, and gray owl), none are expected to nest on the Project site (see Appendix D, Table D-1). Some ponderosa pine trees occur near the western border of the Project site; however, they do not occur in forested or woodland areas, and the site itself does not contain any trees. The Project site lacks native vegetation communities, and consists of mostly ruderal vegetation. Additionally, specific habitat requirements for these species (e.g., dense, mature forest with large trees and high canopy closure; lakes, rivers, or reservoirs; exposed, vertical river banks with friable soils, and shallow or emergent wetlands) are absent from the Project site and vicinity. Marginal foraging habitat exists on site for the golden eagle; however, no CNDDDB occurrences within 5 miles of the Project site have been observed of the golden eagle and they prefer more open areas for foraging as opposed to what is present at the Project site. Marginal foraging habitat also exists for the bank swallow although there are no suitable nesting sites in, or adjacent to, the Project site, making it unlikely that the swallow would utilize the site for foraging. Additionally, although there are two CNDDDB-recorded occurrences within 5 miles of the Project site, Plumas County is outside the normal range for the bank swallow (Plumas County 2012) and the Project site lacks suitable nesting colony substrate (e.g., river banks). The Greater sandhill crane could utilize the site for loafing; however, the site provides only marginal loafing habitat due to its proximity to Lee Road, Highway 70, and highly utilized commercial and residential areas to the west, south, and east of the Project site. Northern goshawk may use forested areas adjacent to (east and south of) the Project site for nesting and foraging; however, it is unlikely that they would utilize the Project site for foraging or nest in the nearby ponderosa pines located on the western border of the fence-line around the site. The Project would have no impact on these special-status bird species.

Most native migratory birds (including active nest sites) are protected under MBTA; active bird nests are protected by CFGC Section 3503; and raptor nests are protected under CFGC Section 3503.5. The ponderosa pines located outside of the Project site, but bordering the fence-line on the western side of the Project site, have moderate potential to be used by nesting raptor species such as red-tailed hawk (*Buteo jameicensis*). In addition, the blue elderberry shrub located near the ponderosa pines, the apple tree near the eastern fence line, and the ornamental shrub near the southeast corner of the site may provide suitable nesting habitat for other nesting birds such as dark-eyed junco (*Junco hyemalis*), fox sparrow (*Passerella iliaca*), and Steller's jay (*Cyanocitta stelleri*). Both the apple tree and ornamental shrub are also located outside of the Project site boundaries. Clearing of trees and shrubs, as well as pruning/trimming them, as a result of the Project could destroy (e.g., crush) active nest sites, if present, on the Project site during construction. Additionally, noise and disturbance associated with construction and operation of the Project could adversely affect nesting birds in adjacent areas to the point that it results in nest abandonment and/or failure. Because the potential loss of an active bird nest during construction would potentially violate protections under the MBTA and CFGC, such an impact is considered significant. With implementation of **Mitigation Measure BIO-1**, the Project would avoid impacts on nesting birds by identifying and avoiding direct and indirect impacts to occupied nests.

The construction and operation of the radio tower is not anticipated to create a collision hazard to birds in flight and night-migrating birds that are protected under the MBTA. The risk of bird collisions with towers is related to tower height, design, lighting, and location

relative to migratory bird concentration areas (USFWS 2016). The Project radio tower would be less than 200 feet tall (approximately 148 feet tall) and would not include guy wires or lighting, features that are typically associated with a minimized level of collision risk (USFWS 2016). Additionally, the Project site is located directly north of an existing commercial and residential area and is not within or adjacent to high quality or known important bird nesting areas (Plumas County 2013). Therefore, potential impacts from the radio tower construction and operation on protected migratory birds would be less than significant.

**Mitigation Measure BIO-1: Conduct Pre-construction Surveys for Nesting Birds and Implement Non-disturbance Buffer Areas if Necessary.**

To the extent feasible, all vegetation removal shall occur between September 1 and January 14, which is outside the bird/raptor nesting season, to avoid potential impacts on nesting birds. If construction activities (including staging and vegetation removal) will occur during the nesting season (January 15 through August 31), the Project proponent shall retain a qualified wildlife biologist to conduct focused surveys for active bird nests on the Proposed Project site and within a 250-foot buffer no more than 7 days before initiation of construction activities. If no work occurs for a period of 5 days during the nesting season, surveys must be performed before work within 250 feet of suitable nesting substrate is resumed. If the survey indicates that no active nests are present, no further mitigation shall be required.

If an active bird or raptor nest is located during the preconstruction surveys, a qualified biologist shall establish appropriate species-specific non-disturbance buffer zones in consultation with USFWS and/or CDFW. No Project activity shall commence within the non-disturbance buffer until a qualified biologist confirms that the nest is no longer active.

***Special-status Mammals***

Eight special-status mammal species, including two special-status bats (discussed below), were identified in database searches as historically occurring within 5 miles of the Project site (CDFW 2018) and are documented in Appendix D, Table D-1. Habitat conditions on the Project site provide only marginal habitat suitable to support American badger and Sierra Nevada red fox. The Project site lacks native vegetation communities and much of the site is composed of open compacted soils. Furthermore, mammal burrows of suitable size to support these two species are absent from the Project site and immediate surroundings. American badger and Sierra Nevada red fox could use land to the north and east of the Project site as movement habitat. The Project would not be expected to cause a substantial increase in disturbance levels (e.g., noise, lighting, visual, etc.) in adjacent areas that could be used by American badger and Sierra Nevada red fox relative to existing conditions. Therefore, impacts to American badger or Sierra Nevada red fox would be less than significant.

There are no existing structures on the Project site that special-status bats (Townsend's big-eared bat and pallid bat) and other communal roosting bat species would find suitable for nesting or roosting. Bats could occur in trees adjacent to the Project site, and could be affected by the Project's development; however, the ponderosa pines generally lack the characteristics necessary to support bat roosts (e.g., cavities, sloughing bark, or otherwise decayed conditions that could support hollow trees). No bats or their sign (e.g., guano) were observed on the Project site during the site reconnaissance survey; however, focused bat surveys have not been conducted for this potential roosting habitat. Because special-status bats could roost in the trees near the property boundaries, construction activities and/or



removal of trees could impact a roost and/or the species if present. Such an impact would be considered significant. Implementation of **Mitigation Measure BIO-2** would reduce the impact to a less-than-significant level through the identification, avoidance, and exclusion of special-status bats and their roosts if present.

**Mitigation Measure BIO-2: Conduct Pre-construction Surveys for Special-Status Bat Species, Implement Non-disturbance Buffer Areas if Necessary, and Exclude Bats if Necessary.**

Pre-construction surveys consisting of visual encounter surveys using binoculars, shall be conducted by a bat biologist for all areas within 50 feet of the Project site to identify potential bat-roosting cavities and assess the presence of bats. If roosting cavities are found, CDFW shall be consulted to determine appropriate buffer and exclusion zones. If no suitable roost sites are identified, no further minimization measures are necessary.

Project operations (other than those related to the radio tower discussed above) such as occasional alarm tests, security lighting, operations of the auto shop, periodic testing of the emergency generator, and daily activity at the facility, would not be expected to cause a substantial impact on special-status wildlife or special-status birds because the Project site is located near a high-disturbance commercial and residential area with existing noise, lighting, and visual disturbances. Potential impacts from Project operations on special-status wildlife species and other protected birds would be less than significant.

Based on the discussion above, impacts on special-status wildlife species and other protected birds would be reduced to **less than significant with mitigation**.

**b. Substantial adverse effect on any riparian habitat or other sensitive natural community—*Less than Significant***

No riparian habitat or other sensitive communities have been identified on or near the Project site (CDFW 2018, see also Figures BIO-1 and BIO-2). However, a drainage<sup>1</sup> is located in the southeast portion of the Project site. The drainage, which was dry during the reconnaissance survey on June 28, 2018, likely conveys stormwater to a culvert under Lee Road. The drainage is characterized by sparse ruderal vegetation; it does not provide habitat that would support any fish or wildlife resources. As described further in Section 3.9, "Hydrology and Water Quality," stormwater on the Project site dissipates over adjacent uplands into this drainage and continues northeast to an unnamed ephemeral channel (USGS 2015), and then out to Thompson Creek which flows northwest to converge with Spanish Creek and out of the American Valley.

As there is evidence that this drainage is hydraulically connected to Thompson Creek, this analysis assumes that the drainage along Lee Road would be considered a water of the U.S. (80 CFR 37054) subject to regulation under CWA Section 404. In addition, this drainage is anticipated to be a potential water of the State and would be subject to regulation under the

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<sup>1</sup> The boundaries of the drainage have not been quantified using standard wetland delineation methods. However, the drainage is up to approximately 0.1 acres.

Porter-Cologne Water Quality Control Act (Section 13050 defines waters of the State to be any surface water within the boundaries of the State).

Potential fill of an unknown acreage of the drainage will occur when the site is graded for construction. This would result in the permanent loss of an unknown amount of waters of the U.S. and waters of the State. Additionally, ground disturbances and equipment operations associated with construction of the Project could cause sediment or pollutant (e.g., oil) runoff into the drainage which could degrade water quality. Work within areas defined as waters of the State would require a Section 401 Water Quality Certification from RWQCB and work within areas defined as waters of the U.S. would require a Section CWA 404 permit from USACE. In addition, a CDFW Lake or Streambed Alteration Agreement pursuant to F&GC Section 1602 could be required. CHP would be required to comply with permit conditions including construction best management practices to avoid and minimize impacts to jurisdictional waters, and would be required to compensate for permanent impacts on potential waters of the State and waters of the U.S. to achieve no net loss. Compliance with RWQCB, USACE, and CDFW permit conditions would ensure that no substantial impacts on waters of the State would occur. This impact would be **less than significant**.

**c. Substantial adverse effects on federally protected wetlands—  
*No Impact***

A search of the USFWS National Wetlands Inventory revealed no wetlands on or adjacent to the Project site (USFWS 2018b). Furthermore, no wetland features were observed on the Project site during the reconnaissance site visit. The Project site and immediate vicinity does not support any federally protected wetlands as defined by Section 404 of the CWA. Therefore, the Project would result in **no impact** on federally protected wetlands.

**d. Substantial interference with wildlife movement, established wildlife corridors, or the use of native wildlife nursery sites—*Less than Significant***

The Project site connects to open fields and then a hardwood-conifer forest to the north and east, which would link suitable habitats for wildlife outside the Project site. The Project site, however, is bordered on the south by Lee Road, Highway 70, and commercial and residential uses, including the town of East Quincy, which would make it difficult for wildlife traveling north to reach the Project site. Additionally, human presence and activity in these areas serve as deterrents to wildlife. The site itself is composed of ruderal/disturbed vegetation and is currently used for grazing. No riparian or other naturally vegetated corridors occur on the Project site. Additionally, potential wildlife corridors and travel routes in the Project vicinity are currently obstructed by existing fencing along the western, northern, southern, and eastern boundaries. Therefore, the Project site is of limited value for wildlife movement.

No known wildlife nursery sites, including important waterfowl nesting areas in Plumas County (Plumas County 2013), occur on the Project site; however, nursery sites for common and sensitive species (e.g., bird nest sites in trees and shrubs; bat communal roosts in trees) could occur near the border of the Project site. Potential impacts on nesting birds and bat communal roosts are addressed under Section 3.4.3 (a), above.

No established wildlife migratory routes have been identified on the Project site. While evidence of deer use (i.e., deer droppings) was observed during the site reconnaissance visit, important deer migration routes identified in Plumas County (Plumas County 2013) do not overlap the Project site or adjacent areas. Implementation of the Project would not interfere substantially with the movement of any native resident or migratory wildlife species because the Project site is of limited value as a wildlife movement corridor and does not provide an important connection between any areas of natural habitat that would otherwise be isolated, nor does it occur along any established wildlife migration routes. Additionally, the Project would not impede use of or access to important native wildlife nursery sites because no known nursery sites have been identified on or adjacent to the Project site. Therefore, the Project would not likely interfere with the movement of any native or migratory wildlife species, nor impede the use of any native wildlife nursery sites and impacts would be **less than significant**.

**e. Conflict with local policies or ordinances protecting biological resources—*No Impact***

The Project would not conflict with Plumas County's Conservation and Open Space and Water Resources regulations (and other local policies and ordinances) protecting biological resources (see Appendix A). Mitigation Measure BIO-1 would be implemented as described above in response to Section 3.4.3 (a), which would be consistent with requirements of the County's Conservation and Open Space regulations. Therefore, implementation of the Project would result in **no impact** arising from conflicts with local ordinances and policies protecting biological resources.

**f. Conflict with the provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP—*No Impact***

No adopted regional HCPs or natural community conservation plans (NCCPs) exist within Plumas County (Plumas County 2013, USFWS 2018c). The Project site is not located within the planning area nor is it under the jurisdiction of an adopted HCP or a NCCP. Therefore, implementation of the Project would not conflict with the provisions of any adopted HCP, NCCP, or any other approved local, regional, or state HCP. There would be **no impact**.

## 3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 3.5.1 REGULATORY SETTING

#### ***Federal Laws, Regulations, and Policies***

The Proposed Project does not require any federal permits, and it is not located on federal lands; therefore, federal laws do not apply to the Proposed Project. The following laws are provided for context only.

#### **National Historic Preservation Act**

Projects that require federal permits, receive federal funding, or are located on federal lands must comply with 54 U.S. Code (USC) 306108, more commonly known as Section 106 of the National Historic Preservation Act (NHPA). To comply with Section 106, a federal agency must "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places [NRHP]." The implementing regulations for Section 106 are found in 36 Code of Federal Regulations (CFR) Part 800, as amended.

The implementing regulations of the NHPA require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking or project. To determine if a site, district, structure, object, and/or building is significant, the NRHP Criteria for Evaluation are applied. A resource is significant and considered a historic property when it:

- A. Is associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Is associated with the lives of persons significant in our past; or
- C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that

represents a significant and distinguishable entity whose components may lack individual distinction; or

D. Yields, or may be likely to yield, information important in prehistory or history.

In addition, 36 CFR Section 60.4 requires that, to be considered significant and historic, resources must also exhibit the quality of significance in American history, architecture, archaeology, engineering, or culture and must possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Other “criteria considerations” need to be applied to religious properties, properties that are less than 50 years old, a resource no longer situated in its original location, a birthplace or grave of a historical figure, a cemetery, a reconstructed building, and commemorative properties. These types of properties are typically not eligible for NRHP inclusion unless the criteria for evaluation and criteria considerations are met.

For archaeological sites evaluated under criterion D, “integrity” requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

Traditional Cultural Properties (TCPs) are locations of cultural value that are historic properties. A place of cultural value is eligible as a TCP “because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community” (Parker and King 1990, rev. 1998). A TCP must be a tangible property, meaning that it must be a place with a referenced location, and it must have been continually a part of the community’s cultural practices and beliefs for the past 50 years or more.

### ***State Laws, Regulations, and Policies***

#### **CEQA and CEQA Guidelines**

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

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

Although not specifically inclusive of paleontological resources, these criteria may also help to define “a unique paleontological resource or site.”

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that “a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] Section 5024.1[k]);
- included in a local register of historic resources (PRC Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of PRC Section 5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and PRC Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in PRC Section 5097.5, “Archaeological, Paleontological, and Historical Sites.” This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources.

### **California Register of Historical Resources**

PRC Section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the NRHP, including properties evaluated under Section 106 of the NHPA. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

- Are associated with the events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Are associated with the lives of persons important in our past;

- Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
- Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

### 3.5.2 ENVIRONMENTAL SETTING

#### ***Prehistory***

Little archeological excavation has taken place in the high mountain valleys of Plumas County, and work that has occurred has largely been in Big Meadows in relationship to Lake Almanor. As a result, the archaeological sequence for the region is based on fairly limited local data and relies heavily on information from the Tahoe area and the west slopes of the Northern Sierra Nevada in Plumas and Butte counties, and in particular the Lake Oroville area. This section presents a brief summary of the cultural-historical sequence recognized in the region.

#### **Paleo-Indian Period (Prior to 8000 Years Before Present [BP])**

The people living in this period were likely hunters of big game, who were highly mobile and who lived in small groups. Artifacts representing their presence usually include large fluted or stemmed spear points; only one of which has been discovered in the Proposed Project region (Compas 2002:91).

#### **Early Archaic (8000 to 3000 BP)**

The Early Archaic represents a time when populations began to rely more on seeds and other plant foods, rather than focusing on large game. This is evidenced by the presence of milling equipment such as handstones and milling slabs. Pinto and Borax Lake style dart points become the norm. There is little data to suggest that the high mountain valleys of the northern Sierra Nevada were occupied during this time period (Compas 2002:91).

#### **Mesilla Complex (3000 to 2000 BP)**

By 3000 BP, during the Middle Archaic, the archaeological record becomes more prevalent in the high mountain valleys. Referred to as the Mesilla Complex in the Project region, the dart and atlatl were introduced during this time period. The dart points were leaf-shaped, stemmed, and corner-notched styles that reflected influence from the Martis tradition that spread northward from the Tahoe basin. Projectile points were largely manufactured from basalt, slate, and chert. Handstones and milling slabs continued to be used for processing seeds, though bowl mortars and cylindrical pestles also appeared at this time. Other Mesilla traits included *Haliotis* and *Olivella* shell beads, along with charm stones and bone pins, all of which indicate trade with Central Valley populations. Archaeological data suggest that occupation of the mountains was by small groups who accessed the region seasonally (Moratto 2004:299).

**Bidwell Complex (2000 BP to 1200 BP)**

The large dart points and milling equipment of the Mesilla Complex persisted into the Upper Archaic Bidwell Complex; however, the mortar and pestle became more common and, where available, use of steatite vessels for cooking now came into play. Data also indicate that settlements were more permanent and there was greater exploitation of riverine resources, as evidenced by the presence of grooved and notched net sinker stones used for fishing, and fresh water mussel shells (Moratto 2004:299-300).

**Sweetwater Complex (1200 BP to 500 BP)**

The Sweetwater Complex is marked by the introduction of the bow and arrow into the region. This is evidenced by the presence of small, light-weight, stemmed and notched or barbed projectile point styles, which suggest influences from both the northwest portions of California and the Great Basin or Tahoe regions. In the Oroville vicinity, the steatite industry also expanded to include cups, platters, bowls, and tubular smoking pipes (Moratto 2004:300). The ancestral Maidu moved into the region sometime during this period (Compas 2002:92), bringing such characteristic traits as an expanded bone tool industry and the use of bedrock mortars that reflects a developed use of acorns (Moratto 2004:300).

***Ethnography***

The Project area is located in the ethnographic territory of the Mountain, or Northeastern Maidu, who occupied the northern Sierra Nevada, including all of Plumas County and adjacent portions of Butte and Lassen counties (Riddell 1978:370-386). Their extensive lands reached from the Sierra Buttes in the south, north to Lassen Peak and Eagle Lake. The western boundary was just downstream of Richbar on the North Fork Feather River and Pilot Peak, while the eastern territory prehistorically extended into the Great Basin and encompassed Honey Lake. The high mountain valleys (Mountain Meadows, Big Meadows, Butt, American, Indian, Genesee, and Red Clover valleys) and the area around Susanville were the major tribelet centers for the Mountain Maidu, where permanent communities were maintained. Habitation in the area around Quincy in American Valley was particularly dense. This vast range provided the Mountain Maidu with a variety of ecosystems that could be drawn from for subsistence. These included mixed-conifer mountain forests and the marshlands around Honey Lake. Additionally, groves of black oak are found along the eastern base of the northern Sierra Nevada, which yielded much-sought-after acorns.

As previously mentioned, as tribelet centers, the permanent Mountain Maidu communities were located in the mountain valleys. These centers included a main village and surrounding smaller housing clusters. The largest village was generally the home of the tribelet headman, and contained a large semi-subterranean lodge used for tribelet ceremonies. The central villages likely contained up to seven semi-subterranean houses or conical bark houses, while smaller surrounding villages consisted of three to five dwellings. Shade shelters were constructed as temporary structures when community members travelled to other regions of the territory during the summer months to hunt and collect acorns or other vegetal goods.

The Mountain Maidu language is one of three closely related Maiduan languages. The other two languages, Konkow Maidu and Nisenan, are spoken by their neighbors immediately to the west and south, respectively. The three Maiduan groups were also culturally similar and actively interacted and traded with one another. In addition to trading with their linguistic and cultural relatives, the Mountain Maidu regularly traded with the Achumawi who lived



1 along their northern border. In exchange for deer hides and bows, the Mountain Maidu  
2 received obsidian from the Achumawi, which was the preferred material for making sharp  
3 stone tools such as arrow points and knives (Riddell 1978:380).

4 The Greenville Rancheria, in Greenville (Indian Valley), is the closest tribe to the Proposed  
5 Project site. It is a federally recognized tribe. The Rancheria in Greenville was originally  
6 established on 275 acres in the late 1880s when the Bureau of Indian Affairs established a  
7 non-boarding school on land that was eventually held in trust for the Mountain Maidu. The  
8 Greenville Rancheria was abolished in 1958 when the U.S. government withdrew the tribe's  
9 federal recognition under the California Rancheria Act. At that time tribal members were  
10 provided land holdings in fee status. However, without the protection of the federal trust  
11 status, many of the Maidu families lost their lands and were forced to leave the area for  
12 economic reasons; more than half of the tribe ultimately moved to the area around Red Bluff  
13 in Tehama County. The tribe regained its federal status in 1983 after winning a law suit  
14 against the federal government for wrongful termination of their legal status. Unfortunately,  
15 the tribe was left without a viable land base by that time. The tribe currently holds several  
16 small parcels of land in Greenville, Red Bluff, and Redding, all in fee status. The tribe provides  
17 medical services to tribal members and others at three clinics in Greenville, Red Bluff, and  
18 Redding. It also supports an active Tribal Environmental Protection Agency and Cultural  
19 Department (Greenville Rancheria 2018).

## 20 ***History***

21 The historic era in Plumas County and the vicinity of Quincy began in 1848 when Peter Lassen  
22 pioneered a new route into California's Central Valley from Goose Lake in present-day Modoc  
23 County. The route passed through Big Meadows (now Lake Almanor) and southwest to the  
24 vicinity of Vina in the Valley (Kyle et al. 2002:282-283). During the subsequent years, with  
25 the advent of the Gold Rush, hundreds of individuals used the trail to pass through the county  
26 in search of their fortunes. It was not until 1849 or 1850 that the gold seekers began to  
27 explore what riches the rivers of the Plumas County region might contain, and by the spring  
28 of 1851 thousands of gold miners were streaming into the county. James Beckwith (aka  
29 Beckwourth) discovered a new route into Plumas County from the east, travelling through  
30 American Valley on his way to the Pitt River region in 1851 (Kyle et al. 2002:282). This pass,  
31 Beckworth Pass, is the lowest elevation pass over the Sierra Nevada, which allowed  
32 immigrants to move into California. Pioneers began settling in the high mountain valleys  
33 during 1852. One such early pioneer was James H. Bradley, who settled in American Valley.  
34 Bradley established the American Ranch and built a hotel, called the American Hotel (the site  
35 is now State Landmark 479), for travelers. Bradley was one of the three original county  
36 commissioners when Plumas County was split off from Butte County in 1854 and, due to his  
37 influence, the hotel became the seat of justice for the county. At this time, Bradley named the  
38 growing community Quincy, after his home town in Illinois (Kyle 2002 et al.:286). During the  
39 next few years the town acquired a Masonic Hall, courthouse, post office, and jail. After  
40 numerous fires that destroyed most of the earliest structures in town, including the American  
41 Hotel, the community constructed a firehouse in 1878.

42 Mining, agriculture, and lumber have long been the economic standards for Plumas County  
43 and the Quincy area. Once gold was discovered in the regional rivers and streams, mining  
44 camps became prevalent throughout the region. The high mountain valleys were agricultural  
45 centers from the time of the earliest settlements by Anglo-Americans. Fruits and vegetables  
46 were grown early on in 1851 and 1852, but by 1853 wheat, oats, and barley were common

place; so much so that the first flour mill in the county was built in American Valley in 1854. Timber was originally cut in order to supply settlers with lumber for their homes and outbuildings, but sawmills sprang up by 1853. The Quincy Railroad was built in 1910 to ship lumber and provide passenger service to American Valley residents. Originally incorporated as the Quincy & Eastern Railway, and reorganized as the Quincy Western Railway, and then the Quincy Railroad, the line ran for about 5.5 miles between downtown Quincy and almost to East Quincy before turning north to join the Western Pacific Railroad line at Quincy Junction. Passenger service ended in the 1950s, and the line currently runs for 3.27 miles between Quincy Junction and Bell Lane, just east of the Project site (Union Pacific 2018). The local Quincy economy continues to be supported by mining, ranching, and lumber, and by its position as the County seat. Tourism has become increasingly important to the local economy over the last decade.

### ***Cultural Resources Studies***

Cultural resources include prehistoric archaeological sites; historic-era archaeological sites; tribal cultural resources; and historic buildings, structures, landscapes, districts, and linear features. Tribal cultural resources are addressed in Section 3.17, *Tribal Cultural Resources*.

### **Archival Search**

A record search was conducted August 1, 2018, by the Northeast Information Center (NEIC) of the California Historical Resources Information System at California State University, Chico (NEIC File #D18-101). The purpose of the record search was to identify the presence of any previously recorded cultural resources within the Project site, and to determine if any portions of the Project site had previously been surveyed for cultural resources. The records search encompassed the Project area as well as a 0.5-mile study radius around the Project area. The record search indicated that no cultural resources had been previously recorded within the Project area or study radius (see **Table CR-1**). The search results found one previous cultural resources study within the Project area, and five studies previously conducted within the 0.5-mile study radius.

**Table CR-1.** Cultural Studies Previously Conducted in the Project Area

NEIC Report No.	Author	Date	Title	Location of Study
219	James, C. D.	1976	Final report Archaeological Clearance Investigations Plumas County Fairgrounds, Plumas County.	0.5-mile study radius
839	Kowta, M.	1988	The Archaeology and Prehistory of Plumas and Butte Counties, California	0.5-mile study radius
1967	Wayland, B.	1997	Confidential Archaeological Addendum for Timber Operations on Non-Federal Lands in California: Blanchard THP.	0.5-mile study radius
9991	Henrici, D.	1979	Archaeological Reconnaissance for the proposed Special Use Permit of assessor's parcel number 117-060-22, Plumas County, California.	0.5-mile study radius

NEIC Report No.	Author	Date	Title	Location of Study
12349	Meyer, J.	2013	A Geoarchaeological Overview and Assessment of Northeast California: Cultural Resources Inventory of Caltrans District 2 Rural Conventional Highways: Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama, and Trinity Counties.	0.5-mile study radius
11578	Browning, H.	2012	Cultural Resources Inventory for the Proposed Special Use Permit of assessor's parcel number 117-060-22, Plumas County.	Project Area

A Phase I Environmental Site Assessment for the Project parcel included research on the historical uses of the property (SHN 2017:6-10). This research involved interviews and examination of historical topographic maps from 1891 through 2012 and aerial photographs dating from 1946 through 2012. The topographic maps indicate that the property has never been developed. Those interviewed confirmed that the land has been continuously used for ranching since the late 1800s, except when a portion of the property was used as an airstrip in the 1930s and 1940s. The presence of an airstrip is corroborated in a 1946 aerial photograph. A pole barn is visible near the east edge of the property in the 1986, 1998, and 2005 aerial photographs; by 2009 the barn has been demolished and only remnants are visible.

A request for information was made to the Plumas County Museum in Quincy via email on July 18, 2018, for any information the organization has about significant historic-era resources within the Project site. Scott Lawson (Lawson 2018), from the Plumas County Museum, responded by email on the same day, noting that the property was once part of the Alford Ranch, which was one of the first ranches settled in the American Valley in the 1850s. It was sold to Samuel Lee sometime in the 1860s or 1870s, and has remained in the family since that time. Mr. Lawson also stated that the Sky Harbor Airport was on the property for a short time in the mid-1900s. According to Mr. Lawson, the structure remains are "from a relatively recent barn."

The Project site is underlain by Holocene alluvial fan deposits identified as part of the Forgay-Urban land complex (Natural Resources Conservation Service 2018). This soil generally consists of gravelly coarse sandy loam with a depth of over 80 inches. The Holocene deposits have the potential to contain buried archaeological materials, as they have been deposited during the time period that indigenous populations lived in the valley. Alluvial deposits oftentimes obscure and bury evidence of early use and occupation of mountain valleys.

### **Native American Consultation**

An email request was made to the Native American Heritage Commission (NAHC) on July 11, 2018, to review its files for the presence of recorded sacred sites on the Project site. The NAHC responded on July 12, 2018, stating that no significant resources were identified in the Project area as a result of a search of their files. The NAHC provided a list of nine tribes and tribal contacts with a traditional and cultural affiliation with the Project area for notification

pursuant to PRC Section 21080.3.1 (Assembly Bill 52). Coordination with tribes is described in Section 3.17, *Tribal Cultural Resources*. None of the tribes who were contacted requested consultation on the Project.

#### Archaeological Survey and Results

An archaeological survey was conducted of the Project site on June 28, 2018, by a professional archaeologist from Horizon Water and Environment (Horizon 2018) (**Appendix E**). The archaeological field survey included pedestrian transects spaced approximately 30 feet apart. Ground surface visibility was generally good with only sparse dry grasses located in patches throughout the property. Trees are restricted primarily to the west fence line, while a single apple tree is on the east fence. A culvert under Lee Road drains water into a shallow ditch in the southeast corner of the parcel. The sidewalls of the ditch were examined for subsurface archaeological materials, as was the backdirt from abundant ground rodent burrows.

Cultural resources on site consist of the remains of a structure, which are likely from the pole barn visible in the aerial photographs from 1986 to 2005. The remains include two trusses (one complete and one fragmented), segments of sheet metal, milled lumber, a few concrete blocks, and a metal stock gate. No foundation for the pole barn was observed. Photographs were taken of the remains and a Department of Parks and Recreation primary record was prepared; the primary record is included in Appendix E. The pole barn originated less than 50 years ago; therefore, the remains do not meet the age criteria for NRHP/CRHR eligibility.

Additional isolated historic-era items were scattered across the property. These included three brick fragments, one smashed tin can, a thin piece of sheet metal, and a flattened metal flask. Isolated artifacts generally have limited research potential and, therefore, are not considered eligible for the NRHP/CRHR.

### 3.5.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Adverse change in the significance of a historical resource—*No Impact*

No historical resources, as defined in Section 15064.5 of the CEQA Guidelines, were identified within the Project site. As a result, the Proposed Project would not cause a substantial adverse change to a historical resource and there would be **no impact**.

Historical resources that are archaeological in nature may be accidentally discovered during project construction; archaeological resources are discussed further in Section 3.5.3(b) below.

#### b. Adverse change in the significance of an archaeological resource—*Less than Significant with Mitigation*

One archaeological resource, the remains of a pole barn, was identified and recorded on the Project site. Research on the remains discovered that the pole barn was in existence from 1986 until at least 2005, but had collapsed before 2009. The recent age of the remains precludes the site from being potentially eligible for the NRHP/CRHR. As a result, no archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, have been identified within the Project parcel. However, archaeological remains may be buried with no surface manifestation. Excavation for site preparation and any buried utilities would occur in

1 areas where buildings, structures, and utilities are to be located. Such excavation activities  
2 could uncover buried archaeological materials. Prehistoric materials most likely would  
3 include obsidian and chert flaked stone tools (e.g., projectile points, knives, and choppers),  
4 tool-making debris, or milling equipment such as mortars and pestles. Historic-era materials  
5 that might be uncovered would likely be related to the presence of the pole barn or the mid-  
6 twentieth century airfield. In general, these items would be fairly recent in age and might  
7 include milled lumber, bricks (as seen scattered on the parcel), or any other structural items  
8 such as bolts, wire, or round nails.

9 If archaeological remains are accidentally discovered that are determined eligible for listing  
10 in the CRHR, or determined to be a TCR, and Proposed Project activities would affect them in  
11 a way that would render them ineligible for such listing, a significant impact would result.  
12 Should previously undiscovered archaeological resources be found, implementation of  
13 **Mitigation Measure CR-1** would ensure that impacts on CRHR-eligible archaeological sites  
14 accidentally uncovered during construction are reduced to a less-than-significant level by  
15 immediately halting work if materials are discovered, evaluating the finds for CRHR  
16 eligibility, and implementing appropriate mitigation measures, as necessary. Implementation  
17 of Mitigation Measure CR-1 would reduce impacts related to accidental discovery of  
18 archaeological resources to a level that is **less than significant with mitigation**.

19 **Mitigation Measure CR-1: Immediately Halt Construction if Cultural**  
20 **Resources are Discovered, Evaluate All Identified Cultural Resources for**  
21 **Eligibility for Inclusion in the CRHR, and Implement Appropriate Mitigation**  
22 **Measures for Eligible Resources.**

23 If any cultural resources, such as structural features, unusual amounts of bone or  
24 shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or  
25 architectural remains, are encountered during any Project construction activities,  
26 work shall be suspended immediately at the location of the find and within a radius  
27 of at least 50 feet and the State will be contacted. Items of a recent historic nature  
28 related to the pole barn do not need to be reported.

29 All cultural resources accidentally uncovered during construction within the Project  
30 site shall be evaluated for eligibility for inclusion in the CRHR. Resource evaluations  
31 will be conducted by individuals who meet the U.S. Secretary of the Interior's  
32 professional standards in archaeology, history, or architectural history, as  
33 appropriate. For finds that are of Native American concerns, local Native American  
34 tribes will be notified, if they have requested notification. If any of the resources meet  
35 the eligibility criteria identified in PRC Section 5024.1 or CEQA Section 21083.2(g),  
36 mitigation measures will be developed and implemented in accordance with CEQA  
37 Guidelines Section 15126.4(b) before construction resumes.

38 For resources eligible for listing in the CRHR that would be rendered ineligible by the  
39 effects of Project construction, additional mitigation measures will be implemented.  
40 Mitigation measures for archaeological resources may include (but are not limited to)  
41 avoidance; incorporation of sites within parks, greenspace, or other open space;  
42 capping the site; deeding the site into a permanent conservation easement; or data  
43 recovery excavation. Mitigation measures for archaeological resources shall be  
44 developed in consultation with responsible agencies and, as appropriate, interested  
45 parties such as Native American tribes. Native American consultation is required if an

archaeological site is determined to be a TCR. Implementation of the approved mitigation would be required before resuming any construction activities with potential to affect identified eligible resources at the site.

**c. Disturbance of any human remains, including those interred outside of formal cemeteries—*Less than Significant with Mitigation***

No evidence of human remains was observed within the Proposed Project parcel. Although a portion of the Project site has been developed as part of a homestead and another section has been previously graded, there is the possibility that Project construction may impact human remains, although this is considered unlikely. Should any such remains be discovered during construction, the California Health and Safety Code Section 7050.5 requires that work immediately stop within the vicinity of the finds and that the county coroner be notified to assess the finds. Implementation of **Mitigation Measure CR-2** would ensure that the Proposed Project would not result in any substantial adverse effects on human remains uncovered during the course of construction by requiring that, if human remains are uncovered, work must be halted and the county coroner must be contacted. Adherence to these procedures and provisions of the California Health and Safety Code would reduce potential impacts on human remains to **less than significant with mitigation**.

**Mitigation Measure CR-2: Immediately Halt Construction if Human Remains are Discovered and Implement Applicable Provisions of the California Health and Safety Code Section 7050.5.**

If human remains are accidentally discovered during the Proposed Project's construction activities, the requirements of California Health and Safety Code § 7050.5 shall be followed. Potentially damaging excavation shall halt on the Project site within a minimum radius of 100 feet of the remains, and the County coroner shall be notified. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). Pursuant to the provisions of PRC Section 5097.98, NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The State shall work with the MLD to ensure that the remains are removed to a protected location and treated with dignity and respect. Native American human remains may also be determined to be tribal cultural resources. The county coroner will contend with the human remains if they are not of Native American origin.

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## 1 3.6 GEOLOGY, SOILS, AND SEISMICITY

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



### 3.6.1 REGULATORY SETTING

#### ***Federal Laws, Regulations, and Policies***

##### **National Earthquake Hazards Reduction Act**

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk reduction program to better understand, predict, and mitigate risks associated with seismic events. Four federal agencies are responsible for coordinating activities under NEHRP: U.S. Geological Survey (USGS); National Science Foundation (NSF); Federal Emergency Management Agency (FEMA); and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2016) are as follows:

1. Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
2. Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
3. Improve earthquake hazards identification and risk assessment methods, and their use.
4. Improve the understanding of earthquakes and their effects.

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of improved design and construction methods and plans and policies to promote safety and emergency planning.

#### ***State Laws, Regulations, and Policies***

##### **Alquist-Priolo Earthquake Fault Zoning Act**

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq.*) was enacted in 1972 to reduce the risk to life and property from surface faulting in California. The Alquist-Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, providing legal definitions to terms such as “active,” and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are “sufficiently active” and “well defined.” A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during the Holocene (defined for the purposes of the act as referring to approximately the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment (Bryant and Hart 2007). Before a project can be permitted, a geologic investigation is required by cities and counties to demonstrate that proposed buildings would not be constructed across active faults.

### Seismic Hazards Mapping Act

As with the Alquist-Priolo Act, the Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. The Alquist-Priolo Act addresses surface fault rupture, including strong groundshaking, liquefaction, and seismically-induced landslides, and SHMA provisions are similar in concept in that the State is charged with identifying and mapping areas of risk of strong groundshaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within Seismic Hazard Zones.

Under SHMA, permit review is the primary mechanism by which development can be locally regulated. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been performed and measures to reduce potential damage have been incorporated into the development plans.

### California Building Standards Code

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California. The current codes, 2016 CBC, were published July 1, 2016 with an effective date of January 1, 2017.

## 3.6.2 ENVIRONMENTAL SETTING

The Proposed Project lies at approximately 3,480 feet above mean sea level within American Valley, a 3.5-mile-long by 7.5-mile-wide elongated (east-west) alluvial valley within the Sierra Nevada range. Spanish Creek (from the southwest), Clear Stream (from the south), Mill Creek (from the southeast), Thompson Creek (from the east), Greenhorn Creek (from the northeast), and several smaller drainages all flow into the valley before converging into Spanish Creek and flowing out of the northern end of the valley (USGS 2015). The valley itself is encompassed on all sides by steep hills, with several smaller outcrops scattered throughout the valley floor. The Project site, which lies near the center of the valley, and the surrounding area within a half-mile radius have less than 10 feet of relief.

### Geology

Regionally, the American Valley is confined by two mountain ranges: the Diamond Mountains on the eastern side and the Sierra Nevada on the south-southwestern border. Between the two mountain ranges lies the Plumas Trench, a “graben,” or depression, between two uplifting faults. The American Valley is located at the northwest portion of this graben.

The foothills surrounding the American Valley are composed of tilted layers of Paleozoic-aged sandstone, siltstone, and slate from the Shoo Fly Complex (California Geological Survey [CGS] 1992). These rocks originally derived from marine deposits on the North American plate but were uplifted and metamorphosed during periods of mountain building. Exposed areas of sandstone and siltstone were subjected to erosional forces forming isolated lakes and river valleys, such as the American Valley. The floor of the American Valley is underlain by

Quaternary-aged lake deposits. These lake deposits consist of eroded material surrounding hills and mountains from the Shoo Fly Complex and other, Tertiary-aged volcanic rocks.

### **Soils**

According to Natural Resources Conservation Service (NRCS) mapping (2018), the site is underlain by Forgay-Urban land complex, and 0 to 5 percent slopes (NRCS 2018). Forgay-Urban land complex is mixed alluvium deposited over an alluvial fan. This soil unit is excessively well drained and has very low plasticity (i.e., low shrink/swell tendencies). Plumas loam may underlie the northern and eastern peripheral areas (NRCS 2018). Plumas loam is characterized as a very gravelly sandy loam of mixed alluvium originating from metamorphosed sedimentary rocks. This soil unit is well drained and has a low plasticity.

A geotechnical study conducted by Geocon Consultants, Inc. (2018) analyzed geologic conditions and potential hazards at the Project site. Exploratory drilling work encountered alluvium with varying degrees of poorly graded gravel, sand, and silt approximately 25 feet to 37 feet below ground surface (bgs) (Geocon Consultants, Inc. 2018).

### **Seismicity**

#### **Alquist-Priolo Fault Zones**

No Alquist-Priolo Fault Zones or recently active faults<sup>2</sup> are known to exist near the Project site (CGS 2010). Both the Almanor Fault Zone and Honey Lake Fault Zone are seismically active and capable of producing 5.0+ magnitude (M) earthquakes (California Department of Water Resources [DWR] 1979; Bryant 1979). Several other faults are located in the region, as presented below in **Table GEO-1**.

**Table GEO-1.** Proximity of the Project site to Regional Faults

<b>Regional Faults</b>	<b>Approximate Distance from Proposed Project</b>	<b>Last Known Major Displacement</b>
Almanor Fault Zone	30 miles, north	11,700-700,000 years ago
Indian Valley Fault	8 miles, north	200 - 11,700 years ago; without historic record
Mohawk Valley Fault	9 miles, east	200 - 11,700 years ago; without historic record
Honey Lake Fault Zone	34 miles, northeast	5.6 M in 1950; potential for similar magnitude events expected within this fault zone
Cleveland Hill Fault	40 miles, southwest	5.7 M in 1975; potential for similar magnitude event exists within this fault zone

Sources: California Department of Conservation 1997; CGS 2010; USGS 1996.

<sup>2</sup> An active fault is a fault that is likely to become the source of another earthquake sometime in the future. Geologists commonly consider faults to be active if there has been movement observed or evidence of seismic activity during the last 11,000 years. A potentially active fault shows evidence of movement within the past 1.6 million years.

## Ground Shaking

The severity of ground shaking experienced at a specific location depends on a variety of factors, such as the magnitude and duration of the seismic event; the fault type associated with the event; distance from the epicenter; and the physical properties of the underlying geology and soils. Due to the observable slippage rate and great distances of regional faults, the Quincy area is considered to have a relatively low seismic risk (Plumas County 2013).

## Liquefaction and Subsidence

Liquefaction can occur when water-saturated, loose sandy soils lose cohesion during seismic shaking. The primary factor that triggers liquefaction is moderate to strong ground shaking. Physical properties that increase susceptibility to liquefaction are relatively clean/loose granular soils, and a shallow depth to groundwater and/or saturated conditions. As discussed in the *Soils* subsection above, soils underlying the Project site consist of varying degrees of gravel, sand, and silt. More sandy soil layers may exhibit some potential for liquefaction.

Depth to groundwater may vary significantly due to seasonal fluctuations, precipitation frequency and intensity, and localized pumping, or other factors. Overall, the groundwater supply throughout the valley is considered very stable and the basin is of very low risk of overdraft or subsidence (DWR 2004, 2016, and 2018).

During a geotechnical investigation (Geocon Consultants, Inc. 2018), groundwater was encountered at depths ranging from approximately 10 feet bgs (in April 2018) to 23 feet bgs (in July 2017). Depth to groundwater at the Project site was comparable to a well located approximately 650 feet southwest of the Project site, where the groundwater elevation generally ranged between approximately 6.5 feet bgs and 32 feet bgs.

## Landslide, Slope Failure, and Lateral Spreading

Landslides are influenced by many variables including: steepness of slope; type of slope material; structure and physical properties of materials; water content; amount of vegetation; proximity to areas undergoing rapid erosion or undercutting slopes; and intensity of seismic events. The Project site is relatively flat, sloping slightly to the north. Topography surrounding the Project site is very flat with less than a 2 percent grade (USGS 2015).

### 3.6.3 DISCUSSION OF CHECKLIST RESPONSES

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

##### i. Seismic-related rupture of a known earthquake fault—*No Impact*

The Project site is not located within an Alquist-Priolo zone. No known historic or potentially active faults have been identified near the Project site. Construction of the Proposed Project would not increase the potential for rupture of a known earthquake fault. Therefore, there would be **no impact**.

## ii. Strong seismic ground shaking—*Less than Significant*

As discussed in the “Seismicity” subsection above, the probability of strong seismic ground shaking in the Project site is very low. Although several active faults are present within a 10-mile radius of the Project site, displacements of those faults date back 200 to 700,000 years ago. Other active regional faults, such as the Honey Lake Fault Zone or the Cleveland fault, are of a significant distance from the Project site and would not be anticipated to result in strong ground shaking in the Quincy area. However, the Proposed Project includes the construction of a 148-foot-tall (approximate) steel communications tower, several low buildings, and multiple above-ground storage tanks. Failure of any of these structures due to improper consideration of on-site seismic or geologic conditions during design or construction could pose a risk to property or human life.

The current CBC (2016) takes seismically-induced stresses into consideration for new construction. The seismic building requirements under Title 24, Part 2 of the CBC are specifically tailored to meet regional requirements for increased seismic stability. Adherence to building codes would reduce the already minimal potential for adverse effects from earthquakes and ground shaking on the Project site by ensuring the stability of new structures and public safety.

With adherence to the current CBC standards, any potential for structural damage associated with seismic ground shaking would be exceedingly minimal. Therefore, effects of seismic ground shaking would be **less than significant**.

## iii. Seismic-related ground failure, including liquefaction—*Less than Significant*.

Since subsurface conditions at the Project site exhibited characteristics potentially susceptible to the effects of liquefaction (i.e., sandy soils and a shallow groundwater table in a seismically active region), the geotechnical investigation (Geocon Consultants, Inc. 2018) included further analysis of the in-situ soil parameters and the potential for seismic-induced liquefaction utilizing computer-based modeling. The model evaluated soil stability in response to a 6.1 magnitude earthquake with shallow groundwater conditions (i.e., 5 feet bgs). Results of the model indicated that soils at the Project site do not appear to be susceptible to liquefaction and no special design measures would be necessary (Geocon Consultants, Inc. 2018). As described in Section 3.6.3(ii) above, adherence to current CBC (2016) standards would reduce the already minimal potential for adverse effects from earthquakes and ground shaking in the Project site by ensuring the stability of new structures and public safety. Therefore, this impact would be **less than significant**.

## iv. Landslides—*No Impact*.

Because the Project site and surrounding terrain is relatively flat, the potential for landslides on the Project site is discountable (Geocon Consultants Inc. 2018). During construction activities, excavation and trenching for building and tower foundations would temporarily create potentially unstable slopes. As described in Section 3.6.3(ii) above, adherence to current CBC (2016) standards would reduce the already minimal potential for adverse effects from earthquakes and ground shaking in the Project site by ensuring the stability of new structures and public safety. Therefore, this impact would be **less than significant**.

**b. Substantial soil erosion or the loss of topsoil—*Less than Significant***

The Proposed Project would include ground-disturbing construction activities that could increase the risk of erosion or sediment transport. In addition, upon completion of construction, the Proposed Project would include structures, asphalt driveways, parking areas and walkways and create approximately 2.8 acres of impervious surfaces. As discussed in Section 3.9, "Hydrology and Water Quality," implementation of best management practices (BMPs) for water quality, sediment control, and containment of hazardous materials would reduce surface erosion and mitigate any loss of topsoil during construction-related activities. With implementation of stormwater BMPs and stormwater pollution prevention plan (SWPPP) requirements, this impact would be **less than significant**.

**c. Location on a geologic unit or soil that is unstable or that would become unstable as a result of the Proposed Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse—*Less than Significant***

The Proposed Project may involve groundwater extraction through an onsite 20-foot well, if site annexation to the Town of Quincy is not approved and water supply services are not provided by the American Valley Community Services District. If a well is required, the well would be constructed and operated in compliance with all applicable laws and regulations, and, as such would not result in land subsidence. In addition, as detailed in Section 3.9, "Hydrology and Water Quality," the groundwater basin is not in overdraft. The Proposed Project would not involve any other activities that could result in land subsidence.

As described in impact discussions, 3.6.3a (iii) and 3.6.3a (iv) above, the Project site's potential for landslides and liquefaction are less than significant. In addition, the potential for lateral spreading on the Project site is discountable because the Project site and the surrounding terrain is relatively flat (Geocon Consultants Inc. 2018). Adherence to current CBC (2016) standards would reduce the already minimal potential for adverse effects related to liquefaction, landslides, or lateral spreading in the Project site by ensuring the stability of new structures and public safety.

Following implementation of load specifications from the geotechnical investigation (Geocon Consultants, Inc. 2018) and adherence to current CBC (2016) standards, potential hazards from on-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be **less than significant**.

**d. Location on expansive soil, creating substantial risks to life or property—*No Impact***

According to Chapter 18A of the CBC (2016), soils with a plasticity index of 15 percent or greater are considered highly expansive. Forgay-Urban land complex and Plumas loam have very low plasticity index ratings (below 3 percent) (NRCS 2018). These soil units would be considered to have a very low shrink-swell (expansive) potential and pose no hindrance of construction of small commercial buildings. Additionally, soil samples analyzed during a geotechnical investigation classified all samples as having a 'very low' expansion potential, as determined per ASTM D4829 (Geocon Consultants, Inc. 2018). Adherence to CBC building

standards would further reduce any potential effects of differential settlement. The Proposed Project would have **no impact**.

**e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater—*No Impact***

The Proposed Project would tie into the Town of Quincy's existing wastewater disposal systems. Septic tanks or other alternative wastewater disposal systems would not be necessary. The Proposed Project would have **no impact**.

**f. Destruction of a unique paleontological resource or site or unique geological feature—*Less than Significant with Mitigation***

No paleontological resources were identified within the Project site. As with archaeological remains, paleontological resources may be buried with no surface manifestation. The accidental discovery of significant paleontological resources that could be destroyed as a result of construction of the Proposed Project would be considered a significant impact. Should previously undiscovered paleontological resources be found, implementation of **Mitigation Measure GEO-1** would reduce impacts to a less-than-significant level by immediately halting work if materials are discovered, evaluating the significance of the find, and implementing appropriate mitigation measures, as necessary. Implementation of Mitigation Measure GEO-1 would reduce this impact to a level that is **less than significant with mitigation**.

**Mitigation Measure GEO-1: Immediately Halt Construction if Paleontological Resources are Discovered, Evaluate the Significance of the Resources, and Implement Appropriate Mitigation Measures as Necessary.**

Paleontological resources are not necessarily visible on the ground surface, but construction of the new CHP facilities has the potential to discover fossils. If any items of paleontological interest are accidentally discovered during construction, work shall be immediately suspended within 50 feet of the discovery site, or to the extent needed to protect the finds, and the State shall be notified. A qualified paleontologist will be retained to examine the discovery.

Any discovery of paleontological resources during construction shall be evaluated by the qualified paleontologist. If it is determined that construction could damage a unique paleontological resource, additional mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines. If avoidance is not feasible, the paleontologist shall develop a treatment plan in consultation with the State. Work shall not be resumed until authorization is received from the State and any recommendations received from the qualified paleontologist are implemented.

## 3.7 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 3.7.1 REGULATORY SETTING

#### ***Federal Laws, Regulations, and Policies***

At the federal level, U.S. Environmental Protection Agency (USEPA) has developed regulations to reduce greenhouse gas (GHG) emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012–2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses. In August 2016, USEPA and the NHTSA jointly finalized Phase 2 Heavy-Duty National Program standards to reduce GHG emissions and improve fuel efficiency of medium- and heavy-duty vehicles for model year 2018 and beyond (USEPA 2017). However, in April 2017, the USEPA stated it may adjust the later years of the 2017–2025 standards, and thus the increased mileage standard requirements may be subject to change (Center for Climate and Energy Solutions 2018).

#### ***State Laws, Regulations, and Policies***

In recent years, California has enacted a number of policies and plans to address GHG emissions and climate change. In 2006, the California State Legislature enacted Assembly Bill (AB) 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. Senate Bill (SB) 32 codified an overall goal for reducing California's GHG emissions to 40 percent below 1990 levels by 2030. Executive Orders (EOs) S-3-05 and B-16-2012 further extend this goal to 80 percent below 1990 levels by 2050. The California Air Resources Control Board (CARB) has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional GHG emission reduction regulations. These include the low carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the renewable portfolio standard (RPS), which requires electricity suppliers to increase the amount of electricity generated from renewable sources to certain thresholds by various deadlines. In 2018, SB 100 updated the RPS to require 50% renewable resources by the end 2026, 60% by the end of 2030, and 100% renewable energy and zero carbon resources by



2045. EO B-55-18 signed by Gov. Brown set a goal of statewide carbon neutrality by 2045 and net negative emissions thereafter.

The California Building Code (Title 24) governs construction of buildings in California. Parts 6 and 11 of Title 24 are relevant for energy use and green building standards, which reduce the amount of indirect GHG emissions associated with buildings.

CARB approved the First Update to the AB 32 Scoping Plan on May 22, 2014 (CARB 2014). This update defines climate change priorities for the next 5 years and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The update also highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals and evaluates how to align the State's longer term GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released and adopted a 2017 Scoping Plan Update (CARB 2018) to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 (CARB 2017a, CARB 2017b, CARB 2018).

### ***Local Laws, Regulations, and Policies***

Local laws, regulations, and policies are provided in **Appendix A**. As described in Section 3.3, "Air Quality," the Proposed Project is within the jurisdiction of the Northern Sierra Air Quality Management District (NSAQMD). Neither the NSAQMD nor Plumas County have climate action plans.

The NSAQMD does not have an established numerical threshold of significance for GHG emissions. However, several air districts, including the Sacramento Metropolitan Air Quality Management District (SMAQMD), the San Luis Obispo County Air Pollution Control District, the South Coast Air Quality Management District, and the Bay Area Air Quality Management District (BAAQMD), have established bright line thresholds below which the GHG mass emissions are unlikely to cause a significant impact. Of these bright line thresholds, those established by the SMAQMD and BAAQMD are the most conservative. The SMAQMD has established a significance threshold for construction- and operational-related GHG emissions from land development and construction projects of 1,100 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year where any project emissions meeting or exceeding this "bright line" threshold would be considered potentially significant. In 2010, the BAAQMD adopted similar GHG thresholds (i.e., an 1,100 metric tons of CO<sub>2</sub>e per year significance threshold), and following litigation, these thresholds were upheld by the California Supreme Court and are included as advisory thresholds in BAAQMD's 2017 CEQA Guidelines (BAAQMD 2017). For the purposes of this analysis, projects below the 1,100 metric tons CO<sub>2</sub>e/year level would be considered to not have a significant cumulative impact to climate change from GHG emissions. This threshold is used since it is based on substantial evidence and no other relevant threshold has been established by the NSAQMD.

### **3.7.2 ENVIRONMENTAL SETTING**

Climate change results from the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (carbon dioxide [CO<sub>2</sub>], methane, and nitrous oxide) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. GHG emissions are typically reported

in terms of CO<sub>2</sub>e which converts all GHGs to an equivalent basis taking into account their global warming potential compared to CO<sub>2</sub>.

Anthropogenic (human-caused) emissions of GHGs are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

In 2016, total California GHG emissions from routine emitting activities were 429.4 million metric tons of carbon dioxide equivalents (MMT CO<sub>2</sub>e) (CARB 2018). This represents a decrease from 2015 and a 14 percent reduction compared to peak levels reached in 2004. Declining emissions from the electricity sector were responsible for much of the reduction due to growing zero-GHG energy generation sources. In 2016, the transportation sector of the California economy was the largest source of emissions, accounting for approximately 41 percent of the total emissions (CARB 2018).

Plumas County performed a community-wide GHG emissions inventory for activities occurring in 2005 (Plumas County 2012). The greatest contributor was the transportation sector, which accounted for 66 percent of the total emissions. The commercial/industrial sector comprised 8 percent of the total emissions. Other sources included agriculture, waste, and residential.

### 3.7.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Generate a net increase in greenhouse gas emissions which may have a significant impact on the environment—*Less than Significant*

The Proposed Project would generate GHG emissions during construction and operation. Construction-related GHG emissions would result from the combustion of fossil-fueled construction equipment, material hauling, and worker trips. These emissions were estimated using CalEEMod version 2016.3.2, with default assumptions for a 3.8-acre site which is the area that would potentially be developed within the 5-acre Project parcel. The Proposed Project's construction-related GHG emissions are estimated at 486 MTCO<sub>2</sub>e.

Operational GHG emissions would result from fossil-fueled equipment and motor vehicles, building energy use, water use, and solid waste. The Proposed Project's operational emissions were estimated with CalEEMod version 2016.3.2 using default assumptions. Mobile emissions, including emissions associated with employee commute trips, CHP patrol officer trips while on duty, and trips generated by civilian employees are summarized in Section 3.3, "Air Quality," under Section 3.3.3(b). Vehicle idling emissions were conservatively estimated by assuming that two CHP patrol vehicles were idling 24 hours per day. The idling emission factors were taken from the EMFAC 2014 model to be consistent with CalEEMod emission factors for a light-duty truck (vehicle class 1). The diesel-powered emergency generator was assumed to have 400 horsepower and operate for 100 hours per year for testing. The energy use included an estimate of energy associated with heated sidewalks and parking areas. Based on these assumptions, the Proposed Project's operational GHG emissions are estimated to be 493 MTCO<sub>2e</sub> per year. The largest source of the emissions would be patrol cars.

The Project emissions are below the SMAQMD's and BAAQMD's bright-line threshold of 1,100 MTCO<sub>2e</sub> and would not be anticipated to result in a significant impact to global climate change or impede the goals of AB 32 and SB 32. In addition, the new facility would be constructed consistent with current California building codes, which substantially reduce the energy and water use for new buildings compared to the standards in effect when the existing Quincy area office was constructed. Since the Proposed Project's emissions would be below the significance threshold, the impact would be **less than significant**.

**b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases—*Less than Significant***

The State of California has implemented AB 32 to reduce GHG emissions. The Proposed Project does not pose any conflict with the most recent list of CARB's early action strategies, nor is it one of the sectors at which measures are targeted. The First Update to the AB 32 Scoping Plan does not mention similar projects as a specific target for additional strategies, but emission reductions at the Project site would be influenced by decisions relating to target sectors such as water, waste, natural resources, clean energy, transportation, and land use. The Proposed Project would not be required to report emissions to CARB. Therefore, emissions generated by the Proposed Project would not be expected to have a substantial contribution to the ongoing impact on global climate change. While local plans, policies and regulations do not apply to the state, the location of the Project site is in line with local general plan policies regarding land use, transportation, climate change, and air quality planning goals. The NSAQMD and Plumas County do not currently have certified climate action plans. For these reasons, the Proposed Project would not conflict with AB 32 or SB 32, the local general plans, and climate action plans. Therefore, this impact would be **less than significant**.

## 1 3.8 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport and result in a safety hazard for people residing or working in the study area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the study area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 3.8.1 REGULATORY SETTING

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are the U.S. Environmental Protection Agency (USEPA); U.S. Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); State Water Resources Control Board (SWRCB); Central Valley Regional Water Quality Control Board (RWQCB); and the Northern Sierra Air Quality Management District (NSAQMD).

#### ***Federal Laws, Regulations, and Policies***

##### **Comprehensive Environmental Response, Compensation, and Liability Act**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, the USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

##### **Resource Conservation and Recovery Act**

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

The USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

##### **Energy Policy Act of 2005**

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto,

that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with the USEPA, the SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

### **Spill Prevention, Control, and Countermeasure Rule**

The USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 Code of Federal Regulations [CFR], Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

### **Occupational Safety and Health Administration**

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

### **Federal Communications Commission Requirements**

There is no federally-mandated radio frequency (RF) exposure standard; however, pursuant to the Telecommunications Act of 1996 (47 USC 224), the Federal Communications Commission (FCC) established guidelines for dealing with RF exposure, as presented below. The exposure limits are specified in 47 CFR 1.1310 in terms of frequency, field strength, power density, and averaging time. Facilities and transmitters licensed and authorized by FCC must either comply with these limits or an applicant must file an environmental assessment with FCC to evaluate whether the proposed facilities could result in a significant environmental effect.

Licensees at co-located sites (e.g., towers supporting multiple antennas, including antennas under separate ownerships) must take "actions necessary" to bring the accessible areas that exceed the FCC exposure limits into compliance. This is a shared responsibility of all licensees whose transmission power density levels account for 5 or more percent of the applicable FCC exposure limits (47CFR 1.1307[b][3]).

Since the Proposed Project would include a communications tower, it would be required to obtain a license from FCC.

### **Code of Federal Regulations (14 CFR) Part 77**

Air safety and the efficient use of navigable airspace is covered by 14 CFR Part 77.9. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements when:

- any construction or alteration exceeding 200 feet above ground level;
- any construction or alteration:
  - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet;
  - within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet;
  - within 5,000 feet of a public use heliport which exceeds a 25:1 surface;
- any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards;
- when requested by the FAA; and
- any construction or alteration located on a public use airport or heliport regardless of height or location.

The Proposed Project includes construction of a 148-foot-tall communications tower.

### ***State Laws, Regulations, and Policies***

#### **Safe Drinking Water and Toxic Enforcement Act of 1986—Proposition 65**

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

#### **The Unified Program**

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;

- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

#### *Hazardous Materials Business Plans*

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES 2018). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES 2018). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES 2018).

#### **California Occupational Safety and Health Administration**

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8, Section 5085 [b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8, Section 5085 [c]).

#### **California Accidental Release Prevention**

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance(s) are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

#### **California Department of Forestry and Fire Protection Wildland Fire Management**

The Office of the State Fire Marshal and the California Department of Forestry and Fire Protection (CAL FIRE) administer state policies regarding wildland fire safety. Construction



contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire-suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

### California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

## 3.8.2 ENVIRONMENTAL SETTING

The general geographic and site description of the Proposed Project are provided in Section 2.3, "Project Location and Setting." SHN Engineers & Geologists (SHN) performed a Phase I Environmental Site Assessment in 2017 (SHN 2017) for much of the property on which the Proposed Project would be located.

As noted in prior sections, the site is zoned agricultural preserve, and the predominant land uses within a 0.5-mile radius consists of residential, agricultural, and commercial properties. There are mid-size industrial type facilities in the vicinity of the site, the closest of which is the Sierra Pacific Industries mill, located approximately 2,000-feet to the west.

The nearest sensitive receptors are residents located on Lee Road, approximately 135 feet from the edge of the Project site. The nearest school is Quincy Elementary School, approximately 940 feet west of the Project site. Much of the adjacent land is undeveloped and consists of agricultural land and large residential lots. Various light commercial businesses are located less than 0.25 mile of the Project site along Lee Road and Main Street.

### ***Existing Hazards and Hazardous Materials***

Based on historic land use, the Phase I Environmental Site Assessment (SHN 2017), and a query of SWRCB's GeoTracker database (2018), hazards and hazardous material releases may have potentially occurred from the following sources:

- The Project site was historically and currently used as undeveloped grazing land. However, area businesses include a dry cleaner, as well as multiple automotive services and fueling stations. The One Stop gas station, located 450 feet to the south of the Project site, was identified as a former leaking underground storage tank (LUST) cleanup site. The case was closed in August 2017 following removal of contaminated soils and use of ozone injection to address groundwater contamination. Groundwater from the One Stop site flows in the general direction of the Project site; however, due to low contaminant concentrations there should be no vapor intrusion issues.
- Two other identified LUSTs containing diesel and petroleum products occurred on Main Street. The Quincy Maintenance Yard site, located roughly 1,000 feet southwest of the Project site, is listed as completed and closed as of 1997. The Sierra Super Stop site, located 1,500 feet east of the Project site, is currently undergoing assessment and corrective action for gasoline, diesel, and related contaminants following an unauthorized release from an underground storage tank system.

### ***Airports***

There are three airports within Plumas County: Nervino Airport in Beckwourth, Rogers Field Airport in Chester, and Gansner Field Airport in Quincy. The nearest airport is Gansner Field, located approximately 2 miles east of the Project site.

### ***Wildfire Hazards***

The majority of Plumas County is classified as having a moderate to very high threat of wildfire (CAL FIRE 2007, CAL FIRE 2009). The community of Quincy is predominantly a moderate to high fire hazard severity zone, with a very high fire hazard severity zone immediately south of the community. The fuel, topography, and weather conditions throughout the county combine to result in these hazardous fire conditions. The U.S. Forest Service, through its Plumas National Forest-related district and ranger centers, is the primary responsible party for wildfire protection for the majority of Plumas County.

The nearest fire station to the Project site is the Quincy Fire Station 1, located at the northwest corner of the intersection of Lawrence Street (State Route [SR] 89) and Andy's Way, approximately 3 miles west and 7 minutes driving distance from the Project site. The Plumas County Fire Safe Council has developed the Plumas County Communities Wildfire Mitigation Plan to provide documentation of implementing actions designed to reduce wildfire risk to homes and communities throughout Plumas County (Plumas County Fire Safe Council 2013).

### 3.8.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials—*Less than Significant*

##### ***Construction***

Construction activities for the Proposed Project would require handling of hazardous materials, such as fuels, lubricating fluids, and solvents for use with construction equipment on site. Accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials (particularly during storm events) to the underlying soils and groundwater.

Although these hazardous materials could pose a hazard as described above, Proposed Project activities would be required to comply with extensive regulations so that substantial risks would not result. Examples of compliance with these regulations would include preparation of a hazardous materials business plan, as described above, which would include a training program for employees, an inventory of hazardous materials, and an emergency plan (Cal OES 2018). All storage, handling, and disposal of these materials would be done in accordance with regulations established by DTSC, USEPA, OSHA, Cal OES, CUPA, and Cal/OSHA.

Additionally, as described in Section 3.9, "Hydrology and Water Quality," the Proposed Project would prepare a SWPPP as part of its compliance with applicable NPDES permits. The SWPPP would include appropriate spill prevention and other construction BMPs to prevent or minimize potential for releases of hazardous materials or risks to workers during routine activities.

As a result of compliance with the applicable regulations as described above, no significant risks would result to construction workers, the public, or the environment from the construction-related transport, use, storage, or disposal of hazardous materials. Therefore, this impact would be **less than significant**.

##### ***Operations***

Operation of the Proposed Project would necessitate the use and storage of several hazardous items and materials. Items and materials that would be on site and could pose a risk to human health and safety and the environment include the following:

- Quart containers of new oil for use in on-site automobile servicing;
- Miscellaneous lubricants from the automobile service station;
- Approximately one 12,000-gallon above-ground tank of gasoline for vehicle refueling;
- Approximately one 275-gallon waste oil tank;
- Storage area for tires;

- One above-ground tank of diesel fuel to power the emergency generator;
- Gun cleaning materials, including various solvents;
- Flares and ammunition; and
- Communications tower.

Hazardous materials would be stored on site and used or disposed of at regular intervals. If adequate precautions are not taken, accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials (particularly during storm events) to the underlying soils and groundwater.

However, all hazardous materials would be either contained within the buildings (e.g., solvents used for cleaning guns) or have appropriate containment measures.

Specifically, hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment, and additionally would be equipped with safe wells downstream of the containers that would capture any leaks or spills in the event of a failure and allow for appropriate treatment and disposal. All storage, handling, and disposal of these materials would comply with the applicable regulations of DTSC, USEPA, OSHA, Cal OES, and Cal/OSHA to ensure that no significant risks would result to workers, the public, or the environment from the operation-related transport, use, storage, or disposal of hazardous materials.

Finally, the Proposed Project would include the installation and use of a communications tower. Compliance with existing FCC regulations regarding RF radiation (see Section 3.8.1 above) would reduce potential for any adverse effects to human health or the environment associated with RF exposure from the communications tower proposed as part of the Proposed Project. Therefore, this impact would be **less than significant**.

**b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment—*Less than Significant***

Multiple schools and several residences, as well as businesses and the fairgrounds, are located within a 1-mile radius of the Project site. The nearest sensitive receptors are residents located on Lee Road approximately 135 feet from the Project site. The nearest school is Quincy Elementary School, located approximately 940 feet west of the Project site.

Construction activities associated with the Proposed Project, including clearing, grubbing, and soil excavation, have the potential to come into contact with existing sources of contamination if any are present. As stated in the Phase I Environmental Site Assessment (SHN 2017), the site appears to have been used historically for grazing and no known hazardous release sites are located on the property. In addition, while there are several sites with documented hazardous substance releases within one mile of the Project site, none of these releases are of environmental concern to the Project site (SHN 2017). Therefore, soil

excavation activities would have a low potential to expose construction workers or nearby sensitive receptors to existing on-site hazardous materials and would not create a significant hazard through upset or accident conditions involving excavated materials.

The Proposed Project's construction would require the use, transport, and disposal of hazardous materials; however, as detailed above, compliance with the applicable regulations and implementation of SWPPP and permit BMPs would ensure that no significant risks would result to construction workers, the public, or the environment from reasonably foreseeable upset or accident conditions involving the use of hazardous materials for the Proposed Project's construction activities.

Operations associated with the Proposed Project would include the use of hazardous and/or flammable materials, such as ammunition, tires, fuels, and flares. These materials would pose a potential health and safety risk to employees on-site and to individuals nearby in foreseeable upset and/or accident (e.g., fire) conditions. However, as discussed above, all hazardous materials would be either contained within the buildings (e.g., solvents and ammunition), or have appropriate containment measures. For example, flares would be stored in a fusee enclosure that is designed to allow flares to burn until all flames are extinguished. Cement-block walls surrounding the fusee enclosure on three sides would further minimize the potential for risk to humans or the environment from a potential accident/fire risk. In addition, implementation of the applicable provisions of USEPA, OSHA, Cal/OSHA, CalEPA, Cal OES, CAL FIRE, and CUPA permitting processes would fully address potential risks associated with all hazardous or flammable materials used during the Proposed Project's operation. Storage and use of these materials would not be substantially different from their use at the existing CHP Quincy Area Office.

Overall, with compliance with the applicable regulations and implementation of applicable BMPs, this impact would be **less than significant**.

**c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school—*Less than Significant***

Quincy Elementary School is located at 175 N Mill Creek Rd, approximately 0.18 mile west of the Project site. As discussed in Section 3.8.3(a) above, hazardous materials would be limited to fuels, lubricating fluids, and solvents for use with construction equipment on-site. Use of these hazardous materials would likely be localized to the Project site and potential for accidental on-site spills would be minimized through implementation of the SWPPP. As discussed in Section 3.3.3, "Air Quality," construction and operation of the Proposed Project may emit DPM and gasoline fuel combustion emissions; however, these emissions would not substantially affect any nearby sensitive receptors. During operation, emissions would not exceed levels of concern with respect to health risk for nearby receptors, as reported in the HRA (see Appendix C). Any handling of hazardous materials or emission of hazardous substances during construction or operational activities would be in accordance with applicable local, State, and Federal standards, ordinances, and regulations.

Following compliance with applicable regulations for hazardous materials, health and safety hazards near existing or proposed schools would be less than significant. Therefore, this impact would be **less than significant**.

**d. Located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, create a significant hazard to the public or the environment—*No Impact***

The Proposed Project is not located on a Historic Cortese list site. The nearest Historic Cortese list site is a former LUST at a gas station (i.e., One Stop) located at 2003 E Main St., approximately 450 feet from the Project site (SWRCB 2018). Remediation activities occurred at this site and in August 2017, Central Valley Water Board issued a *No Further Action* letter for the case and the case is closed. Because the Project site is not included on the Cortese list of hazardous materials sites compiled by DTSC in accordance with Government Code Section 65962.5, the Proposed Project would not create a hazard to the public or the environment. Therefore, there would be **no impact**.

**e, f. Located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a private airport or public airport and result in a safety hazard for people residing or working in the study area—*Less than Significant***

The Project site is located approximately 2 miles east of Gansner Airport. A proposed approximately 148-foot-tall communications tower would be constructed as part of the Proposed Project. According to the Plumas County Airport Land Use Compatibility Plan, which covers Nervino Airport in Beckwourth, Rogers Field Airport in Chester, and Gansner Airport in Quincy, the Project site falls outside of the Quincy-Gansner Airport Influence Area (Plumas County 2008).

In addition, the Proposed Project would comply with the rules and regulations of CFR Title 47, Telecommunication, regarding the location and construction of the communications tower, registering the communications tower with FCC, and marking and lighting of the communications tower. Therefore, this impact would be **less than significant**.

**g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan—*Less than Significant with Mitigation***

***Construction***

Construction-related employee vehicle trips and truck trips for the Proposed Project would potentially increase traffic on Lee Road, and SR 70 over the duration of the construction period. An increase in traffic could impair emergency responders. However, construction-related traffic would be temporary and only a limited number of employee vehicles and trucks would travel to and from the Project site on a daily basis. Access to the Project site and surrounding properties for fire and emergency response vehicles would be maintained at all times. To minimize the potential for the Proposed Project to interfere with an adopted emergency response plan or emergency evacuation plan, implementation of **Mitigation Measure TRA-1 (Prepare and Implement a Construction Traffic Management Plan)**, as detailed in Section 3.16.5 (a), would require preparation of a construction traffic

management plan. With implementation of mitigation, the impact from construction-related activities associated with the Proposed Project would be less than significant with mitigation.

### ***Operation***

Following Project construction, operation of the Proposed Project would result in an increase in trips to and from the Project site along Lee Road. The Proposed Project would generate 115 net total daily trips, 14 of which would occur during the AM peak hour and 12 of which would occur during the PM peak hour at the Project site. This would not substantially affect existing level of service and would not affect roadway safety. For a more detailed discussion on potential traffic impacts of the Proposed Project, please refer to Section 3.16, "Transportation and Traffic." The Proposed Project's operations would be comparable to operation of the existing Quincy Area Office facility. In addition, CHP activities are an integral part of the Plumas County Hazard Mitigation Plan (Plumas County 2013). The CHP replacement facility would be located close to SR 70, allowing for easy emergency access to and from the site. The Proposed Project location would not adversely affect CHP activities or other emergency response activities for the region. Therefore, the impact from operations-related activities of the Proposed Project would be less than significant.

Overall, with implementation of **Mitigation Measure TRA-1**, the Proposed Project's impacts on emergency response would be **less than significant with mitigation**.

### **h. Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands Are Adjacent to Urbanized Areas or Where Residences Are Intermixed with Wildlands—*Less than Significant***

Sections of the Project site are in a designated High Fire Hazard Severity Zone and the surrounding region is designated as moderate to very high fire hazard severity (CAL FIRE 2007, CAL FIRE 2009).

No wildlands are within close proximity of the Project site. Operational activities associated with the Proposed Project would include the storage of flares, ammunition, tires and other flammable materials on-site that might impact nearby vegetated areas. However, CHP would comply with extensive regulations so that substantial risks would not result. Examples of compliance with these regulations would include a training program for employees and an emergency plan (Cal OES 2018). Implementation of the applicable provisions of OSHA, Cal/OSHA, California Emergency Management Agency, and CAL FIRE would fully address potential risks associated with these flammable materials. Therefore, the impact from construction- and operation-related activities associated with the Proposed Project would be **less than significant**.

### 1 3.9 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 3.9.1 REGULATORY SETTING

#### ***Federal Laws, Regulations, and Policies***

##### **Clean Water Act**

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. Key sections pertaining to water quality regulation for the hydrology and water quality impact evaluation are CWA Section 303 and Section 402.

##### ***Section 303(d) —Listing of Impaired Water Bodies***

Under CWA Section 303(d), states are required to identify “impaired water bodies” (i.e., those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. The U.S. Environmental Protection Agency (USEPA) then approves the State's recommended list of impaired waters or adds and/or removes waterbodies. The nearest Section 303(d)-listed water body to the Proposed Project is Spanish Creek (for indicator bacteria), which is approximately 2 miles northwest of the proposed site (State Water Resources Control Board [SWRCB] 2016).

##### ***Section 402—NPDES Permits for Stormwater Discharge***

CWA Section 402 regulates stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES), which is officially administered by USEPA. In California, USEPA has delegated its authority to the State SWRCB, which, in turn, delegates implementation responsibility to the nine Regional Water Quality Control Boards (RWQCBs), as discussed below in reference to the Porter-Cologne Water Quality Control Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits.

**General Permit for Construction Activities:** Most construction projects that disturb 1.0 or more acre of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and

prepare and implement a stormwater pollution prevention plan (SWPPP). The SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of best management practices that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that best management practices are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

### **Federal Emergency Management Agency**

The Federal Emergency Management Agency (FEMA) produces flood insurance rate maps that identify special flood hazard areas. The maps further classify these areas into “zones” that broadly characterize the potential risk of an area being inundated by a 100-year or 500-year flood in any given year.

### ***State Laws, Regulations, and Policies***

#### **Porter-Cologne Water Quality Control Act**

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with CWA (see discussion of the CWA above). It established SWRCB and divided the state into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the state’s surface water and groundwater supplies; however, much of the SWRCB’s daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California’s major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met.

The Project site is located within the Mill Creek-Spanish Creek hydrologic unit (hydrologic unit code [HUC] 180201220804) in the Sacramento River Basin (East Branch of the North Fork, Feather River watershed subbasin) and is under the jurisdiction of the Central Valley RWQCB (RWQCB 2018; USGS 2013). The nearest water body to the project site for which beneficial uses have been established is the North Fork of the Feather River, which is approximately 17 miles northwest of the site. Beneficial uses for this water body are as follows (RWQCB 2018): municipal and domestic supply (MUN), hydropower generation (POW), water contact, canoeing, and rafting recreation (REC1), non-contact water recreation (REC2), cold freshwater habitat (COLD), cold freshwater spawning (SPWN), and wildlife habitat (WILD).

## **Sustainable Groundwater Management Act**

The Sustainable Groundwater Management Act (SGMA), passed in 2014, became law in 2015, and created a legal and policy framework to manage groundwater sustainably at a local level. The SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental conditions and needs and establish new governance structures, known as groundwater sustainability agencies (GSAs). The SGMA requires that a groundwater sustainability plan (GSP) be adopted for groundwater basins designated as high and medium priority under the California Statewide Groundwater Elevation Monitoring program (CASGEM) (described below) by 2020 for basins with critical overdraft of underground aquifers. GSPs are intended to facilitate the use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results. Undesirable results are defined as the following (California Water Code Section 10721):

- Chronic lowering of groundwater levels (not including overdraft during a drought if a basin is otherwise managed);
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies;
- Significant and unreasonable land subsidence that substantially interferes with surface land uses; and
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

## **California Statewide Groundwater Elevation Monitoring Basin Prioritization**

In 2009, the California State Legislature amended the California Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California. Under this amendment, the California Department of Water Resources (DWR) established the CASGEM program, which establishes the framework for regular, systematic, and locally managed monitoring in all of California's groundwater basins. To facilitate implementation of the CASGEM program and focus limited resources, as required by the California Water Code, DWR ranked all of California's basins by priority: High, Medium, Low, and Very Low. DWR's basin prioritization is based on the following factors (California Water Code Section 10933):

1. Population overlying the basin;
2. Rate of current and projected growth of the population overlying the basin;
3. Number of public supply wells that draw from the basin;
4. Total number of wells that draw from the basin;
5. Irrigated acreage overlying the basin;

6. Degree to which persons overlying the basin rely on groundwater as their primary source of water;
7. Any documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation; and
8. Any other information determined to be relevant by DWR.

The American Valley Groundwater Basin, within which the Proposed Project is located, is designated as Very Low priority.

### 3.9.2 ENVIRONMENTAL SETTING

#### ***Topography and Climate***

The Project site lies at 3,484 feet above mean sea level within American Valley, which is a 3.5-mile long by 7.5-mile-wide elongated (east-west) alluvial valley within the Sierra Nevada range. The valley itself is encompassed on all sides by steep hills, with several small hills scattered throughout the valley floor. The Project site lies on the valley floor, approximately 1 mile east of the base of Radio Hill, which rises nearly 540 feet above the valley floor.

The Quincy area has a temperate climate with moderate temperature fluctuations and high amounts of precipitation. Average monthly minimum temperatures in the Quincy area are 23.5 degrees Fahrenheit (°F) to 44.0 °F, with average monthly maximum temperatures of 45.3 °F to 89.5 °F (Western Regional Climate Center [WRCC] 2016). Average annual precipitation in the Quincy area is approximately 40 inches, with precipitation occurring in the form of rain and snow falling primarily from October through April (WRCC 2016).

#### ***Surface Water Hydrology and Quality***

The 5-acre Project site is relatively flat and slopes slightly to the north-northeast (SHN 2017). The site is undeveloped consisting of low grasses and fencing along its eastern, western, and southern boundaries. Access gates are located on Lee Road. A drainage ditch starting from Lee Road runs in a northeasterly direction along the eastern side of the Project site. The site is currently leased for agricultural uses including grazing.

As noted above, the American Valley and Quincy area are located within the Mill Creek-Spanish Creek Watershed (HUC 180201220804) (Caltrans 2018). Creeks within this watershed include Spanish Creek, Clear Stream, Mill Creek, Thompson Creek, and Greenhorn Creek (USGS 2018). In general, the creeks flow north-northeast, combining with Spanish Creek before draining out of the north end of the valley into the Feather River (North Fork). Mill Creek, which is approximately 0.3 mile west-northwest from the Project site, is the closest creek to the Proposed Project. Spanish Creek is approximately 2 miles northwest of the site. Thompson Creek is approximately 1.25 miles east-northeast of the proposed site.

On the eastern boundary of the Project site there is an earthen drainage ditch that conveys seasonal stormwater under Lee Road. Stormwater generated on the Project site and conveyed onto the Project site from the culvert underneath Lee Road dissipates over adjacent land into this drainage ditch and continues northeast to an unnamed ephemeral channel (USGS 2018). Stormwater is then conveyed to Thompson Creek, which flows northwest to converge with Spanish Creek and out of the American Valley.

In general, surface waters in Plumas County are impacted by human activities. The main stems of the Upper Feather River watershed and many of the tributaries exhibit some level of degradation, primarily due to human activities (Plumas County 2013). Timber harvesting, water diversion, irrigation practices, road and railroad construction, grazing and mining have all contributed to in-stream water quality issues, such as increased sediment transport, that impact aquatic life and riparian vegetation (Plumas County 2013). Detailed water quality information was not available for Mill Creek, but Spanish Creek is a listed waterbody on the SWRCB's Section 303(d) list (SWRCB 2016) for Indicator Bacteria.

### ***Stormwater***

As noted above, there is a drainage ditch on the southeastern portion of the Project site, which is fed by a culvert that transports water under Lee Road. Stormwater from Alta Avenue and surrounding areas is collected and funneled underneath Lee Road onto the Project site. The Project site itself has no impervious surfaces and would be expected to generate minimal stormwater runoff (much of the precipitation falling on the site would presumably infiltrate into the soil). As described above, stormwater runoff from the Project site and conveyed onto the site from the drainage ditch / culvert under Lee Road flows northeast over agricultural land to an earthen channel and then into Thompson Creek.

### ***Groundwater Levels, Flows, and Quality***

The Project site is located within the American Valley Groundwater Basin (Basin Number 5-10) (DWR 2004). This basin is bounded to the northeast and southwest by fault systems, the northeast by Paleozoic metavolcanic rocks, and by Paleozoic marine sedimentary and meta-sedimentary rocks on all other sides. Geologic units and soils in the Quincy area are described in Section 3.6, "Geology, Soils, and Seismicity." The American Valley Groundwater Basin has a surface area of 6,800 acres and an estimated storage capacity of 50,000 acre-feet (DWR 2004). Groundwater recharge to the basin generally occurs from direct infiltration of precipitation and subsurface inflows from creeks and drainage channels from surrounding hillslopes. In general, groundwater movement in the Quincy area follows the region's topography and flows towards the northwest where Spanish Creek drains the valley (DWR 2004; SWRCB 2018a). The American Valley Groundwater Basin is designated as Very Low priority under SGMA/CASGEM, and no groundwater management plans have been developed for this basin.

The Quincy area relies entirely on groundwater supplies for potable water. Recharge rates far exceed extraction rates throughout the American Valley Groundwater Basin. A 1997 DWR survey estimated municipal and industrial water usage to be 1,400 acre-feet (DWR 2004). According to the Phase I report prepared for the Proposed Project, in the Project vicinity, shallow groundwater movement appears to follow the topography of the site, generally in a north-northeasterly direction. Water supply wells for Browns Trailer Park, Plumas Unified School District Pioneer School, and Sierra Pacific Industries-Quincy are located within 0.5 mile of the project site (SHN 2017).

Groundwater quality for five active municipal supply wells in the American Valley Groundwater Basin indicated that groundwater is of high quality with few impairments (DWR 2004). Adjacent to the Project site, however, a leaking underground storage tank (LUST) cleanup site is located within 0.25 mile of the Project site (SWRCB 2018a). The LUST at One Stop was discovered in November 2011; it is located on East Main Street

approximately 0.25 mile southeast of the Project site (SWRCB 2018b). Contaminants of concern are benzene, diesel, gasoline, and other fuel oxygenates. A Groundwater Sampling Work Plan was developed in February 2018 and corrective action is underway. The current owner of the Project site property also owns an adjacent property with a domestic well. During the Phase I site visit, the owner stated that his well was contaminated by the One Stop LUST, and that he was connected to the municipal water supply after his well had to be closed (SHN 2017). Groundwater flows from the One Stop LUST towards the Project site.

### ***Floodplains and Tsunamis***

According to the applicable FEMA flood insurance rate map (06063C0917E), the Project site is within a designated special flood hazard area (Zone X/Other Flood Area) with the following conditions: an area with a 0.2 percent annual chance of flooding (500-year event), an area with a 1 percent annual chance (100-year event) with flood waters under 1 foot in depth, or an area protected by levees susceptible to 100-year events (FEMA 2017). The site lies in the 0.2 percent annual chance of flood area.

The Proposed Project is not located within any mapped inundation areas for dam failure (Plumas County 2018).

Tsunamis are giant waves caused by earthquakes or volcanic eruptions under the ocean or very large bodies of water. Due to the Town of Quincy's location high in the Sierra Nevada range and great distance from any large body of water, tsunamis pose no threat to the Project area.

## **3.9.3 DISCUSSION OF CHECKLIST RESPONSES**

### **a, f. Violate any water quality standards, waste discharge requirements or otherwise substantially degrade water quality—*Less than Significant***

#### **Construction Activities**

Construction of the Proposed Project would involve ground disturbance that could result in sediments being transported off site via the drainage ditch along the eastern boundary of the Project site and degrade the quality of receiving waters (e.g., Thompson Creek, Spanish Creek). Construction would also include the potential storage, use, transport, and/or disposal of hazardous materials (e.g., fuels, oils, solvents) used for construction equipment. Accidental spills of these materials or improper material disposal could pose a risk to groundwater underlying the spill or disposal area if the materials seeped into the soil or groundwater. In addition, the Proposed Project's ground-disturbing activities (such as trenching) could expose shallow groundwater and require groundwater dewatering, thereby providing a direct pathway for hazardous materials to enter groundwater and potentially impair its quality. Improper disposal of dewatering effluent could also pose a potential threat to surface water or groundwater quality if the dewatered groundwater was polluted and transported to surface waters or groundwater. Hazardous materials spills on the Project site could affect surface water if they entered the existing ditch near the Project site, which eventually connects with Thompson Creek and Spanish Creek.

As discussed further in Section 3.8, “Hazards and Hazardous Materials,” storage or use of hazardous materials for the Proposed Project’s construction activities would be limited and would be performed in compliance with all applicable federal, state, and local hazardous materials and hazardous waste regulations. No chemical processing or storage or stockpiling of quantities of hazardous materials would take place in the Project site other than what would be necessary for standard construction activities. Furthermore, CHP and/or its contractor would dispose of hazardous materials at an appropriate hazardous materials disposal facility or landfill in accordance with all applicable federal, state, and local hazardous materials and hazardous waste regulations.

In addition, the Proposed Project would be required to comply with applicable NPDES permits, including the NPDES General Permit for Construction Activities. As part of its compliance with this permit, the State and/or its Contractor would prepare and implement a SWPPP, which would include measures to prevent erosion, off-site mobilization of sediments, and hazardous material spills (see Section 3.9.1 for additional description of SWPPP components). Assuming compliance with these existing laws and regulations, including preparation and implementation of a SWPPP, and those laws and regulations related to hazardous materials, this impact would be **less than significant**.

### **Operational Activities**

As detailed in Chapter 2, *Project Description*, and Section 3.8, “Hazards and Hazardous Materials,” the Proposed Project’s operation would include the use and storage of hazardous materials, including fuel and oils, and would generate hazardous wastes from vehicle maintenance activities. These hazardous materials and wastes could result in a water quality impact if transported to downstream surface waters or into soils or groundwater.

All hazardous materials would be either contained within the buildings (e.g., solvents used for cleaning of guns), or have appropriate containment measures. Hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment and, in addition, would be equipped with safe wells downstream of the containers that would capture any leaks or spills in the event of a failure and allow for appropriate treatment and disposal. As the new CHP facility would store greater than the threshold quantities of hazardous materials (e.g., 12,000-gallon fuel tank), it would be subject to the USEPA’s SPCC rule and would require preparation of a Hazardous Materials Business Plan (see Section 3.8, “Hazards and Hazardous Materials” for additional discussion).

With implementation of the above protocols for secondary and tertiary hazardous materials containment, and compliance with existing laws and regulations pertaining to hazardous materials, adverse effects on water quality would not occur during Proposed Project operation. Therefore, this impact would be **less than significant**.

### **b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or lowering of the local groundwater table level—*Less than Significant***

The Project site is mostly undeveloped and has no impervious surfaces. The Proposed Project would add approximately 2.8 acres of new impervious surfaces to the site. These new impervious surfaces could reduce groundwater recharge to some degree, as water falling on the site as precipitation could no longer infiltrate directly into the soil and groundwater

below. In addition, construction activities would require soil excavation and trenching that could encounter shallow groundwater and require some limited dewatering. Both construction and operational activities for the Proposed Project would require water supplies that could be met from groundwater.

In general, as described in the environmental setting above, recharge rates far exceed extraction rates throughout the American Valley Groundwater Basin (DWR 2004), and this basin is designated as Very Low priority under SGMA. The Proposed Project would include stormwater management infrastructure, including a detention basin, which would capture stormwater generated on site and then release it to adjacent lands. These adjacent lands would be pervious; therefore, the water captured on the site would still have an opportunity to infiltrate to the soil and groundwater. As a result, effects on groundwater recharge from addition of new impervious surface area would not be substantial and would not result in a net deficit in aquifer volume or lowering of the groundwater table.

The amount of water that may be encountered during excavations requiring dewatering would be relatively minimal and would not substantially deplete groundwater supplies or local groundwater levels. Likewise, construction-related water demands for dust control purposes would be relatively minor and, even if met entirely through groundwater, would not be sufficient to significantly adversely affect aquifer storage or groundwater levels.

Operation-related water demands would potentially be met by American Valley Community Services District municipal supplies, which are derived exclusively from groundwater supply wells (DWR 2004). Alternatively, the operation-related water demands would be acquired from a 20-foot groundwater well installed on the site. As discussed in 3.10, "Land Use," the Proposed Project would be consistent with applicable land use designations and general plan policies. Therefore, the Proposed Project would not result in water demands exceeding the Town of Quincy's anticipated water demands from planned development. The Proposed Project also would be rated LEED Silver or better and would include water efficient fixtures and landscaping.

Overall, the Proposed Project's construction-related and operational water demands would not substantially deplete groundwater supplies or result in a substantial net deficit in the underlying groundwater aquifer. This impact would be **less than significant**.

**c, e. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, resulting in substantial erosion or siltation on-site or off-site, or create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff—*Less than Significant***

The Project site is mostly undeveloped with no impermeable surfaces. Development of the Proposed Project would involve ground-disturbing construction activities and the creation of impermeable surfaces, altering current drainage patterns.

During construction, clearing, vegetation removal, grading, and other ground-disturbing activities would expose soils within the Project site and alter the current on-site drainage



patterns, thereby increasing on-site susceptibility to erosion and potentially resulting in subsequent water quality impacts if sediments were transported off site and into downstream water bodies. However, the Proposed Project would be required to comply with the NPDES General Construction Permit including preparation and implementation of a SWPPP. The SWPPP would include measures to minimize erosion and off-site movement of sediments and pollutants, and would minimize potential for discharge of polluted runoff.

Once completed, the Proposed Project would add approximately 2.8 acres of new impermeable surfaces to the site. Without proper stormwater management, such impervious surfaces would increase the Project site's runoff flow patterns and quantities, potentially resulting in erosive flows off site. In addition, vehicular use of the Proposed Project's parking areas could result in the transfer of water quality pollutants (such as fuels and oils) onto the parking area surface, which could then be transported off site.

The design of the Proposed Project would include infrastructure to capture on site runoff flows, dissipate erosive energy, and provide water quality treatment prior to discharging captured runoff. The Proposed Project's stormwater infrastructure is anticipated to include but would not be limited to a stormwater detention basin. Stormwater infrastructure for the Proposed Project would comply with the design criteria and requirements of the County's Public Works Department and the applicable state water quality regulations. The Proposed Project would not discharge stormwater directly to Quincy's municipal stormwater collection system, so there would be no concern of exceeding system capacity. With inclusion of the Proposed Project's stormwater management features, the Proposed Project would not result in substantial erosion or siltation on- or off-site, discharge polluted runoff, or exceed the capacity of an existing stormwater system.

Overall, this impact would be **less than significant**.

**d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff resulting in flooding on-site or off-site—*Less than Significant***

Although no streams or other permanent surface waters are present within the Project site, the Proposed Project would include construction-related grading activities and the development of impermeable surfaces that would alter the Project site's existing drainage patterns; however, the Proposed Project's stormwater infrastructure design, implementation, and maintenance would ensure that the rate or amount of surface runoff from the Project site would be reduced prior to discharge to existing drainage channel(s). Thus, the Proposed Project would not result in flooding on site or off site. This impact would be **less than significant**.

**g. Place housing within a 100-year flood hazard area, as mapped on a federal flood hazard boundary or flood insurance map or other flood hazard delineation map—*No Impact***

No housing would be constructed as part of the Proposed Project. Therefore, **no impact** would occur.

1           **h. Place structures within a 100-year flood hazard area resulting in**  
2           **impeding or redirect flood flows—*No Impact***

3           As described above, the Project site is within the designated FEMA flood zone X, an area that  
4           is susceptible to a 0.2 percent annual chance of flooding (500-year flood hazard area). The  
5           Proposed Project would not, however, place structures within a 100-year flood hazard area  
6           or redirect flood flows. As such, there would be **no impact**.

7           **i. Expose people or structures to a significant risk of loss, injury, or death**  
8           **involving flooding, including flooding resulting from the failure of a**  
9           **levee or dam—*No Impact***

10          As described above, the Proposed Project is not within the mapped inundation area for any  
11          dams, and is not immediately downstream of any large surface waters. Therefore, the  
12          Proposed Project would not expose people or structures to a significant risk of loss, injury, or  
13          death involving flooding. There would be **no impact**.

14          **j. Contribute to inundation by seiche, tsunami, or mudflow—*No Impact***

15          The Project site is not within a tsunami-inundation area and would not be at risk of  
16          inundation during the Proposed Project's construction or operation. In addition, because  
17          highways and state routes in Plumas County are not located in tsunami inundation areas, CHP  
18          officers traveling on the local freeways would not be at risk of inundation by a tsunami.

19          No large bodies of water on or adjacent to the Project site that would be susceptible to the  
20          risk of seiche, and the Proposed Project would not contribute to risk of inundation by seiche.

21          The Project site is located in a relatively flat area near the base of Radio Hill. The slopes  
22          adjacent to the Project site are heavily vegetated and undeveloped. There are no known  
23          previous accounts of landslides or mudflows occurring on or near Radio Hill (Geocon  
24          Consultants Inc. 2018, Plumas County 2012). Underlying soils and geology are stable and  
25          likely not subject to mudflow (Geocon Consultants Inc. 2018).

26          For these reasons, there would be **no impact** related to seiche, tsunami, or mudflow.

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## 1 **3.10 LAND USE AND PLANNING**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2 **3.10.1 REGULATORY SETTING**

3 Development activities on state-owned land are exempt from local laws, regulations, and  
 4 policies. However, such laws, regulations and policies may apply to development activities  
 5 not located on the Project site (e.g., connections to infrastructure within the public right-of-  
 6 way). Local laws, regulations, and policies applicable to the Proposed Project are listed in  
 7 Appendix A.

### 8 **3.10.2 ENVIRONMENTAL SETTING**

9 The Project site is located at the intersection of Lee Road and Alta Avenue in the town of  
 10 Quincy and in unincorporated Plumas County. Adjacent land uses include agricultural land to  
 11 the north and east, and residential uses on large parcels to the west. The parcel to the east of  
 12 the site is currently occupied by a barn structure and water trough. An animal hospital,  
 13 residences, a few dining establishments, gas stations, and commercial uses are south of the  
 14 Project site (SHN Consulting Engineers & Geologists, Inc. 2017) on the opposite side of Lee  
 15 Road and on East Main Street. The site is relatively flat and undeveloped consisting of low  
 16 grasses and fencing along its eastern, western, and southern boundaries. Access gates are  
 17 located on Lee Road. A drainage ditch starts from Lee Road and runs in a northeasterly  
 18 direction along the eastern side of the Project site. The site is currently leased for grazing. The  
 19 Plumas County Airport is located approximately 2 miles west of the Project site.

20 According to the County's general plan, the Project site is designated and zoned as  
 21 Agricultural Preserve (AP) (Plumas County 2011 and 2017). According to the County of  
 22 Plumas General Plan (2013), the following uses are permitted of the AP zone: mining, limited  
 23 electric generation, public utility facilities, wildlife management, transport stations,  
 24 agricultural auction yards, outdoor shooting ranges, hunting clubs, bed and breakfast inns,  
 25 and recreational uses.

### 3.10.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Divide an established community—*Less than Significant*

Although the Project site is classified as AP land and is being used for grazing, the proposed CHP facility would be compatible with surrounding land uses. The Proposed Project would not impair the use of the surrounding designated agricultural lands for agricultural uses. The Project would also be compatible with surrounding commercial and industrial land uses to the west and south. The Mountain Building Supply lumber store is approximately 600 feet west of the Project site, while the lands directly to the south are being used for commercial purposes. In addition, the California Department of Motor Vehicles is located at the corner of Alta Road and East Main Street to the south of the Project site and represents a similar type of facility to the Proposed Project. As a result, the Project would not divide an established community. Therefore, this impact would be **less than significant**.

#### b. Conflicts with land use plans or policies—*Less than Significant*

As described in Chapter 2, *Project Description*, the Project site is a State-owned property; however, the State has applied for annexation of the Proposed Project site into the Town of Quincy so that the American Valley Community Services District may provide water and sanitary sewer services to the site. Unless the annexation is approved, the Town of Quincy does not have jurisdiction over the site, and thus the Town's land use plans and policies only apply to Proposed Project activities that would occur off-site (e.g., infrastructure tie-ins). Should the annexation be approved, the Town's plans and policies only as they relate to utilities, would be applicable to the Proposed Project.

As described above, the Project site's land use designation and zoning allows for public utility facilities among other commercial, recreational, and public infrastructure uses. Because the Proposed Project includes construction and operation of a public facility, the Project would be consistent with these land use and zoning designations. Off-site activities would be conducted consistent with local requirements. Additionally, as described in Sections 3.1 through 3.9 and 3.11 through 3.17, the Proposed Project—with the identified mitigation—would not have any significant impacts; therefore, the Project would not conflict with any local plans or policies adopted for the purpose of avoiding or mitigating an environmental effect. This impact would be **less than significant**.

#### c. Conflicts with any habitat conservation plan or natural community conservation plan—*No Impact*

Conflicts with an adopted habitat conservation plan or natural community conservation plan are addressed in Section 3.4, "Biological Resources." As described in Section 3.4, the Project site is not within the jurisdiction of a habitat conservation plan or natural community conservation plan. Therefore, no conflict with habitat conservation plans or natural community conservation plans would occur, and there would be **no impact**.

## 1 3.11 MINERAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2 3.11.1 REGULATORY SETTING

#### 3 *Federal Laws, Regulations, and Policies*

4 No federal laws, regulations, or policies apply to mineral resources and the Proposed Project.

#### 5 *State Laws, Regulations, and Policies*

##### 6 **Surface Mining and Reclamation Act**

7 The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and  
 8 Geology Board identify, map, and classify aggregate resources throughout California that  
 9 contain mineral resources of regional significance. The main objective of the SMARA  
 10 classification-designation process is to ensure that mineral resources will be available when  
 11 needed. Local jurisdictions are required to enact planning procedures to guide mineral  
 12 conservation and extraction at particular sites and to incorporate mineral resource  
 13 management policies into their general plans.

14 There are four Mineral Resource Zone (MRZ) classification-designations used in SMARA.  
 15 These MRZ's are defined below (California Department of Conservation [CDOC] n.d.):

- 16     ▪ MRZ – 1: Areas where adequate geologic information indicates no presence of  
 17       significant mineral deposits, or where it is determined that there is little likelihood of  
 18       the existence of these deposits.
- 19     ▪ MRZ – 2: Areas where adequate information indicates that significant mineral  
 20       deposits are present or where it is judged that a high likelihood for their presence  
 21       exists. This zone shall be applied to known mineral deposits or where well-developed  
 22       lines of reasoning, based upon economic, geologic principles and adequate data  
 23       demonstrate that the likelihood for occurrence of significant mineral deposits is high.
- 24     ▪ MRZ – 3: Areas containing mineral deposits, the significance of which cannot be  
 25       evaluated from available data.

- MRZ – 4: Areas where available information is inadequate for assignment to any other MRZ zone.

### 3.11.2 ENVIRONMENTAL SETTING

Since the mid-1800s, Plumas County has relied mainly on natural resource extraction as the basis for economic development. The Town of Quincy was established during the California Gold Rush, connecting the mineral rich mountains of Plumas County to Sacramento via railway. Gold, copper, and aggregate continue to occur in the County, despite the decline of mining operations over the past several decades (Plumas County 2013). Aggregate extraction of gravel and sand, which occurs at three mining operations located within a 5-mile radius of the Project site, are the only mineral resource extraction operations in the American Valley. These operations lie along the channel and oxbows of the western portion of Spanish Creek where it flows into the valley. The CDOC has not generated SMARA mapping for Plumas County.

### 3.11.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Loss of availability of mineral resources—*No Impact*

The Project would result in the potential loss of available mineral resources if the underlying geologic units contained mineral resources and the Project's construction and operation prevented extraction of those resources. However, the geologic units underlying the American Valley and the Project site are not expected to contain rare minerals for extraction because precious metals and gemstones are most often associated with volcanic soils, which are not present. Instead, the American Valley floor is composed of Quaternary lake deposits, underlain with Shoo Fly complex of Paleozoic-aged sandstone, siltstone, and slate (see Section 3.6, "Geology, Soils, and Seismicity"). Soils at the Project site consist of coarse material of very gravelly, coarse sandy loam (see Section 3.6). Although aggregate mining operations occur within 5 miles to the west (River Ranch Aggregate Mine and two Spanish Creek Mines), the local topography and distance from water courses make it unlikely that aggregate material of high quality or significant volume would be near or underlie the Project site (CDOC 2016a, b, c, and d). In addition, there are no known mineral resource extraction well sites on or near the Project site. Thus, no mineral resources are known or expected to exist on site in amounts or quality high enough to warrant extraction efforts. The Proposed Project's construction and operation would not result in the loss of a known or locally important resource and would have **no impact** to mineral resources.

#### b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan – *No Impact*

As mentioned in discussion of "a" above, there are no known or expected mineral resources on the Project site in amounts or quality high enough to warrant extraction efforts. As a result, Policy COS 7.4.4 of the 2035 Plumas County General Plan Update would not be applicable, since the Project site would not be considered a "future use area with potentially important mineral resources." Therefore, there would be **no impact**.

## 1 **3.12 NOISE**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project site to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2 **3.12.1 OVERVIEW OF NOISE AND VIBRATION CONCEPTS AND TERMINOLOGY**

#### 3 **Noise**

4 In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by  
 5 various parameters, including the rate of oscillation of sound waves (frequency), the speed  
 6 of propagation, and the pressure level or energy content (amplitude). In particular, the sound  
 7 pressure level is the most common descriptor used to characterize the loudness of an ambient  
 8 sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity.  
 9 Because sound pressure can vary enormously within the range of human hearing, a  
 10 logarithmic scale is used to keep sound intensity numbers at a convenient and manageable  
 11 level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise



1 measurements are weighted more heavily for frequencies to which humans are sensitive,  
2 creating the A-weighted decibel (dBA) scale.

3 Different types of measurements are used to characterize the time-varying nature of sound.  
4 Below are brief definitions of these measurements and other terminology used in this  
5 chapter.

6       ▪ **Decibel (dB)** is a measure of sound on a logarithmic scale that indicates the squared  
7 ratio of sound pressure amplitude to a reference sound pressure amplitude. The  
8 reference pressure is 20 micro-pascals.

9       ▪ **A-weighted decibel (dBA)** is an overall frequency-weighted sound level in decibels  
10 that approximates the frequency response of the human ear.

11       ▪ **Maximum sound level ( $L_{\max}$ )** is the maximum sound level measured during a given  
12 measurement period.

13       ▪ **Minimum sound level ( $L_{\min}$ )** is the minimum sound level measured during a given  
14 measurement period.

15       ▪ **Equivalent sound level ( $L_{\text{eq}}$ )** is the equivalent steady-state sound level that, in a  
16 given period, would contain the same acoustical energy as a time-varying sound level  
17 during that same period.

18       ▪ **Percentile-exceeded sound level ( $L_{xx}$ )** is the sound level exceeded during x percent  
19 of a given measurement period. For example,  $L_{10}$  is the sound level exceeded 10  
20 percent of the measurement period.

21       ▪ **Day-night sound level ( $L_{\text{dn}}$ )** is the energy average of the A-weighted sound levels  
22 occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels  
23 during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This  
24 weighting adjustment reflects the elevated sensitivity of individuals to ambient sound  
25 during nighttime hours.

26       ▪ **Community noise equivalent level (CNEL)** is the energy average of the A-weighted  
27 sound levels during a 24-hour period, with 5 dB added to the A-weighted sound levels  
28 between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels  
29 between 10:00 p.m. and 7:00 a.m.

30 In general, human sound perception is such that a change in sound level of 3 dB is barely  
31 noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as  
32 doubling or halving the sound level. **Table NOI-1** presents approximate noise levels for  
33 common noise sources, measured adjacent to the source.

**Table NOI–1. Examples of Common Noise Levels**

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

Source: California Department of Transportation 2009

### **Vibration**

Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or “spectrum,” of many frequencies. The normal frequency range of most ground-borne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration information for this analysis has been described in terms of the peak particle velocity (PPV), measured in inches per second, or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise.

Ground-borne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration.

Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

### 3.12.2 REGULATORY SETTING

#### ***Federal Laws, Regulations, and Policies***

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA  $L_{eq}$  and 100 dBA  $L_{eq}$  should be used for residential and commercial/industrial areas, respectively (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage, 0.2 PPV for non-engineered timber and masonry buildings, 0.3 PPV for engineered concrete and masonry, and 0.5 PPV for reinforced-concrete, steel or timber (FTA 2006).

#### ***State Laws, Regulations, and Policies***

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in **Table NOI-2**.

**Table NOI-2.** State Land Use Compatibility Standards for Community Noise Environment

Land Use Category	Community Noise Exposure - $L_{dn}$ or CNEL (dB)						
	50	55	60	65	70	75	80
Residential – Low Density Single Family, Duplex, Mobile Homes							
Residential - Multi-Family							
Transient Lodging – Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							
<b>Normally Acceptable</b>	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.						
<b>Conditionally Acceptable</b>	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.						
<b>Normally Unacceptable</b>	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.						
<b>Clearly Unacceptable</b>	New construction or development generally should not be undertaken.						

## **Local Laws, Regulations, and Policies**

Local laws, regulations, and policies are provided in **Appendix A**. The analysis below utilizes the Noise Element of Plumas County's Draft General Plan (Plumas County 2013).

### **3.12.3 ENVIRONMENTAL SETTING**

Groups that could be exposed to noise generated by the Proposed Project include residential and commercial areas to the west and south of the site. The closest residence is approximately 380 feet southwest of the center of the Project site<sup>3</sup>. Quincy Elementary School is the nearest school, located approximately 1,175 feet (358 meters) to the southwest of the center of the Project site. The closest daycare and preschool are at Head Start (Sierra Cascade Family Opportunities) located about 1,810 feet (552 meters) to the northwest. The recreational area nearest to the Project site, the Plumas County Fairgrounds, is 3,390 feet (1,033 meters) to the west. The nearest hospital, Plumas District Hospital, is located more than 2 miles away from the project site. The Project site is approximately 2 miles east of the Quincy Gansner Field airport.

The Project site vicinity is subject to noise emanating from vehicular traffic, particularly from Lee Road and E. Main Street/State Route 70. Ambient noise is also influenced by the Burlington Northern/Santa Fe Railroad, which has a terminus at the Sierra Pacific Industries Quincy Mill, and airplanes arriving and departing from Gansner Field. Typical noise associated with railroad operations is caused by diesel engines, switching operations, and whistles (County of Plumas 2013). Airport noise caused by aircraft depends on the type of aircraft flyovers, takeoffs, and landings. According to the Plumas County General Plan Update Environmental Impact Report (2012), the Project site is outside of the existing noise contours (including 60 dB, 65 dB, and 70 dB).

Ambient noise is also influenced by nearby commercial and industrial activities including the Sierra Pacific Industries Quincy Mill, located approximately 1,800 feet west of the Project site. Typical noises generated by these activities include delivery vehicles, truck deliveries, equipment operating at the mill, parking lot vehicle movements, and car doors closing.

The Plumas County Fairgrounds also hosts several events including the High Sierra Music Festival and races, which generate seasonal noise during the summer months.

### **3.12.4 DISCUSSION OF CHECKLIST REPONSES**

#### **a. Noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state or federal standards—*Less than Significant***

The Proposed Project would generate noises associated with construction activities, which would be temporary and cease once construction is complete. Operational noise sources would include vehicle traffic from CHP staff, visitors, and delivery vehicles; short testing of

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<sup>3</sup> Distances to sensitive receptors related to noise are measured from the center of the Project site (since most equipment would operate near the center the majority of the time instead of along the site boundaries). This is consistent with the recommended approach for construction-related noise analyses (FTA 2006).

vehicle sirens as CHP vehicles are taken on shift; and noise from automobile maintenance repair activities. Periodic noises would be associated with operation of the emergency generator during power outages, and testing of building sirens associated with CHP operations.

Activities on the state-owned land would be exempt from local noise standards. Plumas County municipal code states the new land uses shall not increase off-site noise to a level that exceeds the ambient noise level for the specific land use area and noise sensitive uses are prohibited within the industrial protection zones established in the General Plan (Plumas County 2018). In addition, the Plumas County General Plan is informative as it contains policies that provide for appropriate levels of construction-related noise and public safety sirens in the Project vicinity. The Proposed Project would be consistent with General Plan Policy 3.1.4 (Construction Noise), which requires construction to occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday and 8:00 a.m. and 5:00 p.m. on weekends or on federally recognized holidays. Exceptions are allowed if it can be shown that construction beyond these times is necessary to alleviate traffic congestion and safety hazards (Plumas County 2013). General Plan Table 3-5 includes maximum allowable noise exposures for construction noise. Between the construction hours specified above, the maximum allowable noise exposure at residential properties is an average noise exposure level ( $L_{eq}$ ) of 55 dB at residential properties and a  $L_{max}$  of 75 dB (Plumas County 2013). The nearest resident is approximately 380 feet from the middle of the Project site. Warning devices necessary for the protection of public safety, such as police, fire, and ambulance sirens, are also exempt from regulation.

Further discussion of the anticipated noise associated with Proposed Project's construction and operation, and consistency with relevant guidance, is provided below.

### Construction

Because some residential and commercial areas are located in the vicinity of the Project site, the noise levels were compared to the values recommended by FTA. The FTA has established guidance on noise and vibration impact assessments for construction equipment (FTA 2006). The FTA recommends that, for a rough estimate of construction noise levels, the noisiest two pieces of equipment should be used to analyze the anticipated noise levels at sensitive receptors assuming the following:

- full power operation for a full one hour is assumed,
- there are no obstructions to the noise travel paths,
- typical noise levels from construction equipment are used, and
- all pieces of equipment are assumed to operate at the center of the project site.

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

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

Where:

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

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

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

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

$$L_{total} = 10 \log_{10} (10^{\frac{L_1}{10}} + 10^{\frac{L_2}{10}})$$

Where:

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

$L_1$  = The noise emission level of equipment type 1

$L_2$  = The noise emission level of equipment type 2

Noise levels at the Proposed Project's nearest sensitive receptors generated by equipment used during Project construction were estimated using values from the General Plan (Plumas County 2013). The values used for the reference noise level at 50 feet were 88 and 88 dBA. Using the equations above and the two noisiest pieces of equipment, the noise levels at the nearest receptor (residence on Lee Road), located approximately 380 feet from the center of the Project site, would be 73.4 dBA, which is below the  $L_{max}$  of 75 dBA. Noise levels estimated at the nearest residence would be below the FTA's recommended level of 90 dBA.

As a state project on state land, the Proposed Project is exempt from the local noise ordinance. However, since construction equipment operating near the edge of the property may temporarily exceed the County's noise limit of 75 dBA during typical construction hours, the Proposed Project would implement noise-reducing BMPs. BMPs shall be utilized to the extent practical when equipment is operating near residential areas and may include: use of a temporary sound barrier; alternating or limiting the use of construction equipment in a particular area; substituting construction equipment with quieter equipment; retro-fitting equipment with damping materials, mufflers, or enclosures; and/or siting noisy equipment as far as possible from residents. The use of diesel-powered construction equipment would be temporary and episodic, affecting only a few nearby receptors for a limited period of time. For these reasons, and because such work would be consistent with the County's noise standards, the temporary increases in ambient noise levels associated with construction would be **less than significant**.

### Operation

During operation of the proposed CHP Quincy area office, noise would derive from activities at the automobile service building, emergency generator, radio equipment, and testing sirens. The secured portion of the facility would be completely surrounded by a 6-foot-high concrete block masonry fence, which would serve as a sound barrier for the noise associated with the automobile service activities. The emergency generator would also be surrounded by a noise barrier.

In the Project site vicinity, traffic noise from major streets like Lee Road would be caused by vehicles unrelated to the Proposed Project. Typically, a doubling of traffic noise only increases noise by 3 dBA. The minor traffic increases resulting from operation of the Proposed Project are substantially less than a doubling in traffic and, therefore, are not large enough to substantially change the noise levels at nearby sensitive receptors.

During Project operations, all CHP vehicles would be required to test their emergency sirens prior to the beginning of each work shift. These siren tests last no longer than one second and average between 113 and 120 dBA when activated. Based on the site plan, CHP vehicles could be approximately 380 feet from residents. These noise levels would be clearly audible at the closest sensitive receptor, but would be brief in nature. This noise level would be similar to other emergency siren use that occurs in the area. The use of emergency sirens is exempt per Plumas County General Plan policy N3.1.8 (Noise Source Exemptions).

The Proposed Project's operational activities would not result in significant ambient noise increases at the nearest sensitive receptors because of barriers surrounding stationary noise sources (automotive shop and emergency generator) that would reduce noise, limited operation of the emergency generator, and the exemption of the CHP vehicle siren testing. For the reasons described above, impacts would be less than significant.

Overall, the Proposed Project would not conflict with applicable standards and this impact would be **less than significant**.

## **b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels—*Less than Significant***

Vibration thresholds for buildings occur at a PPV of 0.12 in/sec for buildings extremely susceptible to vibration damage; the human perception threshold is at 65 VdB. The annoyance level used as criteria for impact determination is 80 VdB. Vibration and ground-borne noise levels were estimated following methods described in the FTA Noise and Vibration Impact Assessment (FTA 2006) to determine the PPV that would potentially impact buildings and the VdB for annoyance. It was assumed that the equipment would have similar vibration sound levels as a vibratory roller. **Table NOI-3** shows relevant parameters for the construction equipment used for the Proposed Project and distance to sensitive receptors to be below vibration thresholds.

**Table NOI-3.** Construction Equipment and Vibration Distance

Equipment	PPV at 25 ft	Distance to PPV of 0.12 in/sec	Noise Vibration Level at 25 ft	Distance to Noise Vibration of 80VdB
Vibratory Roller	0.21 in/sec	36.3 feet	94 VdB	73 feet

*Source: FTA 2006*

At the proposed CHP Quincy area office, there would be no buildings or noise sensitive receptors located closer than the building vibration or noise vibration annoyance threshold distances, as measured from the center of the Project site. In addition, the Proposed Project's vibration-causing construction activities would be barely perceptible due to the temporary duration of these activities and their limited occurrence near the Project site boundary.



Therefore, the impact of ground-borne vibration or ground-borne noise vibration would be **less than significant**.

**c. Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project—*Less than Significant***

Construction of the Proposed Project would be short-term and would not result in any permanent increase in ambient noise levels. Proposed Project operations would not involve any sources of permanent, ongoing noise outside of noise associated with the automobile care center and some minor traffic increases not large enough to substantially change the noise levels at nearby sensitive receptors. Therefore, this impact would be **less than significant**.

**d. Substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project—*Less than Significant***

As discussed under item 3.12.4(a) above, there would be temporary increases in ambient noise levels due to the Proposed Project's construction activities. In addition, there would be periodic increases in ambient noise levels during operations related to activities such as emergency generator testing and use and testing of sirens for emergency response vehicles. The limited operation of the emergency generator, and the brief CHP vehicle siren testing would not create substantial temporary or periodic ambient noise level increases. Therefore, this impact would be **less than significant**.

**e. For a project located within an airport land use plan area, or, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels—*Less than Significant***

The Proposed Project is located approximately 2 miles from Gansner Field. It is not located within a CNEL contour or compatibility zone from the airport's land use compatibility plan (Plumas County 2008). Therefore, the Proposed Project would not expose people working in the Project site to excessive noise levels from a public airport. The impact would be **less than significant**.

**f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project site to excessive noise levels—*No Impact***

There are no private airstrips within 2 miles of the Proposed Project. Therefore, the Proposed Project would not expose people working in the Project site to excessive noise levels from private airstrips. There would be **no impact**.

### 1 **3.13 POPULATION AND HOUSING**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 2 **3.13.1 REGULATORY SETTING**

3 No laws, regulations or policies (federal, state, and local) are applicable to population and  
4 housing in relation to the Proposed Project.

#### 5 **3.13.2 ENVIRONMENTAL SETTING**

6 According to the 2010 U.S. Census, Plumas County is one of California's most rural counties  
7 with 7.8 people per square mile for a total of 20,007 residents (U.S. Census Bureau 2010a). In  
8 2018, unincorporated Plumas County had a population of approximately 17,612 residents.  
9 Between 2010 and 2018, the population within the unincorporated county decreased by  
10 approximately 1.6 percent. Within this timeframe, the number of housing units increased by  
11 approximately 2 percent from 14,432 units to 14,723 units. As of 2018, 7,035 housing units  
12 in unincorporated Plumas County were vacant, resulting in a vacancy rate of approximately  
13 47.8 percent (California Department of Finance 2018). Based on the EIR prepared for the  
14 2035 Plumas County General Plan Update (Plumas County 2012), between 2012 and 2035,  
15 approximately 201 new dwelling units are expected to be built. These new dwelling units are  
16 projected to house approximately 448 new residents.

17 In 2010, the population of Quincy was 1,728 and had a total of 872 housing units. Of these  
18 housing units, 74 were vacant resulting in a vacancy rate of 8.5 percent (U.S. Census 2010b).  
19 Population and housing estimates for Quincy in 2016 were estimated to be 1,582 inhabitants  
20 and an estimated 815 housing units (U.S. Census 2016).

### 3.13.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Induce population growth—*Less than Significant*

It is expected that the regional labor force would be sufficient to meet the construction workforce demand. While some workers may temporarily relocate from other areas, the resulting population increase would be minor and temporary.

In the long term, the replacement CHP area office facility would be staffed by approximately 37 employees. As the existing CHP facility is staffed by 32 employees, the Proposed Project would accommodate 13 additional employees. This increase in staffing levels would have potential to result in a minor increase in the local population. Based on the information presented in Section 3.13.2, sufficient housing is available in Quincy and Plumas County to support such a population increase. In addition, the replacement CHP area office facility would replace an existing CHP area office facility currently located 2 miles to the west in Quincy; therefore, employees would be able to commute to the proposed new office without having to relocate. Further, the Proposed Project would not involve any activities that would increase population indirectly, such as by removing an obstacle to growth. The existing Quincy CHP area office would be decommissioned and auctioned as part of the State surplus. This action would not be expected to result in substantial population growth at the locations of the existing office. Therefore, this impact would be **less than significant**.

#### b, c. Displace population or housing—*No Impact*

The Project site is used for grazing and does not support any existing housing units. Therefore, the Proposed Project would not displace any existing housing units or people. The Proposed Project would not require construction of any replacement housing. **No impact** would occur.

## 1 **3.14 PUBLIC SERVICES**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2 **3.14.1 REGULATORY SETTING**

#### 3 ***Federal Laws, Regulations, and Policies***

4 No federal laws, regulations, or policies apply to public services and the Proposed Project.

#### 5 ***State Laws, Regulations, and Policies***

##### 6 **California Fire Code**

7 The California Fire Code (California Code of Regulations, Title 24, Part 9) establishes  
 8 minimum requirements to safeguard the public health, safety, and general welfare from the  
 9 hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33  
 10 of the Code contains requirements for fire safety during construction and demolition  
 11 including the following.

12 **3304.1 Smoking.** Smoking shall be prohibited except in approved areas. Signs shall  
 13 be posted in accordance with Section 310. In approved areas where smoking is  
 14 permitted, approved ashtrays shall be provided in accordance with Section 310.

**3304.2 Combustible debris, rubbish and waste.** Combustible debris, rubbish and waste material shall comply with the requirements of Sections 3304.2.1 through 3304.2.4.

**3304.2.1 Combustible waste material accumulation.** Combustible debris, rubbish and waste material shall not be accumulated within buildings.

**3304.2.2 Combustible waste material removal.** Combustible debris, rubbish and waste material shall be removed from buildings at the end of each shift of work.

**3304.2.3 Rubbish containers.** Where rubbish containers with a capacity exceeding 5.33 cubic feet (40 gallons) (0.15 m<sup>3</sup>) are used for temporary storage of combustible debris, rubbish and waste material, they shall have tight-fitting or self-closing lids. Such rubbish containers shall be constructed entirely of materials that comply with either of the following:

1. Noncombustible materials.
2. Materials that meet a peak rate of heat release not exceeding 300 kilowatt per square meter (kW/m<sup>2</sup>) when tested in accordance with ASTM E1354 at an incident heat flux of 50kW/m<sup>2</sup> in the horizontal orientation.

**3304.2.4 Spontaneous ignition.** Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposal container.

**3304.6 Cutting and welding.** Operations involving the use of cutting and welding shall be done in accordance with Chapter 35.

**3304.7 Electrical.** Temporary wiring for electrical power and lighting installations used in connection with the construction, alteration or demolition of buildings, structures, equipment or similar activities shall comply with the California Electrical Code.

**3308.1 Program superintendent.** The owner shall designate a person to be the fire prevention program superintendent who shall be responsible for the fire prevention program and ensure that it is carried out through completion of the Project. The fire prevention program superintendent shall have the authority to enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided, the superintendent shall be responsible for the guard service.

**3308.2 Prefire plans.** The fire prevention program superintendent shall develop and maintain an approved prefire plan in cooperation with the fire chief. The fire chief and the fire code official shall be notified of changes affecting the utilization of information contained in such prefire plans.

**3310.1 Required access.** Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of support vehicle loading

under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

**3316.1 Conditions of use.** Internal combustion-powered construction equipment shall be used in accordance with all of the following conditions:

1. Equipment shall be located so that exhausts do not discharge against combustible material.
2. Exhausts shall be piped to the outside of the building.
3. Equipment shall not be refueled while in operation.
4. Fuel for equipment shall be stored in an approved area outside of the building.

### **3.14.2 ENVIRONMENTAL SETTING**

#### ***Fire***

Fire protection service at the Project site is provided by the Quincy Fire Protection District (QFPD), which is a volunteer fire protection force (QFPD 2014). In 2018, the QFPD consists of three chief officers, four captains, 15 firefighters, and a number of auxiliary and support team staff (Quincy Volunteer Fire Department 2018). The department has three fire stations, including one located at 505 Lawrence Street in Quincy approximately 1.5 miles from the Project site. In 2013, the department successfully responded to 500 incidents (QFPD 2014). The Plumas County Sheriff's Office provides police protection service to the Project site and surrounding area.

#### ***Hospitals***

Plumas District Hospital is located approximately 3.2 miles to the west of the proposed CHP facility. This hospital is considered to be a General Acute Care Hospital with approximately 49 beds and primarily serves the communities of Quincy and East Quincy. In 2017, a total of 513 patients were discharged with an average length of stay of 2.9 days. Most (n=312) of the patients discharged during that year were admitted into the Emergency Department (California Office of Statewide Health Planning and Development 2017).

#### ***Police***

The Plumas County Sheriff's Office is located at 1400 E Main Street in the community of Quincy, approximately 0.5 mile southwest of the proposed CHP facility. The Sheriff's Office jurisdiction extends throughout Plumas County, including the City of Portola, and state- and federally-owned property (Plumas County n.d.).

#### ***Schools***

Schools in Plumas County are operated by the Plumas County Unified School District. The District operates two schools in the Quincy area: Pioneer-Quincy Elementary and Quincy Junior/Senior High. **Table PS-1** shows enrollment information for public schools that serve the Project site.

**Table PS-1.** Plumas County Unified School District Schools Serving the Project Site

School	Distance to Project Area (Miles)	Grades	2017-2018 Enrollment
Quincy Elementary	0.2	K-6	326
Quincy Junior/Senior High	1.8	7-12	301

Source: California Department of Education 2018

### **Parks**

Parks and recreation facilities in the area surrounding the Project site are maintained by the Central Plumas Recreation and Park District. The Plumas County Fairgrounds is located 4,000 feet northwest of the Project site. Please see Section 3.15, "Recreation" and Table REC-1 for information on parks and recreational facilities in the Project site vicinity.

### **Other Public Facilities**

The Project site is located about 2.5 miles east of the Quincy Branch of the Plumas County Library.

## **3.14.3 DISCUSSION OF CHECKLIST RESPONSES**

### **a. Result in adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities**

The Proposed Project is a replacement of an existing police protection facility. The physical environmental impacts of this new facility are discussed throughout this IS/MND and are, therefore, not discussed here. The Proposed Project would not require closure of any public facilities during construction. However, because the replacement CHP area office would support 37 employees, an increase of 5 employees from the existing facility that supports 32 employees, the Proposed Project's increase in the demand on public services would be marginal to none. Potential impacts from the Proposed Project on specific public services are discussed below.

Project construction has been evaluated for its potential to impede public services as a result of truck trips and construction-related traffic in Section 3.16, "Transportation/Traffic."

### **i. Fire protection—Less than Significant**

The Project site consists of low-lying grasses used for grazing and trees scattered throughout the site. There is no forested land surrounding the Project site. Operation of power tools and equipment during project construction could potentially provide an ignition source and increase fire risk in the area. Storage of flammable materials (e.g., fuel) during Project construction could also increase fire risk. However, Project construction activities would follow the requirements for fire safety during construction contained in the California Fire Code (see regulatory setting section above). Adherence to the requirements of the California Fire Code would reduce the potential increase in fire risk during project construction to a less-than-significant level.

As described in Chapter 2, *Project Description*, and in Section 3.8, “Hazards and Hazardous Materials,” the Proposed Project would include storage of flammable materials on site. A liquefied petroleum gas tank would store 12,000 gallons of fuel (gasoline) for CHP vehicle and equipment use. A fusee enclosure would store up to approximately 200 square feet of flares, flare guns, and similar equipment. The generator enclosure would contain an emergency diesel generator, diesel fuel supply, and fuel storage system. As a result, diesel fuel would be held in aboveground fuel tanks that would hold approximately 96 hours of fuel supply or 4,000 gallons. The facility would include an armory to store guns and ammunition. Storage of these materials could potentially increase the demand on fire protection services in the event of an upset; however, storage and containment facilities would follow all applicable safety regulations. Storage of these materials at the new facility also would not differ substantially from storage at the existing facility.

The replacement facility would be equipped with a sprinkler system and would be constructed in accordance with the California Fire Code. The additional employees associated with the Proposed Project would not generate substantial demand for fire protection, significantly affect the average response times or other performance metrics, or require provision of new fire protection facilities. This impact would be **less than significant**.

#### **ii. Police protection—*No Impact***

As mentioned above, the Proposed Project would provide police protection services to the Quincy area. The CHP is responsible for enforcing vehicular and traffic laws on state highways and freeways, and the Proposed Project would replace the existing CHP area office facility in Quincy. The additional officers at the new facility and improved and expanded facilities would likely improve law enforcement services in the area. This may marginally decrease average response times or improve other service performance objectives. Overall, the Proposed Project’s impact on police protection service would be beneficial; therefore, there would be **no impact**.

#### **iii. Schools—*Less than Significant***

The small increase in employment associated with the Proposed Project may result in some population growth and related school enrollment. However, this increase would not be substantial or require construction of new schools. The impact on schools would be **less than significant**.

#### **iv. Parks—*Less than Significant***

The Proposed Project would not involve construction of any parks or recreational facilities, and it would not displace any existing parks or recreational facilities. No existing parks or recreational facilities are located on the Project site. Likewise, Project construction would not require the temporary closure of any parks or recreational facilities or otherwise affect the access or use of such facilities. The small potential increase in population resulting from the Proposed Project could marginally increase demand for parks to some degree, but would not require construction of new parks or recreational facilities. This impact would be **less than significant**.



1       **v. Other public facilities—*Less than Significant***

2       As with other public services discussed above, the marginal potential population increase  
3       resulting from the Proposed Project would not require provision of any new public facilities.  
4       This impact would be **less than significant**.

### 3.15 RECREATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.15.1 REGULATORY SETTING

No federal or state laws, regulations, or policies apply to recreation and the Proposed Project.

#### 3.15.2 ENVIRONMENTAL SETTING

No existing recreational facilities are located on the Project site; however, the Plumas County Fairgrounds is located approximately 0.75-mile west of the site. The fairgrounds have 65 acres of open space, green grass, camping facilities, a race track, and grandstand and conference buildings. The fairgrounds are used to host the Plumas Sierra County Fair, a five-day annual fair that typically takes place in August. The fairgrounds are also used to host other large events including the High Sierra Music Festival, American Valley Speedway, Plumas County Picnic, and the Beemer Bash (Explore Plumas County 2015).

The Central Plumas Recreation and Park District provides and maintains parks and recreational facilities in the Quincy area. Parks and recreational facilities located in the vicinity of the Project site are listed in **Table REC-1**.

**Table REC-1.** Parks and Recreational Facilities in the Vicinity of the Proposed Project

Park/Facility Name	Distance from Proposed Project Site (miles)	Features
Pioneer Park	0.6 West	Playground, volleyball court, horseshoe pits, bocce ball courts, BBQs
Pioneer Pool	0.6 West	Swimming pool
Quincy Skate Park	0.6 West	Bowls, fun boxes, slopes, steps, rails, etc.

Source: Central Plumas Recreation and Park District 2015

### 3.15.3 DISCUSSION OF CHECKLIST RESPONSES

#### a. Increase use of existing parks or recreational facilities—*Less than Significant*

As noted in Section 3.13, “Population and Housing,” the Proposed Project would not result in substantial population growth. As such, the Proposed Project would not have a substantial impact on recreational demand related to population growth. Furthermore, the Proposed Project would not remove any existing recreational facilities or substantially increase the demand for, or result in accelerated deterioration of, recreational facilities. Therefore, the impact would be **less than significant**.

#### b. Creation of new or altered recreational facilities—*No Impact*

The Proposed Project involves construction and operation of a facility intended for emergency services only, with no recreational facilities on site. The Proposed Project would not result in any effects to new or altered recreational facilities. Access to existing recreational sites would not be affected. Therefore, the Proposed Project would have **no impact**.

## 1 **3.16 TRANSPORTATION/TRAFFIC**

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

2

### 3 **3.16.1 TRAFFIC AND TRANSPORTATION TERMINOLOGY**

4 The following are definitions of key traffic and transportation terms used in this section,  
 5 based on materials published by the Transportation Research Board (2016), the 2035 Plumas  
 6 County General Plan and the 2010 Regional Transportation Plan.

7 **Level of Service.** The level of service (LOS) is a qualitative measure describing operational  
 8 conditions within a traffic stream, based on service measures such as speed and travel time,

freedom to maneuver, traffic interruptions, comfort, and convenience. LOS is defined according to methodologies presented in the Highway Capacity Manual (Transportation Research Board, 2016).

Traffic operations at all study intersections were analyzed for weekday AM and PM peak hour conditions. Level of service is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions.

**Table TR-1** describes LOS and the average delay ranges associated with each LOS category.

**Table TR-1.** Level of Service Definitions for Intersections

Level of Service	Description	Delay (seconds/vehicle)	
		Signalized Intersection	Unsignalized Intersection
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 10	0-10
B	Free-flow speeds are maintained. The ability to maneuver within the traffic stream is only slightly restricted.	> 10-20	> 10-15
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 20-35	> 15-25
D	Speeds decline slightly with increasing flows. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 35-55	> 25-35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 55-80	> 35-50
F	Represents a breakdown in flow.	> 80	> 50

Source: Transportation Research Board, 2016

**Delay.** Delay refers to the additional travel time experienced by a driver or traveler that results from the inability to travel at optimal speed, and stops resulting from congestion or traffic control.

**Minor Arterial Roads.** Minor arterial roads provide for mobility within the county, carrying through-traffic on continuous routes and joining major arterials, major and minor collector streets, and local roads. In Plumas County, the minor arterial road systems consist primarily of State Highways that provide regional circulation for the majority of intra-County regional travel. Minor arterials provide more land access than major arterials, while still providing adequate mobility for accommodating longer distance trips.

**Major Collector Streets.** Major collector streets provide greater access to more localized destinations for regional traffic. Major collectors generally serve more important intra-county travel corridors and traffic generators not served by major and minor arterials.

**Minor Collector Streets.** Minor collector streets provide additional access to local attractions for regional traffic. These roadways are designed to supplement regional facilities and provide connectivity to higher class major collectors and major and minor arterials.

**Local roads.** Local roads are public or private roads, typically developed as two-lane, undivided roadways, that provide direct access to individual parcels that are not located on arterials and collectors. Through movement is secondary to the access function and is discouraged by both design and traffic control to encourage low vehicle speeds.

### 3.16.2 REGULATORY SETTING

#### ***Federal Laws, Regulations, and Policies***

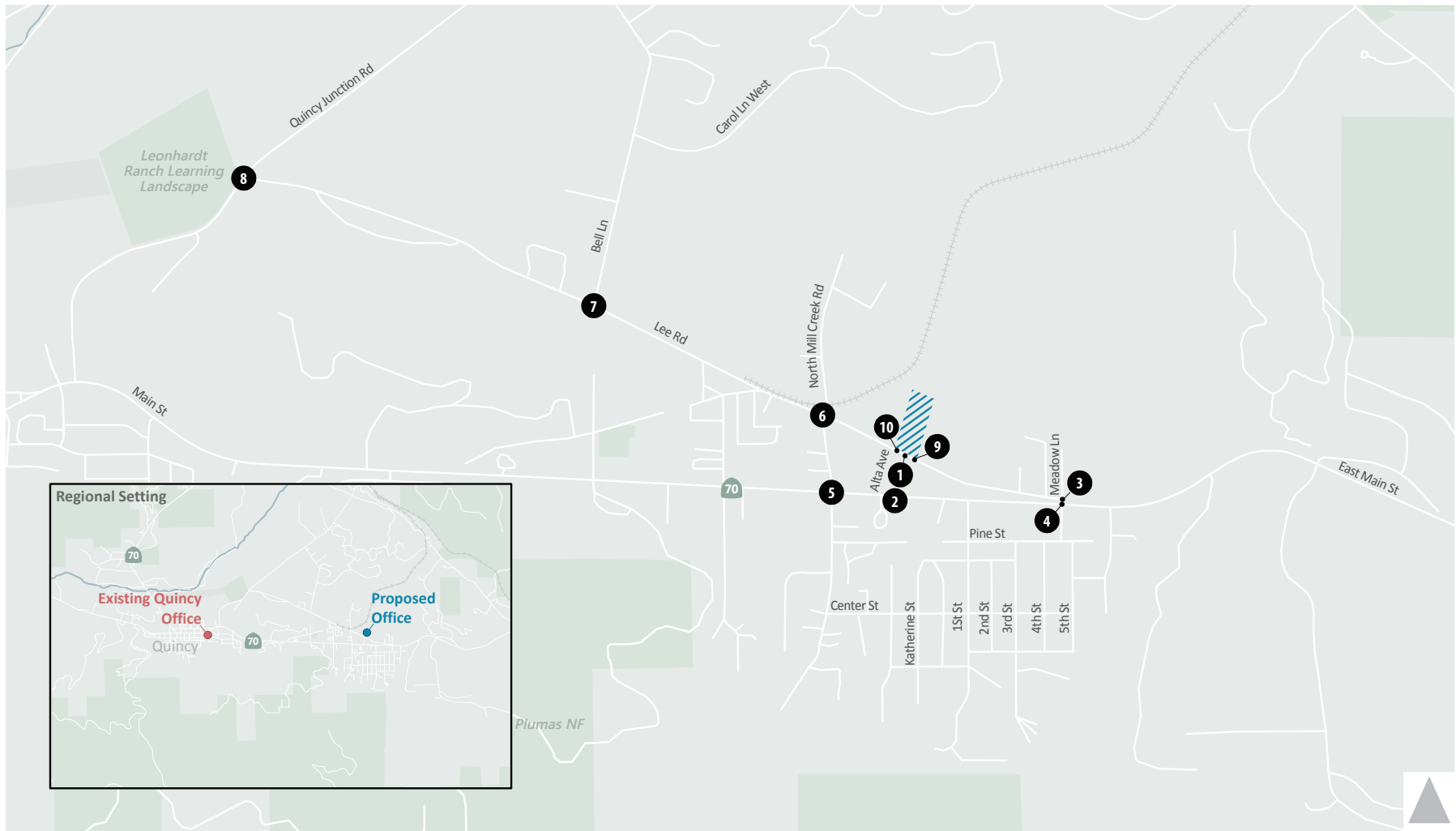
The FAA has conducted a preliminary aeronautical study for the construction of the California Highway Patrol (CHP) communications tower at the project site. See Section 3.8, "Hazards and Hazardous Materials" for further discussion.

#### ***State Laws, Regulations, and Policies***

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

### 3.16.3 ENVIRONMENTAL SETTING

The project site is situated within the town of Quincy in Plumas County and is proposed on the north side of the Lee Road / Alta Avenue intersection, as shown on **Figure TR-1**. The project site is approximately 2.5 miles east of the existing CHP office located at 86 West Main Street, Quincy, CA. The following subsections describe regional and local access to the project area.



- 1 Study Intersections
- Project Site

Prepared by:



Prepared for:  
California Highway Patrol

**Figure TR-1. Project Study Area**

**Quincy Area Office Replacement Project  
Initial Study/Mitigated Negative Declaration**

### ***Existing Vehicle Access***

The project site is situated in East Quincy, north of the Lee Road / Alta Avenue intersection. The project site is served by a minor arterial, collectors and local roads. The following discusses the study area roadway network.

SR-70 is a State Highway that provides an east/west connection across central and southern Plumas County. In Quincy/East Quincy, SR-70 is a minor arterial that primarily consists of five lanes, two lanes in each direction with a two-way left-turn lane that provides access to land uses on either side of the Highway.

Quincy Junction Road is a major collector that provides a north/south connection from Main Street in Quincy to land uses north of East Quincy. Quincy Junction Road consists of two lanes, with one lane in each direction.

Lee Road is a major collector that provides an east/west connection from SR-70 to Quincy Junction Road. The project site is located on the north side of Lee Road, which provides direct access to the site. Lee Road consists of two lanes, with one lane in each direction and is frequently used by trucks hauling lumber to and from the Sierra Pacific Industries Mill, which is located approximately ½ mile northwest of the project site.

Alta Avenue is a local road that provides a north/south connection from SR-70 to Lee Road. Alta Avenue consists of two lanes, with one lane in each direction.

### ***Existing Bicycle and Pedestrian Facilities***

There are currently no bicycle or pedestrian facilities immediately adjacent to the project site, and there are minimal bicycle and pedestrian facilities near the project site. Bicycle facilities in East Quincy are limited to two separate segments of a Class I shared use path; one segment is located on the north side of SR-70, beginning at the intersection of Fairground Road / SR-70 and terminating just east of Redberg Avenue and one segment is located along Pioneer Road near the southeast corner of the Plumas County Fairgrounds. Pedestrian access throughout East Quincy is limited by a lack of sidewalks; however, sidewalks are present on the north side of SR-70 between East Quincy and Quincy.

It should be noted that the Plumas County Draft Active Transportation Plan (Alta Planning + Design, July 2017) identifies the following future bicycle improvements near the project site.

- Class I shared use path on the north side of SR-70 connecting Quincy and East Quincy.
- Class II bike lanes on Lee Road between SR-70 and Quincy Junction Road.
- Class II bike lanes on SR-70 between Bellamy Lane in Quincy and Chandler Road in East Quincy.
- Class II bike lanes on North Mill Creek Road between SR-70 and Lee Road.
- Class II bike lanes on Quincy Junction Road between SR-70 and Chandler Road.

Pedestrian improvements are also recommended in the Plumas County Draft Active Transportation Plan; however, no recommended improvements would improve access to the project site via either Lee Road or Alta Avenue and therefore, are not described in detail in this study.



### ***Existing Transit Service***

Plumas County offers daily bus service between Quincy, Portola, Graeagle, Chester, and Greenville as well as round trips within Quincy. Regional connections are also available by transferring to Lassen County Bus Service at the Hamilton Branch stop located at the north end of Lake Almanor or by transferring to the Susanville Rancheria Public Transportation Bus Service at the Holiday Market stop located in Chester.

Although no bus stops are located adjacent to the project site on either Lee Road or Alta Avenue, four bus stops are located on SR-70 within a ½-mile radius of the project site.

### ***Existing Rail Service***

Two active freight rail operations serve Plumas County. Union Pacific Railroad operates a line that connects Roseville, California to Salt Lake City, Utah and primarily follows SR-70. Burlington Northern Santa Fe Railroad operates a line that runs north/south from Keddie to Lake Almanor in Lassen County and Oregon. An active railroad spur is also located in Quincy and connects the Sierra Pacific Industries Mill to the Union Pacific Railroad.

### ***Existing Commute Trips***

The existing Quincy CHP office is currently staffed by 27 uniformed CHP officers and 5 non-uniformed support personnel. To fulfill its law enforcement and public safety activities at all times, the existing office is staffed 7 days a week, 24 hours a day by shift employees. Uniformed employee shifts generally run from 6:00 AM to early-afternoon, early-afternoon to 10:00 PM, and from 10:00 PM to 6:00 AM. Non-uniformed employee shifts are generally from 8:00 AM to 5:00 PM. Approximately 13 employees typically work between the hours of 7:00 AM and 6:00 PM.

The total number of peak hour trips to and from the existing CHP office by all employees (including uniformed officers and support personnel) was determined by collecting counts during the AM and PM peak periods. Cameras collected data on August 28, 2018 on the two driveways serving the existing facility, to count the number of peak period trips generated by the facility. During the AM peak hour of 7:30 AM to 8:30 AM, seven (7) inbound trips and five (5) outbound trips occurred. During the PM peak hour of 4:00 PM to 5:00 PM, six (6) inbound trips and four (4) outbound trips occurred.

## **3.16.4 IMPACT ANALYSIS**

### ***Methodology***

For this analysis, intersection turning movement volumes were collected on August 28, 2018, while local schools were in session and with clear weather, during the morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) peak periods. Study intersection LOS was evaluated using technical procedures documented in the *Highway Capacity Manual 6<sup>th</sup> Edition* (Transportation Research Board, 2016) through the use of Synchro 10 software. Project-related impacts were assessed based on the standards identified by Plumas County. Consultation with Plumas County occurred during the analysis.

## ***Study Intersections***

The project site is primarily accessed via Lee Road, Alta Avenue and SR-70. Intersections along these roadways are most likely to be affected by the Proposed Project and were selected for the analysis. Based on the conceptual site plan, project access may occur via two new driveways, one on the west side of the Lee Road / Alta Avenue intersection and one on the east side of the Lee Road / Alta Avenue intersection. The following ten study intersections (including the two access driveways) were analyzed:

- a) Alta Avenue / Lee Road
- b) Alta Avenue / SR-70
- c) Meadow Lane / Lee Road
- d) Meadow Lane / SR-70
- e) North Mill Creek Road / SR-70
- f) North Mill Creek Road / Lee Road
- g) Lee Road / Bell Lane
- h) Quincy Junction Road / Lee Road
- i) Lee Road / CHP Driveway 1 (east driveway)
- j) Lee Road / CHP Driveway 2 (west driveway)

All intersections are unsignalized, with the exception of North Mill Creek Road / SR-70 which is a signalized intersection.

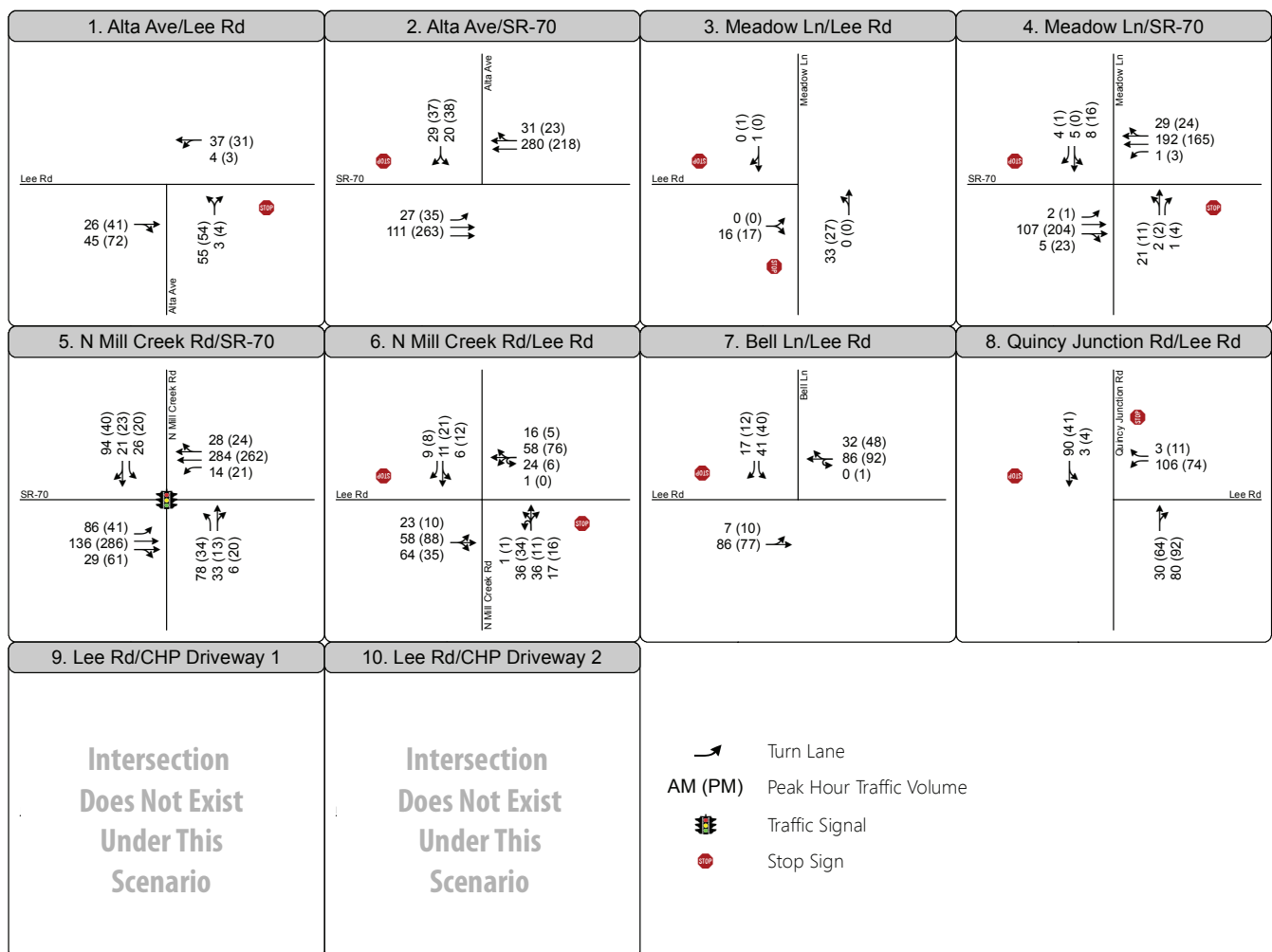
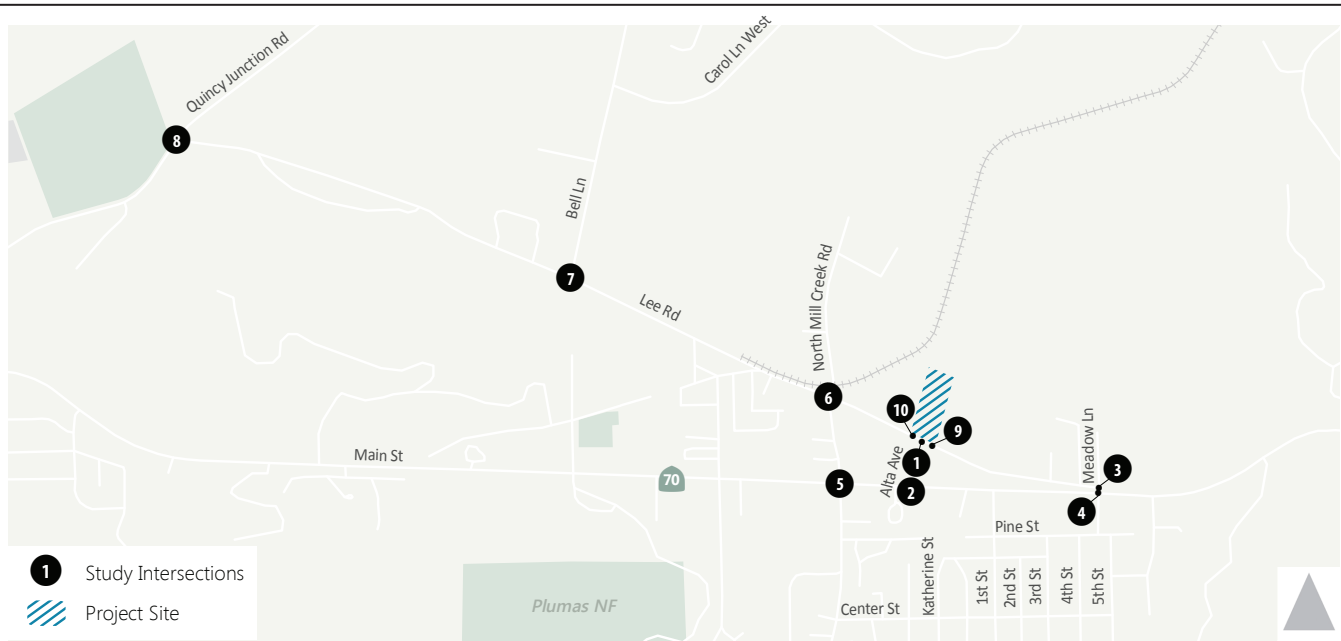
## ***Traffic Data***

Weekday morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) peak-period intersection turning movement volumes, including separate counts of heavy vehicles, pedestrians and bicyclists, were collected at the existing study intersections near the proposed CHP facility location, as well as at the existing CHP facility located at 86 West Main Street. All intersection data was collected on Tuesday, August 28, 2018, a typical weekday with local schools in session. For the study intersections, the single hour with the highest traffic volumes during the count periods was identified. The AM peak hour in the study area is generally from 7:30 AM to 8:30 AM and the PM peak hour is generally from 4:00 PM to 5:00 PM. The traffic counts are provided in **Appendix G**.

Fehr & Peers also used aerial imagery to inventory transportation and circulation facilities in the study area, including intersection lane configurations and controls, location of sidewalks and crosswalks, and location and type of bicycle facilities within the study area. Caltrans staff also provided signal timing sheets for the signalized study intersection. Existing AM and PM peak hour turning movement counts, intersection lane configurations and traffic controls are shown on **Figure TR-2**.

## ***Project Trip Generation***

Trip generation refers to the process of estimating the amount of vehicular traffic that a project would add to the surrounding roadway system. Trip estimates are created on a daily basis and for a one-hour period within both the morning (AM) and afternoon (PM) peak commute time periods. Trips are reviewed during each hour of the 2-hour morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) peak commute periods and the peak hour for each period is identified.



Prepared by:



Prepared for:  
California Highway Patrol

**Figure TR-2. Peak Hour Traffic Volumes and Lane Configurations -Existing Conditions**

**Quincy Area Office Replacement Project  
Initial Study/Mitigated Negative Declaration**

Trip generation rates were developed based on the existing employment levels and trip generation observed at the existing CHP facility in Quincy. The trip generation rates developed for the existing CHP facility were applied to the maximum number of employees (37) anticipated as part of the project to estimate AM and PM peak hour trip generation for the proposed project.

**Table TR-2** shows both the trip generation rate of the existing CHP facility and the estimated trip generation for the replacement facility based on anticipated employment levels. The proposed project would accommodate personnel growth of 15 percent.

**Table TR-2.** Project Trip Generation

Land Use	Number of Employees	Daily <sup>1</sup>	AM Peak Hour Trips <sup>2</sup>			PM Peak Hour Trips <sup>2</sup>		
			In	Out	Total	In	Out	Total
Existing CHP Facility	32	99	7	5	12	6	4	10
Trip Generation Rate per Employee		3.10	0.22	0.16	0.38	0.19	0.13	0.31
Proposed CHP Facility	37	115	8	6	14	7	5	12
<b>Plan Buildout Net New Trips<sup>3</sup></b>		<b>115</b>	<b>8</b>	<b>6</b>	<b>14</b>	<b>7</b>	<b>5</b>	<b>12</b>

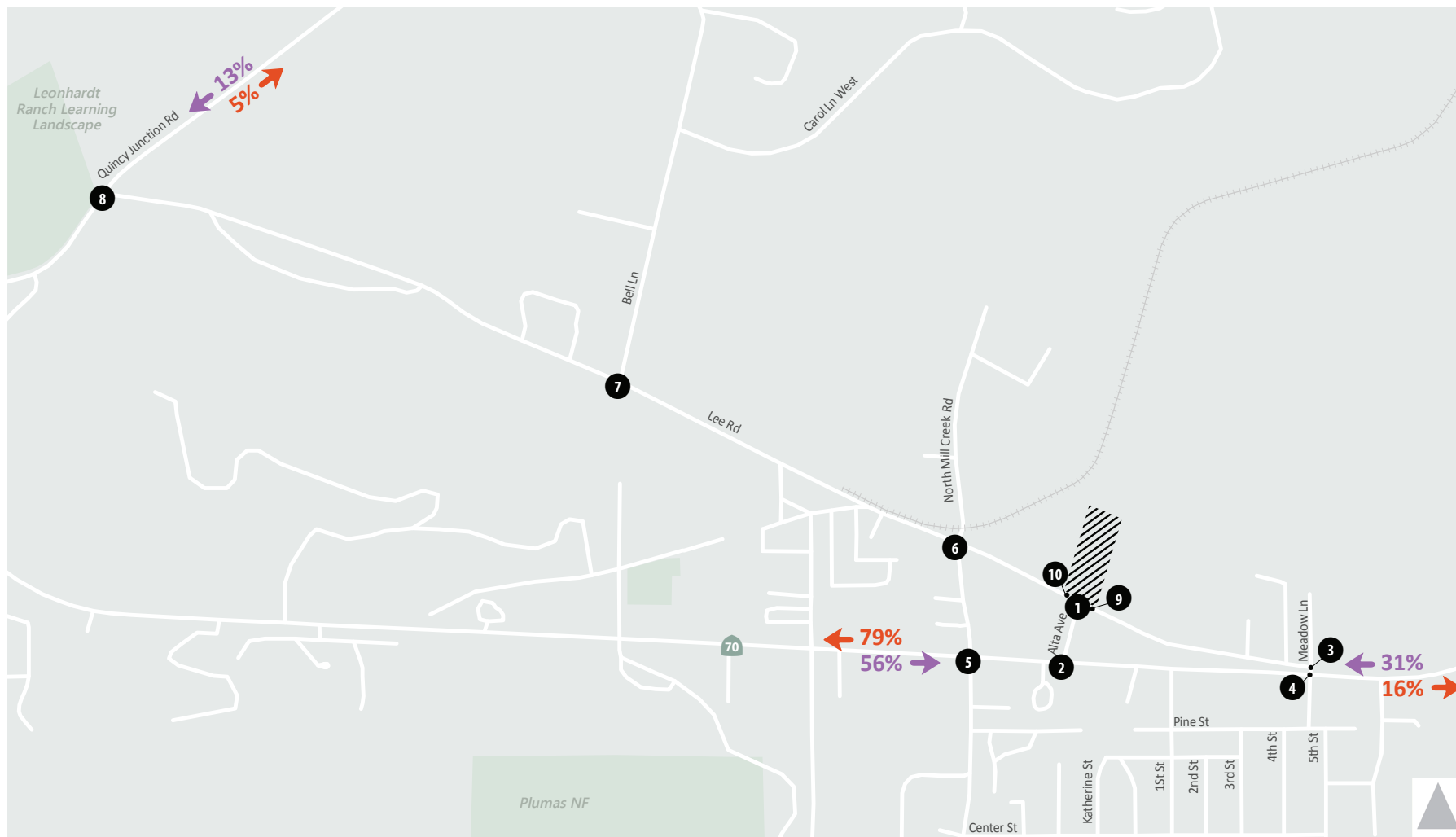
**Notes:**

1. Daily trips are assumed as 10 times the PM peak hour traffic. Factor is based on the Caltrans 2016 Traffic Volume Data AADT/Peak Hour Trip Ratio for Quincy and data collected for other recent CHP studies.
2. Based on driveway counts collected at existing CHP Quincy Facility in August 2018.
3. Since there are no existing trips associated with the undeveloped Project site's current uses, the net new trips would be the same as the trips associated with the Proposed CHP Facility.

*Source: Fehr & Peers, October 2018*

### ***Trip Distribution and Assignment***

The trip distribution and assignment process is used to estimate how the trips generated by the proposed project would be distributed across the roadway network. Directions of approach and departures from the project site were determined based on existing travel patterns in the area and the conceptual site plan (Figure 2-3). Based on the conceptual on-site gate configuration, it is assumed that CHP employees will primarily enter the site using CHP Driveway 2 (west driveway) and exit the site using CHP Driveway 1 (east driveway). Trips were assigned based on this assumption. In the event driveway locations or gate configurations are modified, trip distribution and assignment are unlikely to change substantially due to the low number of trips being generated by the project. The resulting trip distribution percentages for both the AM and PM peak hours are shown on **Figure TR-3** and **TR-4**.



- 1 Study Intersections
- Project Site
- xx% → Inbound Trip Distribution
- xx% → Outbound Trip Distribution

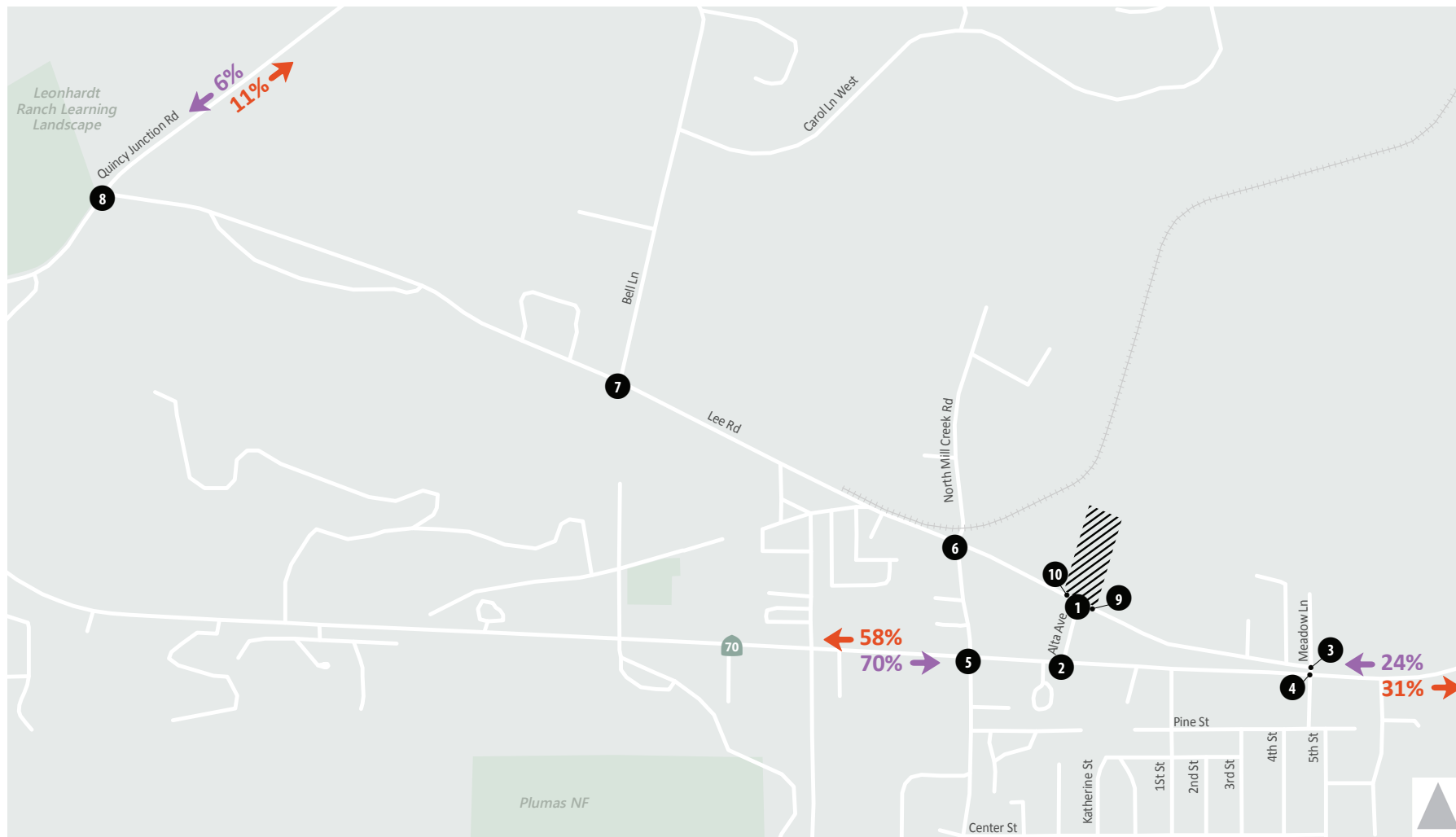
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Prepared for:  
California Highway Patrol

Figure TR-3. AM Trip Distribution

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- 1 Study Intersections
- Project Site
- xx% → Inbound Trip Distribution
- xx% → Outbound Trip Distribution

Prepared by:



Prepared for:  
California Highway Patrol

Figure TR-4. PM Trip Distribution

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### ***LOS Standards and Impact Thresholds***

The study area includes a mix of both Caltrans intersections (Lee Road / SR-70 and North Mill Creek Road / SR-70) and Plumas County intersections (Alta Avenue / Lee Road, Meadow Lane / Lee Road, North Mill Creek Road / Lee Road, Lee Road / Bell Lane and Quincy Junction Road / Lee Road). Therefore, both the *2035 Plumas County General Plan* (Plumas County 2013) and the *California State Route 70 Transportation Concept Report* (April 2017) were reviewed for performance standards and traffic impact thresholds. The following level of service standards and traffic impact thresholds are applied to both Caltrans intersections and intersections maintained by Plumas County.

#### **Performance Standard**

- Level of service “C” or better are considered acceptable for intersections.
- Level of service “D” or worse are considered unacceptable for intersections.

#### **Threshold of Significance**

- A significant impact would occur if the project would result in an intersection operating at an acceptable level (LOS C or better) to deteriorate to an unacceptable LOS.

### **3.16.5 DISCUSSION OF CHECKLIST RESPONSES**

#### **a. Conflict with applicable circulation plans, ordinances or policies and applicable congestion management programs—*Less than Significant with Mitigation***

##### **Construction Impact Analysis**

During the Proposed Project’s construction period, traffic impacts on public streets would be related to the movement of construction equipment and construction worker trips. Project construction would result in a temporary increase in vehicle traffic along nearby roadways, including Lee Road, Alta Avenue, SR-70, and Quincy Junction Road. During the site preparation phase, work activity would result in a maximum of approximately 324 one-way trips (worker and haul trips) on a given construction work day, though construction trips would vary based on the construction phase. **Table TR-3** summarizes the expected number of daily trips per construction phase.

**Table TR-3. Construction Trip Generation**

Phase #	Phase Name	Start Date	End Date	Days per Week	Number of Days	Total Trips	Daily Trips
1	Site Preparation	05/01/2021	05/07/2021	5	5	1,622	324
2	Grading	05/08/2021	05/19/2021	5	8	120	15
3	Construction	05/20/2021	04/06/2022	5	230	15,870	69
4	Paving	04/07/2022	05/02/2022	5	18	360	20
5	Coating	05/03/2022	05/26/2022	5	18	180	10

Project-related truck traffic and incoming/outgoing equipment could increase conflicts between bicyclists, pedestrians, and cars. Slow-moving trucks requiring access to the project site from Lee Road and Alta Avenue could potentially increase conflicts with bicyclists, pedestrians, logging trucks traveling to and from the Sierra Pacific Industries Mill and other vehicles. These potential conflicts could lead to inconsistency with policies established in the Plumas County Circulation Element (Plumas County 2013). This impact would be potentially significant. Implementation of Mitigation Measure TRA-1, which requires development and implementation of a traffic management plan, would decrease potential traffic safety hazards.

**Mitigation Measure TRA-1: Prepare and Implement a Construction Traffic Management Plan.**

The Contractor shall prepare and implement a construction traffic management plan to reduce potential interference with an emergency response plan, as well as to reduce potential traffic safety hazards and ensure adequate access for emergency responders. Development and implementation of this plan shall be coordinated with Plumas County. CHP or the Department of General Services (DGS) shall ensure that the plan is implemented during construction. The plan shall include, but will not be limited to, the following items:

- Identify construction truck haul routes to limit truck and automobile traffic on nearby streets. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety. Identified haul routes will be recorded in the contract documents.
- Implement comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning and detour signs (if required), lane closure procedures (if required), and cones for drivers.
- Evaluate the need to provide flaggers or temporary traffic control at key intersections along the haul route during all or some portion of the construction period.
- Notify adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures.



- Develop a process for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint manager. Post 24-hour contact information for the complaint manager on the site.
- Document road pavement conditions for all routes that would be used by construction vehicles before and after project construction. Make provisions to monitor the condition of surface streets used for haul routes so that any damage and debris attributable to the haul trucks could be identified and corrected. Roads damaged by construction vehicles shall be repaired to the level at which they existed before project construction.

Due to the limited amount of time the heaviest construction traffic will be added to the roads, the temporary nature of construction trips, and the implementation of this mitigation management plan, potential conflicts with the circulation system that could decrease the performance or safety of transportation facilities would be **less than significant with mitigation**.

### **Transportation Impact Analysis**

Intersections in the study area are analyzed based on the Highway Capacity Manual 6<sup>th</sup> Edition (Transportation Research Board, 2016) methodology. LOS criteria are stated in terms of average delay per vehicle during the AM and PM hours of typical weekdays, as shown in **Table TR-1**.

#### *Existing Year Analysis (Year 2018)*

For this transportation impact analysis, AM and PM peak hour impacts at the study intersections were evaluated under Existing and Existing Plus Project conditions. The intersection LOS calculations incorporate the existing intersection lane configurations and traffic controls, including the traffic signal timing data provided by Caltrans. Heavy vehicle trips, based on data collected in August 2018, were also incorporated into the analysis to accurately reflect the higher than typical percentage of heavy vehicle trips. Existing Plus Project intersection turning movement volumes were developed by adding the project trips to existing counts. Existing Plus Project AM and PM peak hour turning movements are shown on **Figure TR-5**. The project's effects on the delay and LOS at the study intersections are compared to existing conditions in **Table TR-4**. Intersection analysis worksheets are presented in **Appendix G**.

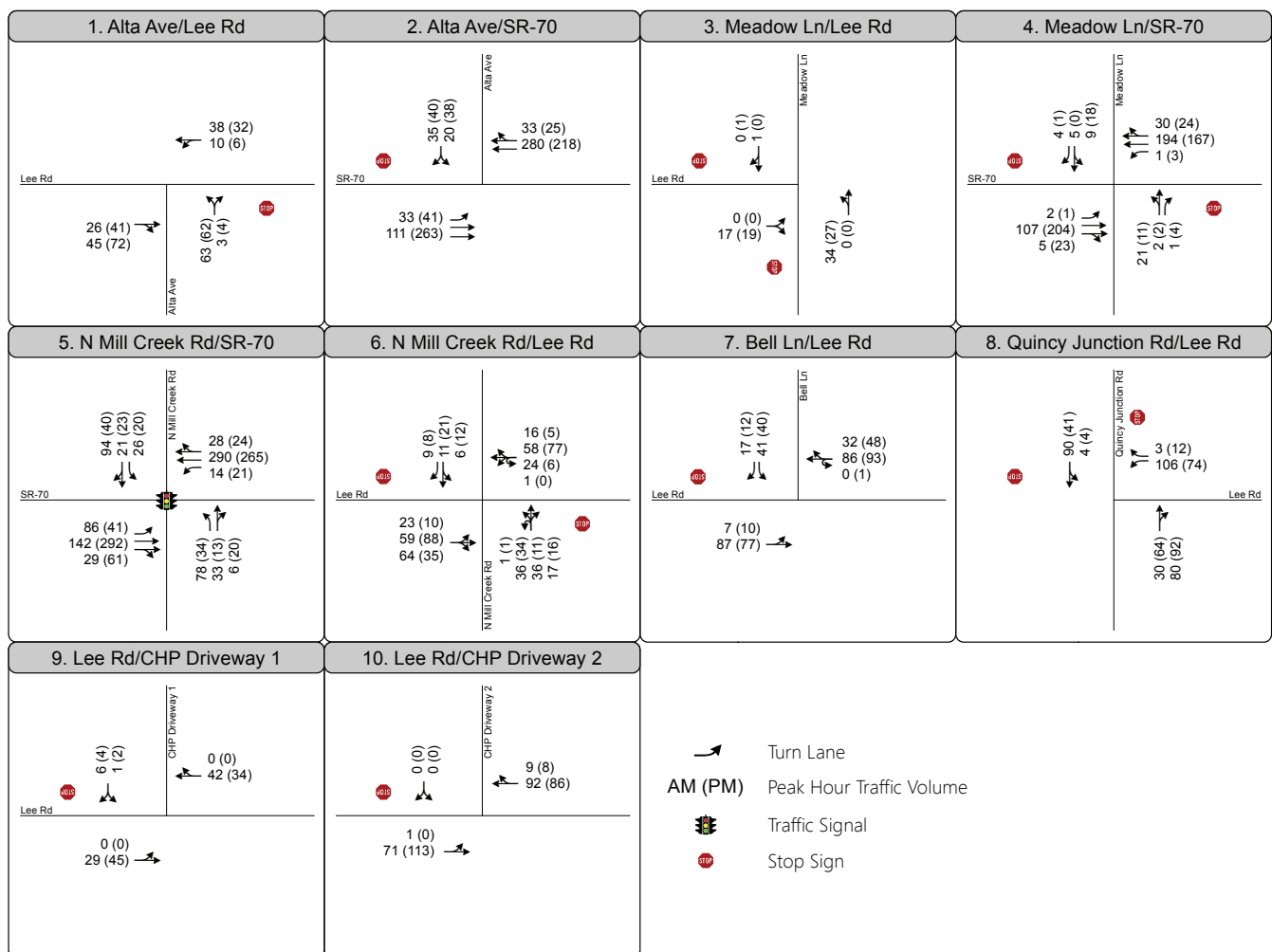
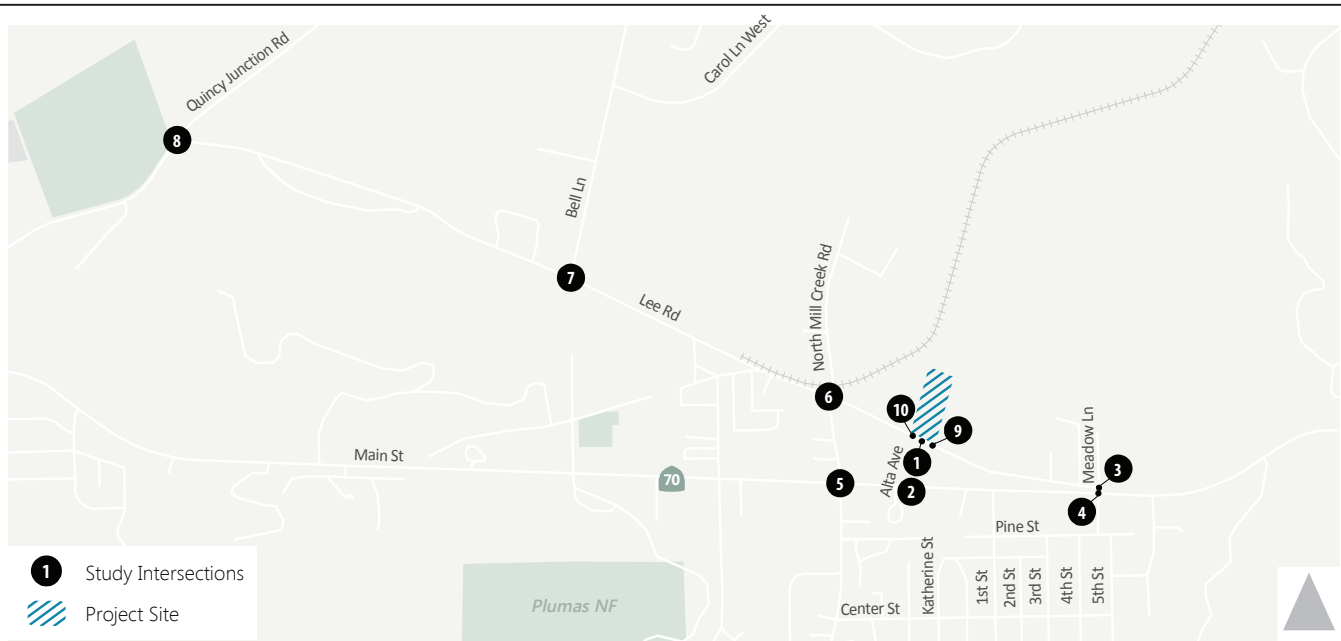
1 **Table TR-4.** Intersection LOS – Existing and Existing Plus Project Conditions

Intersection	Peak Hour	Existing		Existing Plus Project		Significant Impact?
		Delay	LOS	Delay	LOS	
Alta Avenue / Lee Road	AM	10	A	10	A	No
	PM	10	A	10	A	No
Alta Avenue / SR-70	AM	11	B	11	B	No
	PM	11	B	11	B	No
Meadow Lane / Lee Road	AM	9	A	9	A	No
	PM	9	A	9	A	No
Meadow Lane / SR-70	AM	12	B	12	B	No
	PM	12	B	12	B	No
North Mill Creek Road / SR-70	AM	13	B	13	B	No
	PM	9	A	9	A	No
North Mill Creek Road / Lee Road	AM	13	B	13	B	No
	PM	11	B	11	B	No
Lee Road / Bell Lane	AM	11	B	11	B	No
	PM	10	A	10	A	No
Quincy Junction Road / Lee Road	AM	11	B	11	B	No
	PM	10	A	10	A	No
Lee Road / CHP Driveway 1	AM	N/A	N/A	9	A	No
	PM	N/A	N/A	9	A	No
Lee Road / CHP Driveway 2	AM	N/A	N/A	8	A	No
	PM	N/A	N/A	0	A	No

2

3 As shown in Table TR-4, the delay and LOS would remain the same at all intersections during  
4 both the AM and PM peak hours. All study intersections would operate at an LOS B or better  
5 with the addition of the proposed project.

6 As such, the project would not cause any significant impacts during either the AM or PM peak  
7 hours, and traffic impacts due to the project would be **less than significant**.



Prepared by:



Prepared for:  
California Highway Patrol

**Figure TR-5. Peak Hour Traffic Volumes and Lane Configurations -Existing Plus Project Conditions**

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### Future Year (2023) Analysis

To analyze the potential impacts of the project in the opening year (2023), intersection turning movement forecasts were developed for Future Year (2023) conditions using the following steps:

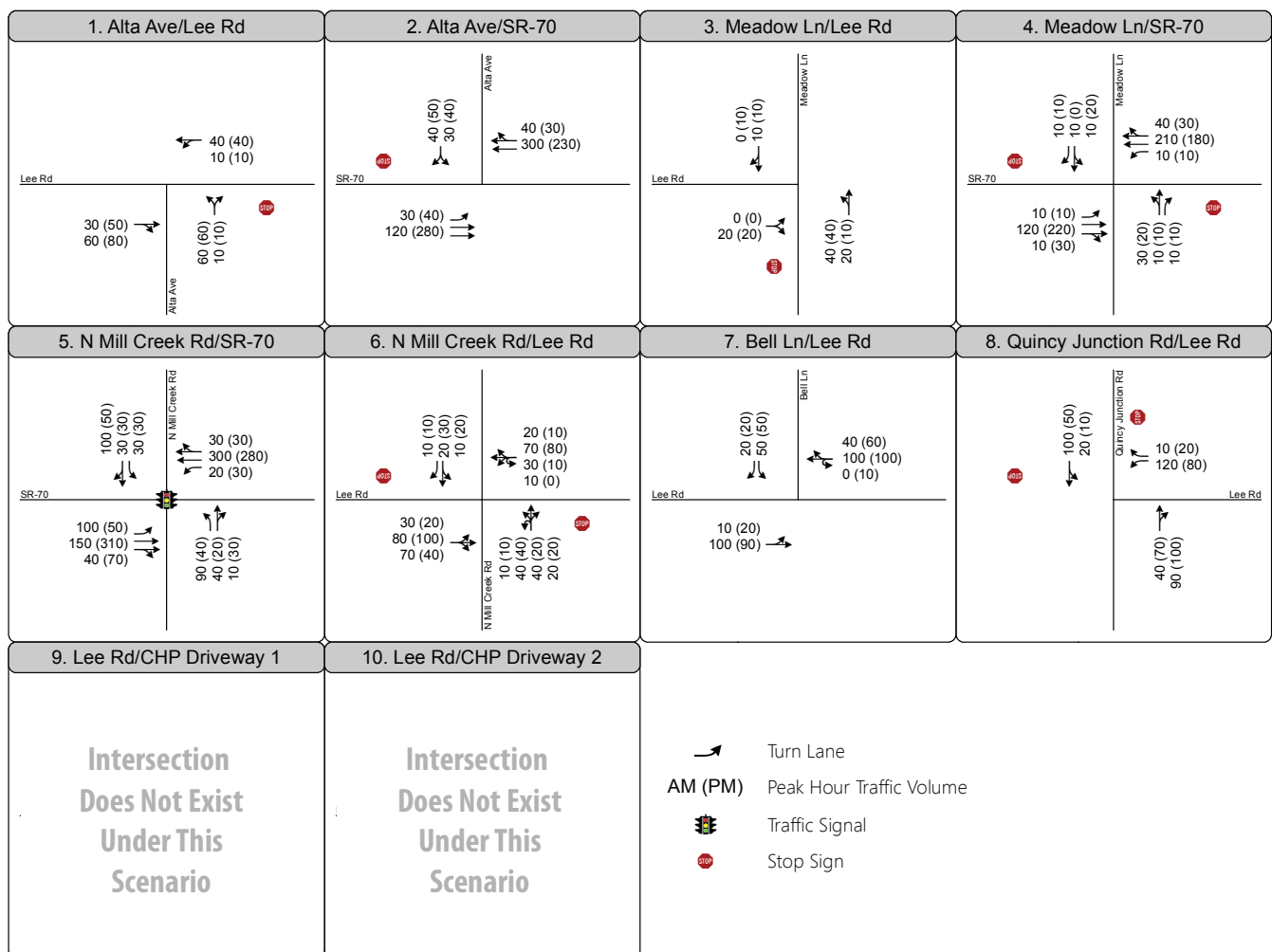
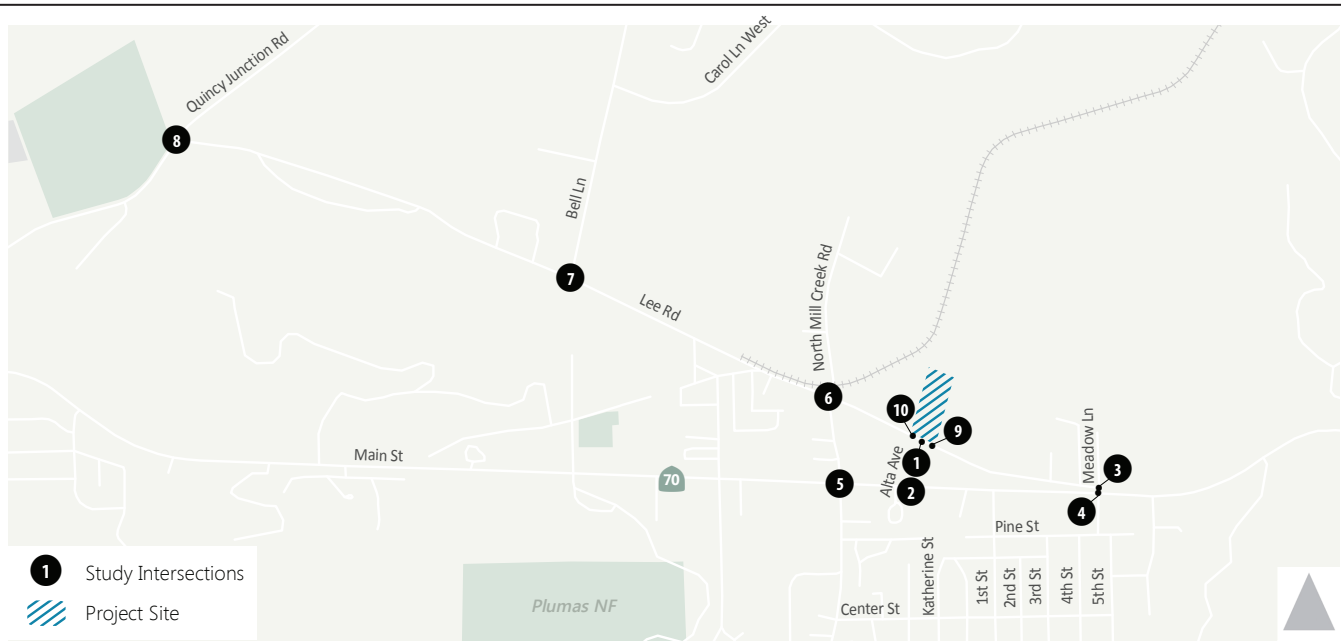
1. Population Growth – Historically, growth in vehicle travel correlates with population growth. Therefore, Plumas County long-range planning documents were reviewed to forecast population growth rates. The *2035 Plumas County General Plan (2013)* and the *2010 Plumas County Regional Transportation Plan (2011)* both identify an annual growth rate of about 1%.
2. Relevant Projects – Future traffic forecasts typically include the effects of known specific projects within the vicinity of the project site that are expected to be developed prior to the buildout date of the proposed project. After consultation with Plumas County staff, there are no relevant projects anticipated to be developed prior to the proposed project within a 1-mile radius of the project site at this time.
3. Future Year (2023) No Project Forecasts – Applied five years of growth, at a rate of 1% annually and rounded up to the nearest 10, to the existing counts to develop Future Year (2023) No Project intersection turning movement forecasts, which are shown on **Figure TR-6**.
4. Future Year (2023) Plus Project Forecasts – Using the trip generation summarized in **Table TR-2** and the trip distributions shown on **Figures TR-3 and TR-4**, project trips were added to the study intersections to develop Future Year (2023) Plus Project intersection turning movement forecasts, which are shown on **Figure TR-7**.

To provide a conservative estimate, all forecasts are rounded up to the nearest 10 vehicles. **Table TR-5** summarizes AM and PM peak hour intersection operations under Future Year (2023) conditions. Intersection analysis worksheets are presented in **Appendix G**.

**Table TR-5.** Intersection LOS – Future Year (2023) Conditions

Intersection	Peak Hour	Future Year No Project		Future Year Plus Project		Significant Impact?
		Delay	LOS	Delay	LOS	
Alta Avenue / Lee Road	AM	10	A	10	A	No
	PM	10	A	10	A	No
Alta Avenue / SR-70	AM	12	B	12	B	No
	PM	11	B	11	B	No
Meadow Lane / Lee Road	AM	9	A	9	A	No
	PM	9	A	9	A	No
Meadow Lane / SR-70	AM	13	B	14	B	No
	PM	13	B	13	B	No

Intersection	Peak Hour	Future Year No Project		Future Year Plus Project		Significant Impact?
		Delay	LOS	Delay	LOS	
North Mill Creek Road / SR-70	AM	13	B	13	B	No
	PM	10	A	10	A	No
North Mill Creek Road / Lee Road	AM	14	B	14	B	No
	PM	12	B	12	B	No
Lee Road / Bell Lane	AM	11	B	11	B	No
	PM	11	B	11	B	No
Quincy Junction Road / Lee Road	AM	12	B	12	B	No
	PM	10	A	10	A	No
Lee Road / CHP Driveway 1	AM	N/A	N/A	9	A	No
	PM	N/A	N/A	9	A	No
Lee Road / CHP Driveway 2	AM	N/A	N/A	8	A	No
	PM	N/A	N/A	0	A	No



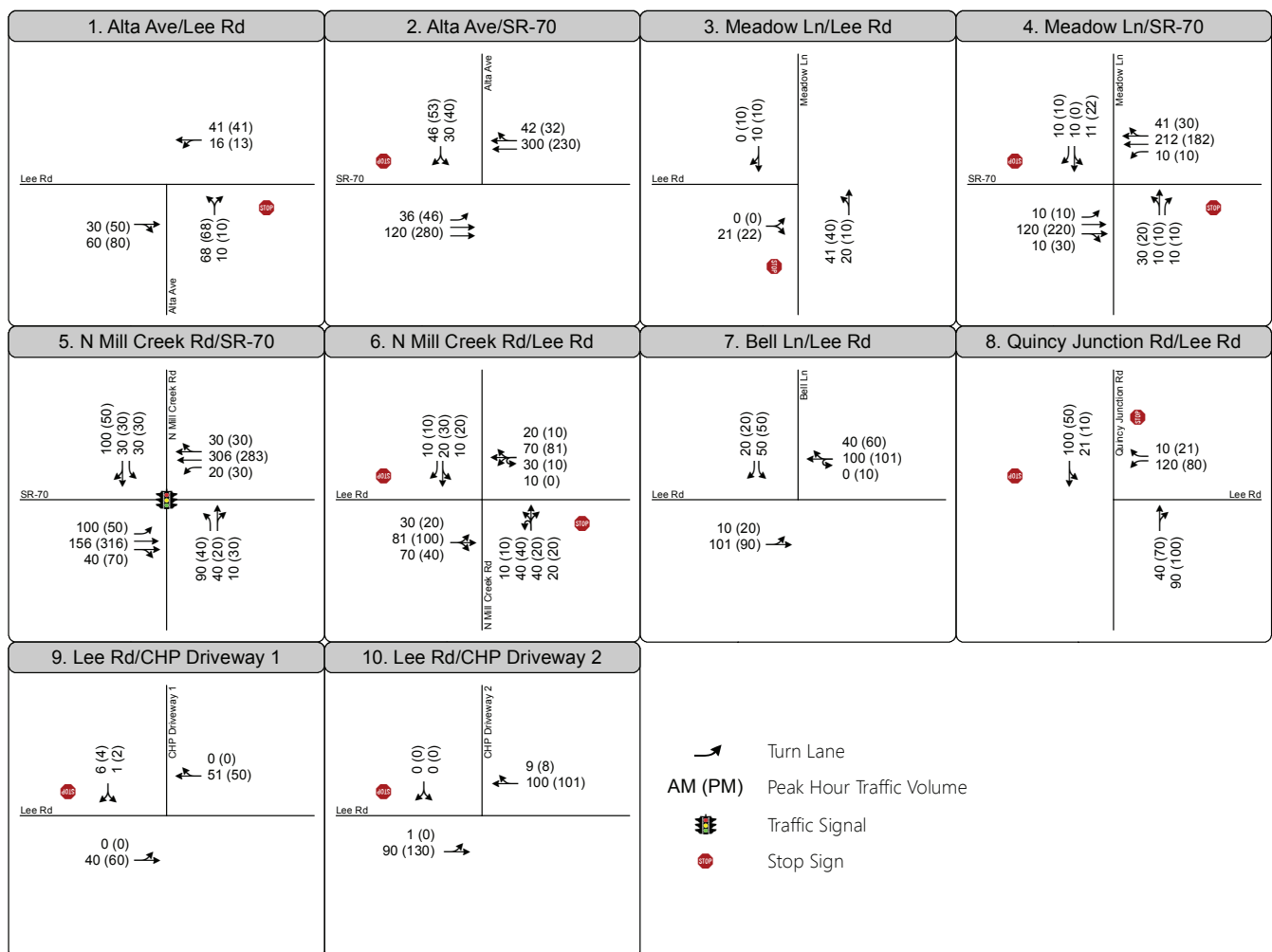
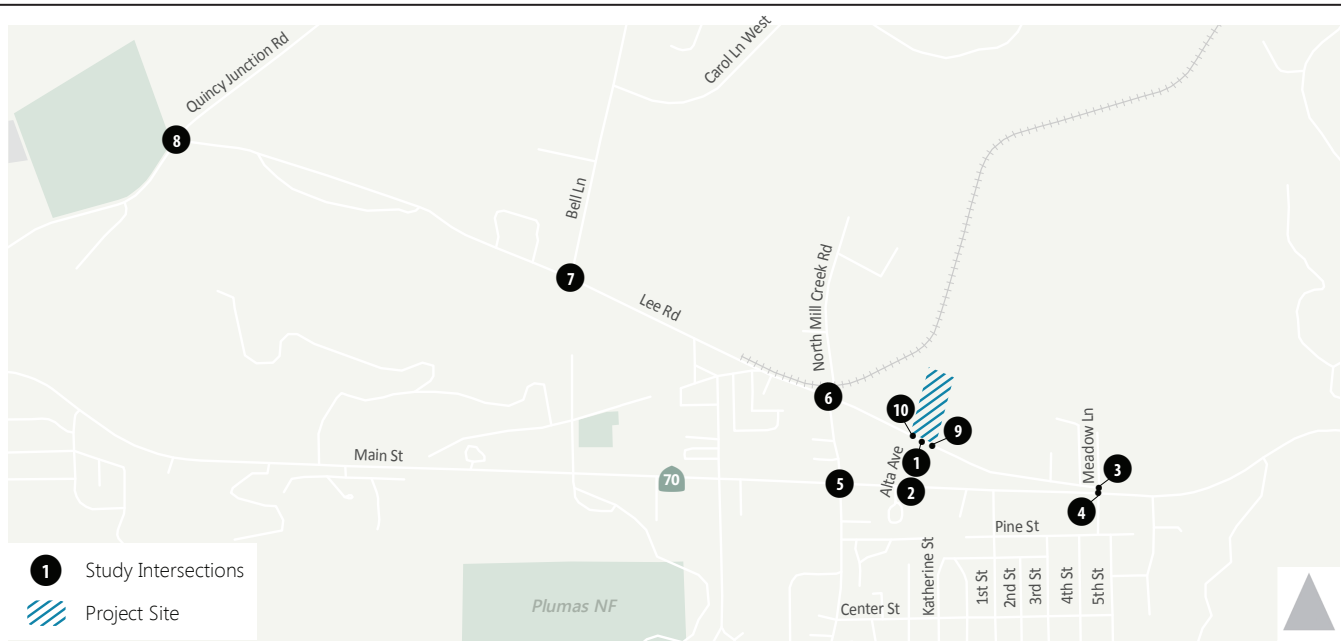
Prepared by:



Prepared for:  
California Highway Patrol

**Figure TR-6. Peak Hour Traffic Volumes and Lane Configurations -Future Year No Project Conditions**

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Prepared by:



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California Highway Patrol

**Figure TR-7. Peak Hour Traffic Volumes and Lane Configurations - Future Year Plus Project Conditions**

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As shown in Table TR-5, all study intersections would operate acceptably at LOS C or better under Future Year (2023) conditions with the addition of the proposed project. Delay would remain similar and LOS would remain the same at all study intersections during both the AM and PM peak hours.

As such, the project would not cause any significant impacts during either the AM or PM peak hours, and traffic impacts due to the project would be **less than significant**.

### *Summary*

Under both Existing and Future Year (2023) Conditions, traffic impacts due to the project would be less than significant. However, project related truck traffic during construction could be potentially significant. Due to the limited amount of time the heaviest construction traffic will be added to the roads, the temporary nature of construction trips, and the implementation of Mitigation Measure TRA-1, potential conflicts with the circulation system that could decrease the performance or safety of transportation facilities would be **less than significant with mitigation**.

### **b. Conflict with an applicable congestion management program—*No Impact*.**

With a population less than 50,000, Plumas County does not meet the minimum population threshold for an urbanized area that would require the County to establish a Congestion Management Agency and to prepare a Congestion Management Program. No roadways in Plumas County are subject to standards of a Congestion Management Program, therefore, the proposed project would have **no impact**.

### **c. Change in air traffic patterns—*No Impact***

The Gansner airport is located approximately 2.5 miles west of the project site. As indicated in Section 3.8 of the FAA aeronautical study (FAA 2018), “Hazards and Hazardous Materials,” the proposed tower would not exceed obstruction standards and would not be a hazard to air navigation. Therefore, construction of the new communications tower would **not impact** air traffic patterns.

### **d. Increased hazards due to design features—*Less than Significant***

The Proposed Project would not require changes to any road configurations that could create sharp curves or dangerous intersections. For discussion regarding potential safety hazards during construction (e.g., resulting from the presence of slow-moving trucks and equipment), refer to the discussion under items 3.16.5(a) and 3.16.5(b).

The Proposed Project would include new vehicular access driveways to the project site that, if not properly designed and constructed, could potentially result in safety hazards. However, the Proposed Project’s final site plan would be designed such that all driveways and parking areas are accessible to emergency service vehicles. This impact would be **less than significant**.



**e. Inadequate emergency access—*Less Than Significant with Mitigation***

During project construction, emergency access could be temporarily restricted from the presence of slow-moving trucks on local roads. As discussed under items 3.16.5(a) and 3.16.5(b), implementation of Mitigation Measure TRA-1 would require the construction contractor to identify construction haul routes that minimize traffic on nearby streets. Implementation of this mitigation measure would reduce construction-related impacts on emergency access to a less-than-significant level.

As previously described under items 3.16.5(a) and 3.16.5(b), operational traffic would not substantially reduce the effectiveness of nearby roadways or impede emergency access on these roads. For these reasons, the Proposed Project would not be expected to result in inadequate emergency access and, even with increased activity, any impacts of project operation would be less than significant.

In conclusion, impacts related to emergency access as a result of the Proposed Project would be **less than significant with mitigation**.

**f. Conflict with alternative transportation policies, plans, or programs—*No Impact***

The Proposed Project would not adversely affect future transit service planned nor would it create a demand for alternative transportation systems or affect public transit services. In addition, the magnitude of increased traffic on the road resulting from the Proposed Project would not affect pedestrian and bicycle safety, and thus would not conflict with the goals and policies established in the 2035 County of Plumas General Plan. Since the Proposed Project would not modify or conflict with any alternative transportation policies, plans or programs, it would have **no impact** on such programs.

## 1 **3.17 TRIBAL CULTURAL RESOURCES**

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

### 2 **3.17.1 REGULATORY SETTING**

#### 3 ***Federal Laws, Regulations, and Policies***

4 Federal law does not address tribal cultural resources (TCRs), as these resources are defined  
5 in the California Public Resources Code (PRC). However, similar resources, called Traditional  
6 Cultural Properties (TCPs), fall under the purview of Section 106 of the National Historic  
7 Preservation Act (NHPA), which was referenced in Section 3.5, *Cultural Resources*. TCPs are  
8 locations of cultural value that are historic properties. A place of cultural value is eligible as a  
9 TCP “because of its association with cultural practices or beliefs of a living community that  
10 (a) are rooted in that community’s history, and (b) are important in maintaining the  
11 continuing cultural identity of the community” (Parker and King 1990, rev. 1998). A TCP must  
12 be a tangible property, meaning that it must be a place with a referenced location, and it must  
13 have been continually a part of the community’s cultural practices and beliefs for the past  
14 50 years or more. Unlike TCRs, TCPs can be associated with communities other than Native  
15 American tribes, although the resources are usually associated with tribes. By definition,  
16 TCPs are historic properties; that is, they meet the eligibility criteria as a historic property for  
17 listing in the National Register of Historic Places (NRHP). Therefore, as historic properties,  
18 TCPs must be treated according to the implementing regulations found under Title 36 Code  
19 of Federal Regulations (CFR) Section 800, as amended in 2001.

## **State Laws, Regulations, and Policies**

### **CEQA and CEQA Guidelines**

California Assembly Bill 52, which was approved in September 2014 and which went into effect on January 1, 2015, requires that state lead agencies consult with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in PRC Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in PRC Section 21074(a) Public Resources, TCRs are:

(1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources; or

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under PRC Section 21074 as follows:

(b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

### **3.17.2 ENVIRONMENTAL SETTING**

As discussed in Section 3.5, *Cultural Resources*, the Proposed Project is in the traditional ancestral territory of the Mountain Maidu. No tribes with a traditional and cultural affiliation to the Project area have requested consultation with CHP on department projects pursuant to PRC Section 21080.3.1. However, in the spirit of PRC Section 21080.3.1, the California

Department of General Services (DGS), on behalf of CHP, notified local tribes who were identified by the NAHC as having a traditional and cultural association with the Project area about the Project via letters dated July 18, 2018. DGS did not received any tribal requests for consultation on the Project. **Table TCR-1** lists all those contacted and summarizes the results of the consultation. All correspondence between the NAHC, Native American tribes, CHP, and DGS is provided in **Appendix E**.

**Table TCR-1. Native American Consultation**

Organization/Tribe	Name of Contact	Letter Date	Letter Receipt	Comments
Estom Yumeka Maidu Tribe of the Enterprise Rancheria	Glenda Nelson, Chairperson	July 18, 2018	July 20, 2018	No response from the tribe
Greenville Rancheria of Maidu Indians	Kyle Self, Chairperson	July 18, 2018	July 20, 2018	No response from the tribe
Honey Lake Maidu	Paul Garcia, Chairperson	July 18, 2018	N/A	Letter not picked up
Honey Lake Maidu	Ron Morales, Chairperson	July 18, 2018	July 20, 2018	No response from the tribe
Mooretown Rancheria of Maidu Indians	Gary Archuleta, Chairperson	July 18, 2018	July 23, 2018	No response from the tribe
Susanville Rancheria	Brandon Guitierrez, Chairperson	July 18, 2018	July 20, 2018	No response from the tribe
Tsi Akim Maidu	Don Ryberg, Chairperson	July 18, 2018	N/A	No response from the tribe
Washoe Tribe of Nevada and California	Neil Mortimer, Chairperson	July 18, 2018	July 20, 2018	No response from the tribe
Washoe Tribe of Nevada and California	Darrel Cruz, Cultural Resources Department	July 18, 2018	July 23, 2018	No response from the tribe

### 3.17.3 DISCUSSION OF CHECKLIST RESPONSES

**a, b. Cause a Substantial Adverse Change to Tribal Cultural Resources Listed, or Eligible for Listing in the California Register of Historical Resources or a Local Register of Historical Resources, or Determined by the Lead Agency to be Significant—*Less than Significant with Mitigation***

No TCRs that are listed or eligible for listing in the CRHR or a local register of historical resources have been identified within the project area. Therefore, there would be **no impact** to TCRs that are listed or eligible for listing in the CRHR or a local register.

As mentioned above, although DGS notified tribes with a traditional and cultural affiliation with the area about the Proposed Project, none of the tribes contacted identified TCRs in the Project area. Furthermore, no TCRs determined by the lead agency, in its discretion and supported by substantial evidence, to be significant are known to be located in the Project vicinity. As a result, it appears that there would be no impact to TCRs. However, it is possible that Native American archaeological remains or Native American human remains that could be determined to be TCRs could be discovered during the course of construction. If such resources are identified, they would be treated according to **Mitigation Measure CR-1** or **Mitigation Measure CR-3**, respectively, as described in Section 3.5, *Cultural Resources*. Implementation of these mitigation measures would result in a less-than-significant impact with regard to TCRs. As a result, this impact would be **less than significant with mitigation**.

### 1 **3.18 UTILITIES AND SERVICE SYSTEMS**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Exceed wastewater treatment requirements of the applicable RWQCB?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or an expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or an expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the Project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Encourage activities that result in the use of substantial amounts of fuel or energy, or use these resources in a wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 2 **3.18.1 REGULATORY SETTING**

##### 3 ***Federal Laws, Regulations, and Policies***

##### 4 **Energy Policy Act of 2005**

5 The Energy Policy Act of 2005 provides loan guarantees or tax credits for entities that  
6 develop or use fuel-efficient and/or energy-efficient technologies (U.S. Environmental

Protection Agency [USEPA] 2017). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA 2017).

### ***State Laws, Regulations, and Policies***

#### **California Integrated Waste Management Act of 1989**

The California Integrated Waste Management Act (CIWMA) of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The State, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act. In 2016, unincorporated Plumas County's per resident disposal rate was 5.8, which was lower than its target rate of 6.4 (California Department of Resources Recycling and Recovery [CalRecycle] 2018a). Likewise, the County's per employee disposal rate was 18.5, which was lower than its target rate of 19.8 (CalRecycle 2018a).

#### **California Solid Waste Reuse and Recycling Access Act of 1991**

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900–42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

#### **California Integrated Energy Policy**

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research. The 2017 Integrated Energy Policy Report Update includes policy recommendations, such as continued renewable energy development and development and implementation of distributed energy resource technologies (CEC 2017).

#### **Title 24–Building Energy Efficiency Standards**

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2016). The standards are updated on an approximately 3-year cycle. The 2016 standards went into effect on January 1, 2016.

#### **Urban Water Management Planning Act**

California Water Code Sections 10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year, prepare an urban water management plan.

## ***Other Standards and Guidelines***

### **Leadership in Energy & Environmental Design**

Leadership in Energy & Environmental Design (LEED) is a green building certification program, operated by the U.S. Green Building Council (USGBC), which recognizes energy-efficient and/or environmentally friendly (green) components of building design (USGBC 2018a). To receive LEED certification, a building project must satisfy prerequisites and earn points related to different aspects of green building and environmental design. The four levels of LEED certification are related to the number of points a project earns (USGBC 2018a):

- 1) certified (40–49 points)
- 2) Silver (50–59 points)
- 3) Gold (60–79 points)
- 4) Platinum (80+ points)

Points or credits may be obtained for various criteria, such as indoor and outdoor water use reduction, and construction and demolition (C&D) waste management planning. Indoor water use reduction entails reducing consumption of building fixtures and fittings by at least 20 percent from the calculated baseline and requires all newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling to be WaterSense labeled (USGBC 2018b). Outdoor water use reduction may be achieved by showing that the landscape does not require a permanent irrigation system beyond a maximum 2-year establishment period, or by reducing the project's landscape water requirement by at least 30 percent from the calculated baseline for the site's peak watering month (USGBC 2018c). C&D waste management points may be obtained by diverting at least 50 percent of C&D material and three material streams or by generating less than 2.5 pounds of construction waste per square foot of the building's floor area (USGBC 2018b). CHP, as a state agency, is required at a minimum to meet LEED silver requirement for new facilities.

## **3.18.2 ENVIRONMENTAL SETTING**

### ***Water***

The American Valley Community Services District (AVCSD) (previously the Quincy Community Services District [QCSD] and East Quincy Services District [EQSD]) is the primary provider of water and sanitary sewer services in the Quincy area. Note that the site is in unincorporated Plumas County and is currently not within the AVCSD service area; however, as described in Chapter 2, *Project Description*, CHP is pursuing annexation of the site into East Quincy and AVCSD's service area. The AVCSD obtains water from groundwater wells. The EQSD system, prior to merging operations with QCSD in forming the AVCSD in 2018, included six wells, two water tanks, and three lift stations, which serviced East Quincy (EQSD 2018). Communications with officials in Plumas County have indicated that there is water supply/treatment capacity available to serve the Proposed Project (Dunn 2018).

### ***Sewer***

AVCSD also provides sanitary sewer service to the Project area. Wastewater generated in Quincy is treated at the wastewater treatment plant (WWTP) located off Spanish Creek Road, approximately 2.3 miles from the Project site. According to the 2035 Plumas County General Plan Update EIR (2012), the existing wastewater treatment plant serving Quincy is close to



capacity. The existing wastewater treatment plant currently serves approximately 2,787 dwelling unit equivalents (DUEs) and has a total treatment capacity to serve 3,300 DUEs (Enplan 2016). Of the remaining 513 DUEs, 232 are allotted to projected growth within the East Quincy service area. The Proposed Project is located in this area. To maintain wastewater treatment capacity for future growth and to meet the Central Valley Regional Water Quality Control Board (RWQCB) waste discharge requirements, the construction of a new WWTP has been slated for completion in December 2021 (Enplan 2016). The proposed expanded facility off Spanish Creek Road would not increase the existing treatment capacity (of 3,300 DUEs) but would improve function. This level of capacity is anticipated to be sufficient to accommodate future growth through 2035.

A sewer manhole is present on Lee Road, southeast of the Project site. No water well, sewer or water lines exist within the Project site (SHN Consulting Engineers & Geologists, Inc. 2017). However, the adjacent property on the eastern side has a well, and a water meter was observed across Lee Road near the Project site. According to the Phase I report prepared for the Proposed Project, no surficial evidence of sub-grade septic system or disposal pit for wastewater was observed on the Project site (SHN Consulting Engineers & Geologists, Inc. 2017).

### ***Stormwater***

There is no municipal storm drainage system that serves the immediate Project site. A drainage ditch, originating from Lee Road, parallels the Project site's eastern boundary and flows in a northeasterly direction. This ditch receives runoff from Alta Avenue and Lee Road that is conveyed via the culvert underneath Lee Road. No other pond or pits were observed on the site (SHN Consulting Engineers & Geologists, Inc. 2017).

### ***Solid Waste***

Solid waste collection and disposal service is provided to the Quincy area by Plumas County. The nearest solid waste disposal facility to the Project site is the East Quincy Transfer Station, located at Abernathy Lane in East Quincy, approximately 0.5 mile from the Project site (CalRecycle 2018b). The East Quincy Transfer Station has a maximum permitted throughput of 85 tons/day (CalRecycle 2018b). The nearest active landfill to the Project area is the Chester Sanitary Landfill, though this landfill does not accept municipal solid waste, only inorganic waste, such as bricks, concrete, and other construction demolition materials (Plumas County 2018). The Chester Sanitary Landfill has approximately 388,150 cubic yards (cy) of capacity remaining and an estimated closure date of 2024 (CalRecycle 2018c). At present, the majority of municipal solid waste generated in Plumas County is transported to the Lockwood Regional Landfill in Sparks, Nevada (Plumas County 2013). The estimated remaining capacity at the Lockwood Regional Landfill is approximately 267,730,000 cy (Nevada Division of Environmental Protection 2015).

### ***Electricity and Natural Gas***

Pacific Gas & Electric Company (PG&E) provides natural gas and electricity to the Quincy area. A 12 kilovolt-ampere (kVA) PG&E power line is located along the southern boundary of the Project site, parallel to Lee Road along the northern side. As part of the Proposed Project, the electric power line located along the Project site's southern boundary/Lee Road would be relocated belowground.

## **Communications**

HughesNet provides telephone and internet service to the surrounding area. Internet lines would be installed underground and tied into existing HughesNet lines.

### **3.18.3 DISCUSSION OF CHECKLIST RESPONSES**

As discussed in Chapter 2, *Project Description*, DGS is currently pursuing annexation of the Proposed Project site into East Quincy and the AVCS D's service area. If this annexation is successful, the Proposed Project would connect to the municipal water and sewer system and receive service from AVCS D. If the annexation is not successful, then the Proposed Project would install a well and septic system for obtaining water and treating wastewater. Given that the outcome of the annexation process is unknown at this time, operational effects of the Proposed Project are evaluated below under two scenarios: (1) with services provided by AVCS D and (2) with on-site septic system / well.

#### **a. Exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board—*Less than Significant***

##### **Construction**

Construction of the Proposed Project would not generate any wastewater that would be treated by the wastewater treatment plant; sanitary portable restrooms would be used. Therefore, **no impact** related to exceedance of wastewater treatment requirements of the Central Valley RWQCB would occur from Project construction activities.

##### **Operation**

###### ***With Services Provided by AVCS D***

During operation, employees and visitors at the Proposed Project facilities would generate wastewater from hand washing, toilet flushing, and other domestic activities. Due to the Proposed Project's newer and water-efficient fixtures (the facility would be rated LEED Silver or better), this wastewater generation would likely be comparable or less significant than the existing CHP facility's wastewater generation in spite of the additional employees that would ultimately be accommodated by the Proposed Project. Under this scenario, wastewater generated by the Proposed Project during operation would be routed to AVCS D's wastewater treatment plant. Wastewater generated by operation of the Proposed Project would not contain any toxic or persistent contaminants and would not affect AVCS D's capability to meet the wastewater treatment requirements of the Central Valley RWQCB. Therefore, this impact would be **less than significant**.

###### ***With On-site Septic System***

If the annexation of the Project site to the Town of Quincy is unsuccessful, the previously described septic system would be installed on site. If the 3,750-gallon septic tank and two leach fields are installed on site, the Proposed Project would not contribute to the wastewater being treated by the AVCS D. With the on-site septic system, **no impact** would occur.

**b. Require the construction of new water or wastewater treatment facilities or expansion of existing facilities—*Less than Significant***

**Construction**

Construction of the Proposed Project would not generate any wastewater requiring treatment by the wastewater treatment plant; sanitary portable restrooms would be used. Additionally, construction-related water demands would be relatively limited (e.g., for dust control) and would not require the construction of new or expanded water treatment facilities. Therefore, **no impact** would occur from Project construction activities.

**Operation**

*With Services Provided by AVCSD*

While the Proposed Project would accommodate 13 more employees than the existing CHP area office facility, the Proposed Project's water demand at build-out would be similar or even less than the existing facility as the new facility would be built with modern low-flow fixtures and would have drought-tolerant landscaping (it would be rated LEED Silver or better). Communications with officials in Plumas County have indicated that water supply/treatment capacity is available to serve the Proposed Project (Dunn 2018).

Due to the Proposed Project's modern and efficient fixtures, its wastewater service demand would likely be similar or even less than the existing CHP facility. As described above, if annexation is successful, wastewater generated by the Proposed Project would be routed to the AVCSD's wastewater treatment plant. This plant has enough capacity to serve approximately 150 additional homes, and officials in Plumas County have stated that EQSD/AVCSD would not deny the Proposed Project's application (Dunn 2018). Although capacity is constrained, the Proposed Project would not substantially increase wastewater treatment demand in comparison to the existing CHP area office. As such, the Proposed Project would not require construction of new wastewater treatment facilities. Therefore, this impact would be **less than significant**.

*With On-site Well & Septic System*

If annexation is unsuccessful, the Proposed Project would include an on-site groundwater well, which would provide water supply for the facility. Under this scenario, the Proposed Project would not connect to the municipal system and would not require construction of new or expanded facilities (other than the well itself, whose environmental effects are considered throughout this IS/MND). Similarly, if annexation is unsuccessful, the Proposed Project would include an on-site septic system for management of wastewater. In this situation, the Proposed Project would not connect to AVCSD's system or contribute any additional municipal wastewater service demand. No construction of new or expanded wastewater treatment facilities would occur, other than the septic system itself, whose environmental effects are considered throughout this IS/MND. Overall, **no impact** would occur.

**c. Require the construction of new stormwater drainage facilities or expansion of existing facilities—*Less than Significant***

As described in Section 3.9, “Hydrology and Water Quality,” the Proposed Project would include infrastructure that would capture on-site runoff flows, dissipate erosive energy, and provide on-site water quality treatment. This infrastructure would be stand-alone and would not connect to, or contribute flows to, the municipal stormwater collection/drainage system. The environmental effects of the Proposed Project’s stormwater infrastructure are considered throughout this IS/MND. No additional construction of new or expanded stormwater drainage facilities would occur as a result of the Proposed Project. This impact would be **less than significant**.

**d. Have sufficient water supplies available to serve the project from existing entitlements and resources—*Less than Significant***

**Construction**

Construction activities for the Proposed Project would rely on water trucks to meet water supply needs (e.g., for dust control, equipment cleaning, and fill conditioning). These water demands would be relatively minor and would not substantially affect water availability under any existing entitlements or resources. Therefore, **no impact** would occur.

**Operation**

*With Services Provided by AVCSD*

As a State facility, the Proposed Project would be required to obtain LEED Silver certification and would include water-efficient fittings and fixtures to conserve water. Once in operation, the Proposed Project’s water demand (e.g., employees’ and visitors’ drinking and hand washing, landscape irrigation, etc.) would not be substantially different from the existing CHP area office building’s water demand. If annexation is successful, the Proposed Project would obtain water from the AVCSD’s system. As described above, AVCSD obtains water from groundwater wells. No entitlements are required to pump groundwater and, as the American Valley Groundwater Basin is designated Very Low priority, this basin will not be subject to a groundwater sustainability plan. Impacts on groundwater resources from operational water demands are not expected to be significant (see Section 3.9, “Hydrology and Water Quality” for additional discussion). Overall, the decommissioning of the existing area office would likely result in a reduction of water use due to the water conservation measures in effect at the Proposed Project. Therefore, this impact would be **less than significant**.

*With On-site Well*

If the Proposed Project is not annexed, water would come from the on-site water system (a well, domestic water pump, fire pump, a 280,000-gallon water tank for domestic uses, and a 255,000-gallon water tank for fire flow uses). No entitlements are required to pump groundwater in California and the American Valley Groundwater Basin will not be subject to a groundwater sustainability plan. Impacts on groundwater resources from operational water demands are not expected to be significant (see Section 3.9, “Hydrology and Water Quality” for additional discussion). The use of the on-site system would remove the current area office employees from dependence on the AVCSD water supply and any associated entitlements. Overall, this impact would be **less than significant**.

**e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments—*Less than Significant***

**Construction**

The Proposed Project would not generate municipal wastewater during construction because sanitary portable restrooms would be used. Therefore, **no impact** would occur.

**Operation**

*With Services Provided by AVCSD*

Wastewater generated during operation of the Proposed Project would be transmitted to the AVCSD's wastewater treatment plant. As described above, while treatment capacity is constrained, wastewater treatment demand from the Proposed Project would be similar to the demand generated at the existing CHP area office, which would be decommissioned upon completion of the Proposed Project. Therefore, it is anticipated that the AVCSD's wastewater treatment facility would have sufficient remaining capacity to serve the Proposed Project. This impact would be **less than significant**.

*With On-site Septic System*

The use of an on-site septic system would remove the existing area office employees from dependence on the AVCSD wastewater services, so there would be **no impact**.

**f, g. Comply with all applicable regulations related to solid waste and have available landfill capacity to accommodate the project's solid waste disposal needs—*Less than Significant***

The Proposed Project would generate some construction debris, including from demolition of existing structures on the site. During operation, the Proposed Project would generate typical domestic solid waste (e.g., employees' trash) as well as hazardous wastes (e.g., fuel, oil, other automotive fluids) from automobile servicing, evidence processing, and CHP equipment maintenance activities. Hazardous wastes generated by the Proposed Project would be stored on site temporarily and, on a quarterly basis, transported to a nearby hazardous waste facility for disposal or recycling. The Project would be LEED Silver and would have recycling bins. In accordance with the CIWMA, the Proposed Project would seek to divert at least 50 percent of its solid waste. As described in the Regulatory Setting above, unincorporated Plumas County is currently meeting its target per capita disposal rates pursuant to CIWMA, and the Proposed Project would not adversely affect the County's ability to continue to meet those target rates.

Solid waste generated by the Proposed Project would be taken to the Quincy Transfer Station, Chester Sanitary Landfill, or Lockwood Regional Landfill in Nevada. During operation, the Project is estimated to generate approximately 39 tons of solid waste per year. The Chester Sanitary Landfill and Lockwood Regional Landfill have sufficient remaining capacity to serve the Proposed Project's solid waste disposal needs during construction and operation. In general, the Proposed Project's solid waste disposal needs would be small and would not

1 substantially contribute to landfill capacity issues at either of these landfills. Therefore, this  
2 impact would be **less than significant**.

3 **h. Encourage activities that result in the use of substantial amounts of**  
4 **fuel or energy, or use these resources in a wasteful manner—*Less than***  
5 ***Significant***

6 The Proposed Project would not use substantial amounts of fuel or energy, or use these  
7 resources in a wasteful manner. The facilities would be state-of-the-art and LEED certified,  
8 with energy-efficient fixtures. As described in Section 3.3, "Air Quality," existing laws  
9 prohibits unnecessary idling of construction equipment, and the construction contractor for  
10 the Proposed Project would be required to follow these laws. Overall, the Proposed Project  
11 facilities would be more energy efficient than the existing area office and other older  
12 development in the area, and, in this respect, implementing the Proposed Project would  
13 conserve energy. This impact would be **less than significant**.

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### 1 3.19 MANDATORY FINDINGS OF SIGNIFICANCE

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

#### 2 3.19.1 DISCUSSION OF CHECKLIST RESPONSES

##### 3 a. Effects on environmental quality, fish or wildlife, and historic 4 resources—*Less than Significant with Mitigation*

##### 5 Wildlife Habitat and Populations; Rare and Endangered Species

6 The Project site is covered by grassland and, as described in Section 3.4, “Biological  
7 Resources,” provides only marginal habitat for a limited number of rare plant species.  
8 Furthermore, the Project site lacks native vegetation communities and contains mostly  
9 ruderal vegetation. Potential impacts to special-status plants would be less than significant.

10 The number of special-status wildlife species with a potential to occur on-site is limited to  
11 seven, largely due to the presence of marginally suitable habitat, but the Project site is not  
12 within critical habitat for any wildlife species. Habitat conditions on the Project site provide  
13 only marginal habitat suitable to support American badger and Sierra Nevada red fox. Some  
14 ponderosa pine trees occur near the western border of the Project site; however, they do not  
15 occur in forested or woodland areas, and the site itself does not contain any trees. As a result,  
16 none of the special-status birds in the area are expected to nest on the Project site. Similarly,  
17 there are no existing structures on the Project site that special-status bats and other



communal roosting bat species would find suitable for nesting or roosting. Bats could occur in trees adjacent to the Project site, but the ponderosa pines generally lack the characteristics necessary to support bat roosts. The Project would have no impact on special-status fish, amphibian, and reptile species.

Over the short term, construction would have some potential for significant adverse impacts for sensitive bird and bat species in the Project site through impacts related to construction-related disturbance, as discussed in Section 3.4, "Biological Resources." Implementation of **Mitigation Measure BIO-1** and **Mitigation Measure BIO-2** requires that pre-construction surveys for nesting birds and bats, respectively, be conducted. With implementation of these mitigation measures, impacts on special-status wildlife species would be reduced to a level that is less than significant. Ongoing operational activities associated with the facility would not be anticipated to reduce habitat quality and/or disturb wildlife. Impacts would be **less than significant with mitigation**.

#### **California History and Prehistory**

As discussed in Section 3.5, "Cultural Resources," the archaeological survey identified one archaeological resource, the remains of a pole barn, on the Project site. However, the recent age of the remains precludes the site from being potentially eligible for the NRHP/CRHR. As a result, no archaeological resources, as defined in Section 15064.5 of the CEQA guidelines, have been identified within the Project parcel. Nevertheless, the Project area may contain unknown buried resources that are eligible for the CRHR. Project construction activities would have the potential to result in damage or loss of archaeological resources affecting important documentation of California prehistory. To address this concern, **Mitigation Measure CR-1** would be implemented to reduce impacts on CRHR-eligible archaeological sites accidentally uncovered during construction to a less-than-significant level by immediately halting work if materials are discovered, evaluating the finds for CRHR eligibility, and implementing appropriate mitigation measures, as necessary.

Human remains are not known to exist in the Project site; however, human remains may be buried with no surface manifestation, and excavations associated with construction, particularly trenching, have the potential to uncover such remains if they are present. Implementation of **Mitigation Measure CR-2** would ensure that the Proposed Project would not result in any substantial adverse effects on human remains uncovered during the course of construction by requiring that work be halted immediately if human remains are uncovered and the County Coroner be contacted. Adherence to these procedures and other provisions of the California Health and Safety Code would reduce potential impacts on human remains to a less-than-significant level.

#### **b. Cumulative Impacts—*Less than Significant with Mitigation***

A cumulative impact refers to the combined effect of "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). Cumulative impacts reflect "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines Section 15355[b]).

Lead agencies may use a “list” approach to identify related projects, or may base the identification of cumulative impacts on a summary of projections in an adopted general plan or related planning document (CEQA Guidelines Section 15130[b]), also known as the “projection” approach. This document utilizes a combination of the list and projection approaches. Project contributions to localized cumulative impacts (air quality, biological resources, noise and vibrations) are evaluated using the list approach, while Project contributions to regional cumulative impacts (greenhouse gas emissions and traffic) are evaluated using the projection approach.

The geographic scope defines the area within which a proposed project and related projects may contribute to a specific cumulative impact. The geographic scope of the cumulative impact analysis varies depending upon the specific environmental issue being analyzed. **Table MAND-1** defines the geographic scope used in the impact analysis for the resource areas evaluated in detail below.

**Table MAND-1. Geographic Scope for Resources with Potential Cumulative Impacts**

Resource	Geographic Scope
Air Quality	The Mountain Counties Air Basin
Biological Resources	Migratory nesting sites in the project site and surrounding area
Greenhouse Gas (GHG) Emissions	The geographic scope for GHG emissions is the state of California where GHG policies and regulations have been established. However, the true impact of GHG emissions is global in nature.
Noise and Vibrations	Project site and surrounding areas exposed to noise and vibration generated in the project site.
Traffic and Transportation	Plumas County roadways with traffic generated by the Proposed Project.

The list approach is applied by developing a list of past, present and reasonably foreseeable related projects. Projects considered in this analysis are shown in **Table MAND-2**. The list of projects used for this analysis was developed by identifying projects posted on CEQAnet, an online database of CEQA documents (including pending projects), and the Plumas County website. Projects with the potential to contribute to the same cumulative impacts as the Proposed Project are in close geographic proximity to the project site. Several of these projects may have construction activities occurring at the same time as the Proposed Project. While not every possible cumulative project is listed, the list of cumulative projects is believed to be comprehensive and representative of the types of impacts that would be generated by other projects related to the Proposed Project. The cumulative impact evaluation assumes that the impacts of past and present projects are represented by baseline conditions, and cumulative impacts are considered in the context of baseline conditions alongside reasonably foreseeable future projects.

**Table MAND-2.** List of Reasonably Foreseeable Future Projects that May Cumulatively Affect Resources of Concern for the Proposed Project

Project Title	Brief Description
Spanish Ranch Road Bridge (No. 9C-0039) Replacement Project – Plumas County	<p>The Plumas County Department of Public Works proposes to replace the existing Spanish Ranch Road Bridge (9C0039) over Spanish Creek approximately 5 miles west of the unincorporated community of Quincy in rural Plumas County. The existing bridge is a 50-foot-long single-lane bridge with steel stringers and a laminated timber deck. The proposed new bridge will occupy essentially the same alignment as the existing structure. It will be 114 feet long and 29 feet wide with metal tube bridge railings mounted on curbs. The new bridge approaches will be approximately 125 feet in length and will conform back to the existing roadway.</p> <p><i>Project Issues:</i> Aesthetic/Visual, Agricultural Land, Air Quality, Cultural Resources, Biological Resources, Drainage/Absorption, Flood Plain/Flooding, Noise, Toxic/Hazardous, Traffic/Circulation, Water Quality, Wetland/Riparian, Growth Inducing, Land use, Cumulative Effects</p>
Kedde Bridge Replacement Project (No. 9C-0034) at Spanish Creek – Plumas County	<p>Plumas County is proposing replacement of Kedde Bridge (No. 9C-0034) over Spanish Creek with a new two-lane bridge just downstream of the existing bridge. The existing bridge is functionally obsolete and structurally deficient and poses a safety hazard to vehicle travel. The existing bridge will be removed and replaced with a pedestrian bridge on the existing abutments. The project also includes modification of the approaches on Kedde Resort Road to match the alignment and grade of the new bridge.</p> <p><i>Project Issues:</i> Aesthetic/Visual, Agricultural Land, Air Quality, Cultural Resources, Biological Resources, Drainage/Absorption, Flood Plain/Flooding, Noise, Toxic/Hazardous, Traffic/Circulation, Water Quality, Wetland/Riparian, Growth Inducing, Land use, Cumulative Effects</p>
Snake Lake Road Bridge Replacement Project (No. 9C-0148) at Spanish Creek – Plumas County	<p>Plumas County is proposing to replace Snake Lake Road Bridge over Spanish Creek (Bridge No. 9C-0148). Snake Lake Road Bridge is located in an unincorporated mountainous area of Plumas County, in the Plumas National Forest, approximately 5 miles west of the town of Quincy, California. The project site is located at the intersection of Bucks Lake Road and Snake Lake Road and encompasses approximately 2.16 acres.</p> <p><i>Project Issues:</i> Aesthetic/Visual, Agricultural Land, Air Quality, Cultural Resources, Biological Resources, Drainage/Absorption, Flood Plain/Flooding, Noise, Toxic/Hazardous, Traffic/Circulation, Water Quality, Wetland/Riparian, Growth Inducing, Land use, Cumulative Effects</p>

Project Title	Brief Description
Plumas Charter School Quincy Facility Project - Plumas Charter/Plumas Alternative Learning Services	<p>Based on the Initial Study, the project includes the construction of an approximately 15,000-square-foot school building and associated infrastructure. As the site was covered with uncompacted fill in 1988, construction of the foundation will likely require over-excavation and compaction involving the use of onsite soils. Construction of the building will include typical construction activities. A new water line will tie in to an existing water line located south of the project area on Kelsey Lane. A new effluent line will exit the northwest corner of the school site and travel along Quincy Junction Road to near the main entrance of Quincy Junior-Senior High School where it will tie into the existing gravity system. New encroachments onto Quincy Junction Road will be required in order to facilitate student drop-off and pick-up.</p> <p>Approximately 200 students and 15 staff are anticipated to be present on site throughout the week. Center schedule will include opportunities for 140 students to be present 4 days per week and 60 students 3 days per week.</p> <p>As part of the educational facilities, a school garden will be developed to provide garden-based education for students in grades K-12 as well as fresh fruits and vegetables to students.</p> <p><i>Project Issues:</i> Biological Resources, Cultural Resources</p>
Beckwourth-Genesee Road Project – Federal Highway Administration	<p>Plumas County, in combination with the Federal Highway Administration and U.S. Department of Agriculture, Forest Service (Plumas National Forest), is proposing to improve and realign the southern 9.6 miles of Forest Highway 177 (Beckwourth-Genesee Road) from SR 70 in Beckwourth to County Road 111 in Clover Valley. The existing roadway is a combination of paved and unpaved surfaces. The project would widen, realign, and resurface the road to improve the operational and design deficiencies of the roadway to be consistent with current design standards. The main realignment would shift the road outside the Ceresola Ranch.</p> <p><i>Project Issues:</i> Air Quality, Cultural Resources, Biological Resources, Drainage/Absorption, Flood Plain/Flooding, Noise, Toxic/Hazardous, Traffic/Circulation, Water Quality, Wetland/Riparian, Growth Inducing, Land use, Cumulative Effects</p>
Permit to Mine/Reclamation Plan-Seneca Gold, LLC	<p>Surface placer gold mining of Quaternary river and bench gravels with the boundaries of three patented mining claims (Mineral Patent CA 30606) and concurrent reclamation activities. The project site is located near Canyon Dam. An IS/MND was prepared and the Permit to Mine and Reclamation Plan, plus Special Use Permit, to allow operation of a surface placer gold mine was issued in October 2014 and a notice of determination was filed and received on October 15, 2014.</p> <p><i>Project Issues:</i> Biological Resources, Geologic/Seismic, Minerals, Soil Erosion/Compaction/Grading, Vegetation, Water Quality, Wetland/Riparian</p>

Project Title	Brief Description
Spanish Creek in Meadow Valley Stream Rehabilitation Project – Plumas County	<p>The Plumas Corporation is jointly developing a stream rehabilitation and gravel management plan for Spanish Creek in Meadow Valley with the Soper-Wheeler Co. and the several landowners along Spanish Creek. Using natural stream technology, approximately 72 acres along 2.6 miles of channel length from Greens Flat upstream to Ranch Road Bridge at Spanish Ranch would be treated to capture and remove excess gravel at three designated sites and to stabilize four rapidly eroding gully banks. Including would be the realignment of 3,800 feet of stream channel to move them away from the eroding banks. These banks would be sloped back and stabilized. The IS/MND was prepared in 2012 and the notice of determination was filed in 2013.</p> <p><i>Project Issues:</i> Aesthetic/Visual, Agricultural Land, Air Quality, Archaeologic-Historic, Biological Resources, Drainage/Absorption, Flood Plain/Flooding, Forest Land/Fire Hazard, Geologic/Seismic, Minerals, Noise, Population/Housing Balance, Public Services, Recreation/Parks, Schools/Universities, Septic System, Sewer Capacity, Soil Erosion/Compaction/Grading, Solid Waste, Toxic/Hazardous, Traffic/Circulation, Vegetation, Water Quality, Water Supply, Wetland/Riparian, Growth Inducing, Land use, Cumulative Effects, Other Issues (GHG)</p>
Tentative Parcel Map-Sierra Group L.P. (TPM 1-10/11-02) – Plumas County	<p>Tentative Parcel Map to divide 80 acres into four parcels of 7 acres each plus a remainder for single-family residential use. The project is located in Beckwourth. An IS/MND was prepared in 2014.</p> <p><i>Project Issues:</i> Archaeologic-Historic, Biological Resources, Forest Land/Fire Hazard</p>
Upper North Fork Feather River Hydroelectric Project Water Quality Certification – State Water Resources Control Board	<p>The Upper North Fork Feather River Hydroelectric Project (UNFFR Project) involves the issuance of a water quality certification as part of the Federal Energy Regulatory Commission (FERC) relicensing of PG&amp;E Company's existing UNFFR Project located on the North Fork Feather River in Plumas County, California. The purpose of the certification is to ensure the UNFFR Project complies with the water quality standards of the North Fork Feather River and its tributaries, as identified in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan). The water quality standards are comprised of the beneficial uses and water quality objectives identified in the Basin Plan, as well as state and federal anti-degradation requirements. The Draft EIR was undergoing public review through March 2015.</p> <p><i>Project Issues:</i> Aesthetic/Visual, Air Quality, Archaeologic-Historic, Biological Resources, Drainage/Absorption, Forest Land/Fire Hazard, Geologic/Seismic, Minerals, Noise, Population/Housing Balance, Public Services, Recreation/Parks, Soil Erosion/Compaction/Grading, Toxic/Hazardous, Traffic/Circulation, Vegetation, Water Quality, Water Supply, Wetland/Riparian, Growth Inducing, Land Use, Cumulative Effects</p>

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Regional impacts as a result of growth projections were recently evaluated for the 2035 Plumas County General Plan Update (Plumas County 2013). The EIR prepared for the general

plan update (Plumas County 2012) identified the following cumulative significant and unavoidable impacts of projected growth in Plumas County and the surrounding region:

- substantial degradation to existing visual character or quality;
- new sources of substantial light or glare adversely affecting day or nighttime views;
- substantial increase in vehicular traffic on State Route 36 near Chester;
- increase of criteria air pollutants that violate air quality standards;
- conflicts with applicable Air Quality Management Plans and Standards;
- substantial increases in traffic noise;
- depletion of groundwater supplies or interference with groundwater recharge;
- development of areas located within an existing dam failure inundation zone;
- increased exposure to wildland fires;
- conversion of Important Farmland or Forest Land to non-agricultural use;
- cumulative biological resources impacts;
- cumulative historic resources impacts;
- significant and irreversible use of nonrenewable and slowly renewable natural resources during construction efforts; and
- significant and irreversible use of fossil fuel energy resources for automobiles and utility services.

These projected cumulative impacts were considered for the evaluation of the Proposed Project.

Detailed analysis of a project's contribution to cumulative impacts is required when (1) a cumulative impact to which a project may contribute is expected to be significant, and (2) the project's contribution to the cumulative impact is expected to be cumulatively considerable, or significant in the context of the overall (cumulative) level of effect. **Table MAND-3** summarizes cumulatively significant impacts and identifies the Proposed Project's contribution. Additional analysis follows for those impacts to which the Proposed Project would contribute.

**Table MAND-3.** Summary of Cumulative Significant Impacts and Proposed Project's Contribution

Resource Topic	Cumulatively Significant Impacts	Proposed Project's Contribution
Aesthetics	Incremental visual impacts due to degraded visual character or quality, or new light or glare sources in the county is considered cumulatively significant.	None of the projects listed in Table MAND-2 are located in the immediate vicinity of the Proposed Project. Given that the Project site is of low quality and is surrounded by industrial uses, the Proposed Project's contribution to degradation of visual character or quality in the region, would not be considerable.
Agricultural Resources	Proposed Project would have no impacts related to agricultural resources.	No analysis required.
Air Quality	Plumas County in the Quincy area is designated as a federal and state attainment or unclassified area for all criteria air pollutants, except for PM <sub>10</sub> for which it is in nonattainment for the state standard.	Construction of the Proposed Project would not increase emissions above significance thresholds for project-level and cumulative impacts established by NSAQMD. These significance thresholds were developed considering the other sources of air pollutants and growth of emissions in the air basin. A project below this significance threshold is unlikely to substantially contribute to a cumulative air quality impact. The primary sources of PM <sub>10</sub> in Plumas County are wildfires and road dust. The Proposed Project would not make a cumulatively considerable contribution to these sources of PM <sub>10</sub> . Thus, the Proposed Project's contribution to cumulative impacts related to air quality would not be considerable.
Biological Resources	Plumas County and larger Feather River Watershed area supports a variety of aquatic habitats including, small alpine streams, natural ponds, lakes, reservoirs, and rivers that provide habitat for a variety of regionally significant fish species. While the Plumas County General Plan contains policies regarding preservation of important biological resources, ongoing development could lead to the cumulative loss of special-status species and habitats. This impact would be considered cumulatively significant.	Construction activities have the potential to affect special-status species and may result in temporary impacts to Sierra Nevada red fox habitats nearby. <i>Further analysis provided below.</i>

Resource Topic	Cumulatively Significant Impacts	Proposed Project's Contribution
Cultural Resources	Throughout California, the Native American cultural legacy, including culturally important sites and traditional cultural practices, has been substantially affected by land management practices and urbanization over the past 150 years. While the Plumas County General Plan contains policies regarding preservation of important cultural resources, ongoing development could lead to the cumulative loss of significant historic, archeological, and paleontological resources. This impact would be considered cumulatively significant.	As in any area with a long history of human use, the project site may contain unknown buried resources. Project construction thus has the potential to result in significant impacts on cultural resources, which could rise to a cumulatively considerable level. However, the State would implement mitigation measures that include a "stop work" order followed by appropriate treatment if cultural resources are discovered during the project's activities. The State would also comply with all applicable codes relative to treatment of human remains, if any are uncovered. With these measures in place, impacts on cultural resources are expected to be less than significant at the project level, and the Proposed Project would not make a considerable contribution to long-term regional loss of cultural resources. No further analysis is required.
Geology, Soils, and Seismicity	None identified.	No analysis required.
Greenhouse Gas (GHG) Emissions	Anthropogenic emissions of GHGs are widely accepted in the scientific community as contributing to global warming. This impact is considered cumulatively significant.	Vehicle and equipment use would result in emissions of GHGs. However, because such emissions would be below a bright line threshold, the Proposed Project would not make a considerable contribution to cumulative impacts related to GHG emissions. <i>Further discussion is provided below.</i>
Hazards and Hazardous Materials	New development projects may have increased exposure to wildland fires. This would be a cumulatively significant impact.	The Proposed Project would adhere to safety standards to prevent against fire hazards during construction. The Project would be designed and operated in compliance with federal and state health and safety standards. Further, the Proposed Project would replace existing facilities and operations and would considerably increase fire hazards. The Project would not make a considerable contribution to the existing cumulative impact related to wildlife fire hazards. No analysis required.



Resource Topic	Cumulatively Significant Impacts	Proposed Project's Contribution
Hydrology and Water Quality	<p>Spanish Creek is not listed on the Clean Water Act Section 303(d) impaired waters list. However, the North Fork of the Feather River below Lake Almanor is listed for unknown toxicity, polychlorinated biphenyls (PCBs), and high water temperature. Water quality beneficial uses in the Feather River watershed are influenced by local land uses (such as, sediment discharges and pesticide use) and treated sewage discharges. PCBs are a legacy contaminant and have been banned in the U.S. since the 1970s. Any contribution to water quality impairments in the Feather River watershed would be considered cumulatively significant.</p> <p>Increased use of groundwater supplies or interference with groundwater recharge would be considered cumulatively significant.</p>	<p>During construction, the Proposed Project would incorporate measures to prevent sediment eroding from disturbed areas from reaching surface waters. The Proposed Project would utilize local groundwater supplies and would contribute to sewage discharges, but not substantially more than under existing conditions. Overall, the Proposed Project would not make a considerable contribution to the existing cumulative impact related to chemical contamination or water temperature impairments in the North Fork Feather River watershed, and no further analysis of cumulative water quality issues is required.</p> <p>Because the Proposed Project's demand for groundwater supplies would not be substantially more than the existing CHP Quincy area office facility's demand, the Proposed Project's contribution to cumulative groundwater supply effects would not be considerable. No further analysis is required.</p>
Land Use and Planning	None identified.	No analysis required.
Mineral Resources	None identified.	No analysis required.
Noise	Reasonably foreseeable construction projects could combine in the same place and time and create a significant cumulative noise impact on sensitive receptors.	There are sensitive receptors that would be in close proximity to the Proposed Project. However, there are no other reasonably foreseeable construction projects in the immediate project vicinity that could affect the same sensitive receptors. Therefore, the Proposed Project would not have the potential to contribute to a cumulatively significant noise impact, and no further analysis is required.
Population and Housing	None identified. According to the Plumas County General Plan and U.S. Census, the local population has decreased.	No analysis required.
Public Services	None identified.	No analysis required. The Proposed Project would benefit public services in the area.
Recreation	None identified.	No analysis required.

Resource Topic	Cumulatively Significant Impacts	Proposed Project's Contribution
Tribal Cultural Resources	None identified.	No analysis required.
Transportation and Traffic	Future increased growth in traffic volumes in the County could affect load and capacity of the street system. However, no information has been found during preparation of this IS/MND to suggest that this impact would be cumulatively significant.	No analysis required.
Utilities and Service Systems	None identified.	No analysis required.

The following sections provide a detailed analysis of the Proposed Project's contribution to existing significant cumulative impacts. As identified in Table MAND-3, the following resource issues are discussed: biological resources and global climate change.

### ***Biological Resources: Impacts to Special-status Species—Less than Significant with Mitigation***

As described in Section 3.4, "Biological Resources," the ponderosa pines located outside of the Project site, but bordering the fence-line on the western side of the Project site, the elderberry shrub located near the ponderosa pines, the apple tree near the eastern fence line, and the ornamental shrub near the southeast corner of the site may provide suitable nesting habitats for migratory birds. Tree removal and noise associated with construction activities have the potential to adversely affect migratory birds that may use the trees and shrubs on-site to the point that it results in nest abandonment and/or failure. Active nests of most native birds are protected under the Migratory Bird Treaty Act (MBTA), and raptors are protected under California Fish and Game Code (CFGF) Section 3503.3. **Mitigation Measure BIO-1** requires a pre-construction survey on the project site no less than 14 days before construction activities and, if active nests are identified, appropriate buffers would be established in consultation with USFWS and/or CDFW. No project activity would commence within the buffer area until a qualified biologist confirms that the identified nest is no longer active. Implementation of this mitigation measure would ensure that the Proposed Project will reduce impacts on migratory and special-status birds to a less-than-significant level.

Although there are no existing structures on the Project site that special-status bats (Townsend's big-eared bat and pallid bat) and other communal roosting bat species would find suitable for nesting or roosting, these bats could roost in trees near the property boundaries, upon which construction activities and/or removal of trees could impact a roost and/or the species if present. Implementation of **Mitigation Measure BIO-2** would reduce this impact to less-than-significant by requiring pre-construction surveys for special-status bat species by bat biologists within 50 feet of the Project site. CDFW would be consulted with to determine appropriate buffer and exclusion zones if roosting cavities are found.

With implementation of Mitigation Measures BIO-1 and BIO-2, the Proposed Project would not considerably contribute to existing cumulative impacts on special-status bird or bat populations, and impacts would be **less than significant with mitigation**.

### ***Greenhouse Gas Emissions: Emissions of GHGs—Less than Significant***

GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. Climate change may contribute to an increase in the number of days of extreme heat, higher concentrations of air pollutants, sea level rise, and impacts to water supply and water quality, public health, ecosystems, agriculture, and other environmental areas. No single project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to the phenomenon of global climate change and its associated environmental impacts.

The Proposed Project would result in the combustion of fossil fuels for operation of fossil-fueled construction equipment, material hauling, and worker trips. These fuels would result in construction-related air pollutant GHG emissions and thus may have some potential to contribute to climate change. In addition, operational criteria GHG emissions would be generated by fossil-fueled equipment and motor vehicles, building energy use, and an on-site refueling pump. As described in Section 3.7, "Greenhouse Gas Emissions," project-related emissions would be below the established screening level threshold of 1,100 MTCO<sub>2</sub>e and would not be anticipated to result in a significant impact to global climate change or impede the goals of Assembly Bill 32 and Senate Bill 32. Because GHG emissions are by nature a cumulative problem, the mass emissions threshold for GHG emissions also serves as the cumulative emissions threshold. Because the project would result in GHG emissions at a level that is less than the threshold, the contribution of the Proposed Project toward a cumulatively significant impact would be **less than significant**.

### ***c. Effects on Human Beings—Less than Significant with Mitigation***

As discussed under the applicable resource areas in Chapter 3 of this IS/MND, the Proposed Project would not result in a significant and unavoidable impact on human beings, either directly or indirectly. Compliance with existing regulations related to hazards and hazardous materials would prevent creation of substantial hazards to workers, the public, or the environment from use of hazardous materials during Project construction or operation. Additionally, implementation of **Mitigation Measures AQ-1 through AQ-3** would prevent or minimize substantial air emissions during Project construction. **Mitigation Measure TRA-1** would minimize potential hazards associated with construction traffic. The Project also would not be constructed on an existing hazardous materials contamination site or in an area subject to probable flooding. Following construction, operations at the new CHP facility would provide improved facilities for law enforcement and emergency response; therefore, the Project would protect against possible adverse effects on human beings. As a result, this effect would be **less than significant with mitigation**.

## **Chapter 1, Introduction**

None.

## **Chapter 2, Project Description**

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## Chapter 5

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5

Appendix A.

## **Local Laws, Regulations, and Policies**



## Appendix A

## LOCAL LAWS, REGULATIONS, AND POLICIES

Development activities on state-owned land are exempt from local laws, regulations, and policies. However, such laws, regulations and policies may apply to development activities not located on the Project site (e.g., connections to infrastructure within the public right-of-way).

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**Law, Regulation,  
or Policy**
**Overview****AESTHETICS****2035 Plumas County  
General Plan Update**

The Conservation and Open Space Element of the 2035 Plumas County General Plan Update (2013) provides goals and policies relevant to maintaining aesthetic qualities of the region. The following policies from the General Plan may be relevant to the Proposed Project:

**Goal 7.6. Scenic Resources.** To preserve the visual aspects of the environment which are of particular importance to the maintenance of the rural and natural character of the County. These include, but are not limited to, views of meadowlands and waterways from highways and populated areas.

**AGRICULTURE AND FORESTRY RESOURCES****2035 Plumas County  
General Plan Update**

The 2035 Plumas County General Plan Update (2013) existing general plan contains several goals and policies related to agricultural and forestry resources. The following policies in the County's general plan are relevant to the Proposed Project:

**Goal 8.1. Protect Agriculture as a Productive Use of Resource Land.**

Protect and support agriculture as a productive use of resource lands, for the continuation of a diversified economy, for the maintenance of the County's rural character, for the protection of scenic, natural, and recreational resources, and as a defining characteristic of the County's quality of life.

**Policy 8.1.2 Maintain Land in Agricultural Use.** Support private and public owners of lands that have traditionally been used for agriculture to keep land in agricultural production by continuing existing agricultural use, developing compatible uses, and/or leasing lands to agricultural users.

**Goal 8.2. Prevent Conversion to Non-Agricultural Uses.** The County will strive to protect Agricultural lands, strongly discourage

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or Policy****Overview**

conversion to non-agricultural uses, and prohibit uses that are incompatible with long-term agricultural production.

**Policy 8.2.1. Maintain Agricultural Production.** Maintain agricultural production as the primary use on agricultural lands by limiting non-agricultural use development to that which is compatible with agriculture.

**Policy 8.2.2. Agricultural Preserve and Agriculture and Grazing Areas.** Maintain parcel sizes outside of the planning area boundaries large enough to sustain viable agriculture and avoid conversion to non-agricultural uses.

**Policy 8.2.7. Limit Extension of Services and Infrastructure.** Protect agriculture lands from non-compatible encroachment by limiting the extension of services facilities and infrastructure.

**AIR QUALITY****Northern Sierra Air  
Quality Management  
District Regulations**

The Northern Sierra Air Quality Management District (NSAQMD) has implemented several regulations to control air emissions. These include requiring permits for sources of air emissions, limitations and prohibitions on air emissions such as fugitive dust, and incorporation of the state's airborne toxic control measures (ATCMs). These regulations would apply to the Proposed Project during construction and operation, in particular to the gasoline refueling station and emergency generator located on-site. The area is designated as non-attainment of the state standard for particulate matter of aerodynamic radius of 10 micrometers or less (PM<sub>10</sub>).

NSAQMD has Thresholds of Significance that they recommend for use by Lead Agencies. NSAQMD has developed a tiered approach to significance levels: a project with emissions meeting Level A thresholds will require the most basic mitigations; projects with projected emissions in the Level B range will require more extensive mitigations; and those projects which exceed Level C thresholds will require the most extensive mitigations. Emissions that exceed Level B or C after mitigation would result in a significant air quality impact. NSAQMD does not have thresholds for TACs. The NSAQMD's thresholds of significance are provided below.

**Law, Regulation,  
or Policy****Overview****NSAQMD Thresholds of Significance**

Threshold Tier	NOx	ROG	PM10
Level A	<24 lb/day	<24 lb/day	<79 lb/day
Level B	24-136 lb/day	24-136 lb/day	79-136 lb/day
Level C	>136 lb/day	>136 lb/day	>136 lb/day

Source: NSAQMD 2009

**Northern Sierra Air  
Quality Management  
District Rules**

The NSAQMD manages air quality in the basin for attainment and permitting purposes and has implemented several regulations to control air emissions. These regulations would apply to the Proposed Project during construction and operation, in particular to the gasoline refueling station and emergency generator located on-site.

The NSAQMD has also established the following rules and regulations that may pertain to the Proposed Project (NSAQMD 2018):

**Regulation 2, Rule 202: Visible Emissions.** Restricts visible emissions from any single source.

**Regulation 2, Rule 205: Nuisance.** Prohibits any emissions that would cause injury, detriment, nuisance or annoyance.

**Regulation 2, Rule 214: Phase I Vapor Recovery Requirements.** Limits emissions of organic compounds from delivery vehicles to storage tanks.

**Regulation 2, Rule 215: Phase II Vapor Recovery System Requirements.** Applies to the dispensing of gasoline from any stationary storage tank to motor vehicles.

**Regulation 2, Rule 226: Dust Control.** Requires measures to reduce and control fugitive dust.

**Regulation 2, Rule 227: Cutback and Emulsified Asphalt Paving Materials.** Places limits on the emissions of volatile organic compounds caused by the use of emulsified and cutback asphalt in paving materials and paving and maintenance operations.

**Regulation 4, Rules 401 through 427: Authority to Construct.** Provides requirements related to obtaining and complying with an Authority to Construct permit for any person building, altering, or replacing any source of air contaminants.

**Regulation 5, Rules 501 through 527: Permit to Operate.** Rules under this regulation identify the requirements of obtaining a permit to operate



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	prior to operating an emissions source, and the specific compliance conditions of that permit.
<b>2035 Plumas County General Plan Update</b>	<p>The 2035 Plumas County General Plan Update (2013) existing general plan contains goals and policies related to air quality. The following General Plan goals and policies are applicable to the Proposed Project.</p> <p><b>Goal 7.9. Air Quality.</b> To maintain good air quality in Plumas County.</p> <p><b>Policy 7.9.2. Air Quality and Sensitive Receptors.</b> The County shall ensure that new facilities in which sensitive receptors are located, such as schools, child care centers, playgrounds, retirement homes, and hospitals, are sited away from significant sources of air pollution and no new sources are sited near sensitive receptors.</p> <p><b>Policy 7.9.3. Dust Suppression Measures.</b> The County shall require developers to implement dust suppression measures during excavation, grading, and site preparation activities as required by the NSAQMD.</p> <p><b>Policy 7.9.4. Vehicle Trip Reduction Measures.</b> The County shall encourage new developments that reduce the length and frequency of vehicle trips through land use and transportation decisions that encourage mix-use developments and compact development patterns in areas served by public transit and alternative modes of travel.</p> <p><b>Policy 7.9.5. Street Designs.</b> The County shall promote street design that provides an environment which encourages transit use, biking, and pedestrian movements within planning areas.</p>

## BIOLOGICAL RESOURCES

<b>2035 Plumas County General Plan Update</b>	<p>The 2035 Plumas County General Plan Update (2013) takes a comprehensive approach to the protection of biological resources, including habitats and special-status species, through the implementation of goals and policies intended to conserve open space, preserve natural resources and maintain good water quality. The following policies from the Conservation and Open Space and Water Resources elements are relevant to biological resources and the Proposed Project:</p> <p><b>Goal COS-7.2. Biological Resources.</b> Conserve and protect the County's biological resources.</p>
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or Policy****Overview**

**Policy 7.2.1. Habitat Protection.** The County shall protect areas that have significant habitat and wetland values, including riparian corridors, wetlands, grasslands, and creeks and rivers, from incompatible rural development. The County shall also support their protection as a method to provide carbon sequestration for GHG emissions under applicable State programs.

**Policy 7.2.2. Species and Habitat Avoidance.** The County shall require new development projects to avoid or minimize adverse impacts to threatened, rare, or endangered species and critical, sensitive habitat, as defined by appropriate local, state, and federal agencies, through proper project location and design. In the event that avoidance is not feasible, the County shall require a "no-net-loss" of these sensitive natural plant or habitat communities. Wildlife habitat will be preserved and managed in a manner that will not lead to the listing of additional species as threatened and endangered or negatively impact listed threatened or endangered species.

**Policy 7.2.9. Wildlife Fencing.** The County shall discourage the use of fencing in rural areas that is exclusionary or dangerous to wildlife, except when necessary for property protection, human safety, crop protection, or domestic animal containment through its discretionary project review and implementation process.

**Policy 7.2.13. Biological Resource Maps.** The County shall maintain and consult biological resource maps during the discretionary permit review process in order to identify habitat concerns and guide mitigations that will reduce biological resource impacts.

**Policy 7.2.14. Natural Landscapes in Site Design.** The County shall encourage the integration of natural landscapes, such as rivers, streams, lakes, ponds, wetlands, and riparian areas, into new development in such a way as to enhance the aesthetic and natural character of individual sites while avoiding the destruction, disturbance, and fragmentation of these natural landscapes.

**Policy 7.2.15. Use of Native Plant Species for Landscaping.** The County shall encourage the use of native plant species in landscaping plans and projects, where feasible.

**Goal W-9.2. Water Quality.** To protect, restore and enhance the quality of surface and groundwater resources to meet the needs of all reasonable beneficial uses.

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or Policy****Overview**

**Policy 9.2.6. Erosion and Sediment Control Measures.** The County shall ensure that Best Management Practices to control erosion and sediment will be incorporated into development design and improvements.

**CULTURAL RESOURCES****2035 Plumas County  
General Plan Update**

The Plumas County 2035 General Plan contains a goal and 10 policies related to cultural and historical resources. Most of the policies are statements of support and encouragement for the identification, recordation, and preservation of cultural and historic resources by public and private parties during the project planning stage. The County's goal and one policy are particularly pertinent to the Proposed Project:

**Goal COS 7.5. Cultural and Historical Resources.** To protect and preserve historic and prehistoric sites, structures, features, objects, and properties important in Native American history for their aesthetic, historical, scientific, educational, and cultural values.

**Policy 7.5.5. Assessment of Impacts to Cultural and Historical Resources.** The County shall encourage cultural resource preservation and ensure that new development does not adversely impact important resources. Discretionary projects involving ground disturbance shall have evaluations to determine cultural and historical significance. The County shall ensure that individuals conducting inventory and evaluation of cultural and historical resources consult with the Northeast Information Center in advance of any such assessments or studies and that those individuals undertaking such activities meet minimum standards. Any archaeological or paleontological resources discovered on a development project site shall either be preserved in their sites or adequately documented as a condition of removal. When a development project has sufficient flexibility, avoidance and preservation of the resource shall be the primary mitigation measure.

**GEOLOGY, SOILS, AND SEISMICITY****2035 Plumas County  
General Plan Update**

The 2035 Plumas County General Plan (2013) has goals and policies related to geology, soils, and seismicity. The following policies from the General Plan are relevant to the Proposed Project:

**Policy PHS 6.2.2. Design Measures.** The County shall require earthquake resistant designs consistent with the requirements of the CBC for all critical structures, such as fire stations, emergency

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	<p>communication centers, private schools, high occupancy buildings, and non-highway bridges.</p> <p><b>Policy PHS 6.2.4. Development of Slopes.</b> The County shall not allow development on slopes 30 percent or greater, unless the applicant can sufficiently mitigate the inherent problems associated with developing on steep slopes.</p> <p><b>Policy COS 7.3.2. Soil Erosion and Vegetation Protection.</b> For Development projects that require earthwork and grading, including cut and fill for roads, the County shall require the developer to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation whenever feasible.</p> <p><b>Policy COS 7.3.4. Erosion Control Plan.</b> The County shall require that a runoff evaluation and erosion control plan be prepared by an engineer for erosion potential areas. The runoff evaluation and control plan shall provide mitigation which preclude hazards to public health, safety and general welfare and ensure maintenance of water quality and fish and wildlife habitat.</p>

## GREENHOUSE GAS EMISSIONS

<b>Northern Sierra Air Quality Management District</b>	The NSAQMD has not identified California Environmental Quality Act (CEQA) thresholds of significance for greenhouse gas (GHG) emissions at this time, but the district encourages project applicants to consider various programs and policies regarding GHG emissions and climate change issues, including GHG emission quantification and mitigation strategies.
<b>2035 Plumas County General Plan Update</b>	<p>The 2035 Plumas County General Plan contains policies related to greenhouse gas emissions, including developing a climate change strategy. The following goal and policies are relevant to the Proposed Project:</p> <p><b>Goal 7.10. Climate Change.</b> To address climate change and manage its effects by pursuing programs and strategies in order to meet or exceed state requirements for reductions in GHG emissions.</p> <p><b>Policy COS 7.10.1. Inventory and Monitor GHG Emissions.</b> The County shall inventory and monitor GHG emissions in County operations and in the community consistent with Northern Sierra Air Quality Management District and/or State guidelines.</p>

**Law, Regulation,  
or Policy****Overview****HAZARDS AND HAZARDOUS MATERIALS****2035 Plumas County  
General Plan Update**

The Public Health and Safety element of the Plumas County General Plan identifies potential hazards throughout the County and provides goals to minimize and, if needed, respond to such hazards. Key hazards that are identified include geologic, wildfire, flood, airports, waste, and noise. The goal of the General Plan is to provide guidelines for development such that it is done in a manner that achieves reasonable safety from natural and man-made hazards, and that natural resources are protected. General plan policies that are relevant to hazards and hazardous materials and the Proposed Project include the following:

**Goal 6.3. Wildland Fire Hazards and Fire Protection.** To minimize the possibility of the loss of life, injury, damage to property, and loss of habitat and natural resources as a result of fire.

**Policy PHS 6.3.2. Limitations in Fire Hazard Areas.** The County shall consult the current Fire Hazard Severity Zone Maps during the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated with a high or very high fire hazard rating. Intensive development in areas with high or very high fire hazard rating shall be discouraged.

**Policy PHS 6.3.4. New Development Requirements.** As a requirement for approving new development, the County must find (based on information provided by the applicant and the responsible fire protection district), that concurrent with development, adequate emergency water flow, fire access and fire-fighting personnel and equipment, will be available in accordance with applicable State, County, and local fire district standards.

**Goal 6.5. Hazardous Wastes.** To protect the community from hazardous materials through safe and efficient use, storage, transport and disposal.

**Policy PHS 6.5.1. Hazardous Materials.** The County Environmental Health Division, as the Certified Unified Program Agency (CUPA), shall strive to ensure hazardous materials are used, stored, transported and disposed of in a safe manner in compliance with local, State and Federal safety standards.

**Policy PHS 6.5.4. Contamination Prevention.** The County shall require new developments to protect soils, air quality, surface

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water and groundwater from hazardous material contamination associated with site development and construction activities.

**Policy PHS 6.5.8. Hazardous Materials and Waste Management.** The County shall ensure the safe and effective management of hazardous materials and hazardous wastes generated within the county. Primary management strategies include waste minimization, waste reduction and recycling. Should applications for the treatment, processing or disposal of hazardous wastes or materials be received, such facilities shall be located in a manner consistent with state law as well as criteria established in the state-approved Plumas County Hazardous Waste Management Plan approved by the County.

**Goal 6.6. Airport Safety**

**Policy PHS 6.6.1. Consistency with the Airport Land Use Compatibility Plan.** The County shall review all development proposals near county airports to ensure consistency with the current ALUCP's height, noise and safety policies and land use criteria set forth in the Plumas County ALUC's statement of Policies, Rules and Regulations, and each ALUCP. When required, development proposals shall be referred to the ALUC for review and recommendations.

**Policy PHS 6.6.2. Compliance with Federal Aviation Administration (FAA) Regulations.** The County shall ensure that development within the airport approach and departure zones is in compliance with Part 77 of the FAA Regulations.

**Goal 6.7. Emergency Operations Management and Planning:** To provide effective emergency response to natural or human-made hazards and disasters.

**Plumas County  
Hazardous Materials  
Program**

The Plumas County Environmental Health Department (PCEHD) manages and regulates the storage, use, and disposal of hazardous wastes through the Hazardous Materials Program. Hazardous materials in use by businesses are reported to the PCEHD under the Hazardous Materials and Business Plan Program. The PCEHD also oversees measures for hazardous waste onsite treatment, spill prevention control and countermeasures for aboveground and underground storage tanks, site mitigation, and risk management and prevention. PCEHD is the CUPA for Plumas County and maintains state certification through the California Environmental Protection Agency.

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<b>Plumas County Hazards Mitigation Plan</b>	The Plumas County Hazards Mitigation contains 11 goals, each with several related objectives that collectively serve to reduce the risk of potential hazards as well as the impacts on the community in the event that a hazard occurred. In order to achieve the goals and objectives of the HMP, the County developed an Action Table that identifies key activities and responsible parties that would work toward achieving specific goals. Several of the actions relate specifically to community education and engagement, as well as response preparation in the event of a flood or fire event. The action of adopting and enforcing relevant state codes and ordinances that address potential hazards and hazardous materials is relevant to the Proposed Project (Plumas County 2006).
<b>Plumas County Airport Land Use Compatibility Plan for Gansner Airport at Quincy</b>	There are three airports within Plumas County: Beckwourth Nervino Airport, Chester-Rogers Field, and Quincy-Gansner Airport. The Gansner Airport is located approximately 0.25 mile west of the Proposed Project site. The Plumas County Airport Land Use Compatibility Plan for Quincy, Chest, Beckwourth was approved on December 17, 2008 by the Plumas County Airport Land Use Commission. Appendix B of the plan identifies the Proposed Project site as falling within compatibility zone 6 of Quincy Airport Influence Area (Plumas County 2008). As a result of being within the Airport Influence Area, the Proposed Project is subject to regulations under FAR Part 77, as well as to review by the Plumas County Airport Land Use Commission.

## HYDROLOGY AND WATER QUALITY

<b>2035 Plumas County General Plan Update</b>	<p>The 2035 Plumas County General Plan contains the following policies related to stormwater, water resources and water quality and flooding that are relevant to the Proposed Project:</p> <p><b>Policy PHS 6.4.2. Development in Floodways and Dam Inundation Areas.</b> Prohibit the development of new critical or high-occupancy structures within the floodway of any river, stream or other body of water, nor be located within the inundation areas resulting from failure of dams identified by the State Department of Water Resources (DWR) Division of Safety of Dams (DSOD).</p> <p><b>Policy PHS 6.4.4. Floodplain Development Restrictions.</b> Ensure that riparian areas and drainage areas within floodplains are free from development that may adversely affect floodway capacity or characteristic of natural/riparian areas or natural groundwater recharge areas.</p> <p><b>Policy PHS 6.4.7. Limit Surface Runoff.</b> Review development projects to determine that such development can be permitted without alteration of off-site historical flood patterns or</p>
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contribution to flooding hazards for downstream users. Each project with the potential to create off-site drainage shall be required to submit a plan showing how the impacts of such drainage will be addressed, both on-site and off-site.

**Policy PHS 6.4.8. Stormwater Retention/Detention and Groundwater Infiltration.** Require development to incorporate stormwater retention/detention ponds to encourage groundwater recharge and to make efficient use of stormwater.

**Policy W.9.1.2. Groundwater Recharge Area Protection.** Require that all projects be designed to maintain or increase the site's pre-development absorption of rainfall (minimize runoff), and to recharge groundwater where appropriate.

**Policy W.9.2.4. Wildfire and Water Quality Controls.** Develop a variety of land-use planning, site design and vegetation management techniques to reduce the risk of wildfires. This risk reduction shall also include post-fire erosion, sedimentation and water-quality conditions.

**Policy W.9.2.6. Erosion and Sediment Control Measures.** Ensure that Best Management Practices to control erosion and sediment will be incorporated into development design and improvements.

**Policy W.9.2.7. Wastewater Application Management.** Approach all wastewater application, both individual on-site and community systems, in a manner that supports Federal, State and local wastewater regulations to ensure the protection of public health and the environment.

**Policy W.9.4.1. Watershed Protection.** Require new development projects to mitigate potential impacts on surface water, recreation areas, agriculture and wildlife habitat areas.

**Policy W.9.5.4. Water Supply for New Development.** Ensure a sufficient water supply for all new residential/non-residential development through enforcement of Water Code Section 10910 (Senate Bill 610) and Government Code Section 66473.7 (Senate Bill 221), or more current state code requirements, suitable for the size and scale of the development.

**Policy W.9.5.8. Level of Service Impacts.** Ensure that any new development projects do not create significant adverse impacts on existing water and wastewater infrastructure.



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**Policy W.9.7.1. Natural Stormwater Drainage Courses.** Require that natural drainage courses, including ephemeral streams, be retained and protected from development impacts which would alter the natural drainage courses, increase erosion or sedimentation or have a significant adverse effect on flow rates or water quality. Natural vegetation within riparian and wetland protection zones shall be maintained to preserve natural drainage characteristics consistent with the policies provided in the Conservation Element [of the Plumas County General Plan]. Stormwater discharges from outfalls, culverts, gutters and other drainage control facilities that discharge into natural drainage courses shall be dissipated so that they make no contribution to addition erosion and, where feasible, are filtered and cleaned of pollutants.

**Policy W.9.7.2. Downstream Peak Flows.** For new development, the County shall require that peak stormwater discharge not exceed the capacity limits of off-site drainage systems or cause downstream erosion, flooding, habitat destruction or impacts to wetland and riparian areas.

**Policy W.9.7.4. Runoff Quality.** Require all drainage systems in new development and redevelopment to comply with applicable state and federal non-point source pollutant discharge requirements.

**Policy W.9.7.5. Best Management Practices.** Require best management practices in new development and redevelopment to reduce pollutants from entering natural water bodies while allowing stormwater reuse.

**Policy W.9.8.2. Recycled Water Use.** Require and encourage new development, redevelopment, and landscape and agriculture irrigators to use recycled water whenever practical and available.

**Policy W.9.8.7. Sustainable Water Practices.** Encourage the use of sustainable, affordable water management practices that meet state and local standards, such as greywater reuse, rainwater capture/harvest, watershed management and stormwater infiltration to reduce demands on potable supply.

**Upper Feather River  
Integrated Regional  
Water Management  
Plan**

The Upper Feather River Integrated Regional Water Management Plan (IRWMP) Update 2016 (Upper Feather River Regional Water Management Group 2016) updates the 2005 Upper Feather River Watershed IRWMP to comply with grant program guidelines established by the California Department of Water Resources in 2012 and 2016. The previous plan (2005) integrated seven previously existing, smaller water resources plans into a

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single management plan encompassing the entire Upper Feather River Watershed and corresponding water issues. The updated Upper Feather River IRWMP (2016) identifies five (5) goals and eighteen (18) objectives for the plan's implementation, and the potential benefits and impacts of achieving each of these objectives. The plan provides relevant background information related to the regional climate, water, land use, and planning conditions and applicable entities. In addition, the 2016 IRWMP identifies projects that will be implemented under the plan and includes specific criteria for the plan's implementation, performance, monitoring and data management criteria.

**LAND USE AND PLANNING****2035 Plumas County  
General Plan Update**

The County of Plumas 2035 General Plan Update (2013) contains the following goals and policies relevant to land use and the Proposed Project:

**Policy LU1.1.1. Future Development.** The County shall require future residential, commercial and industrial development to be located adjacent to or within existing Planning areas; areas identified on Plumas County's General Plan Land Use Maps as Towns, Communities, Rural Areas or Master Planned Communities, in order to maintain Plumas County's rural character with compact and walkable communities. Future development may also be approved within areas for which Community Plans or Specific Plans have been prepared. Small, isolated housing tracts in outlying areas shall be discouraged as they disrupt surrounding rural and productive agricultural lands, forests, and ranches and are difficult and costly to provide with services. Land division may be allowed outside of Planning Areas only when the resulting development complies with all applicable General Plan Policies and County Codes.

**Policy LU1.5.3.** The County shall require development to be located adjacent to, or within, areas where fire and life safety services exist, or can be efficiently and economically provided.

**Goal LU1.8. Land Use Pattern that Minimizes Travel.** To develop land use patterns which minimize travel to jobs and services.

**Policy LU1.8.1.** The County shall require that sites for moderate-to large-scale industrial and commercial development be located within or near the Town and Community areas; within areas for which Specific Plans or Master Plans have been prepared; or within areas that contain, or are capable of containing, infrastructure adequate to support the use of the property for more intensive non-residential purposes, such as abandoned mill sites.

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Additionally, the County shall consider the location of such uses where appropriate to reduce travel and commute times.

**Goal LU.1.9.** To accommodate communication infrastructure facilities while requiring site provisions that protect the visual quality, health and character of the County.

**Policy LU1.9.1. Communication Tower Location Criteria.** The County shall provide development criteria in the County's Zoning Code.

According to the general plan land use diagram, the project site is designated as agricultural preserve.

**Plumas County  
Municipal Code**

The project site is zoned as Agricultural Preserve (AP). The purpose of the AP zone is to provide for dwelling units in prime areas with provisions for compatible uses. Permitted uses of the AP zone include:

- (a) The following uses shall be permitted in the Agricultural Preserve Zone (AP) subject to site development review as set forth in Article 30 of this chapter:
  - (1) Agriculture, timber management, agricultural product sales, animal breeding and boarding, and employee housing;
  - (2) One dwelling unit; and
  - (3) Child day care homes and limited child day care homes.
- (b) The following uses shall be permitted subject to the issuance of a special use permit:
  - (1) Mining, limited electric generation, public utility facilities, wildlife management, transport stations, agricultural auction yards, outdoor shooting ranges, hunting clubs, and bed and breakfast inns; and
  - (2) Recreational uses, but not limited to walking, hiking, picnicking, camping, swimming, boating, fishing, hunting, or other outdoor games or sports for which facilities are provided for public transportation.

**Height (AP)**

No structure in the Agricultural Preserve Zone (AP) shall exceed sixty (60') feet in height, except for dwelling units, which shall not exceed thirty-five

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	<p>(35') feet, and windmills, silos, elevators, and barns, which may be any height.</p> <p>Area and Width (AP)</p> <ul style="list-style-type: none"> <li>(a) The minimum gross lot area in the Agricultural Preserve Zone (AP) shall be eighty (80) acres, except as provided in subsection (b) of this section.</li> <li>(b) The minimum gross lot area shall be ten (10) acres solely where the primary use is an agricultural auction yard with no dwelling unit permitted.</li> <li>(c) When a parcel resulting from a lot line adjustment contains an area zoned Agricultural Preserve Zone (AP), that area shall be of at least the minimum area required by subsections (a) or (b) of this section, as applicable, or the lot line adjustment shall be denied.</li> </ul>

## MINERAL RESOURCES

<b>2035 Plumas County General Plan Update</b>	<p>The 2035 Plumas County General Plan Update (2013) contains the following policy related to mineral resources and the Proposed Project:</p> <p><b>Policy COS 7.4.4. Mineral Resource Preservation.</b> The County shall preserve future use areas with potentially important mineral resources by limiting residential or other uses that are considered incompatible with mining operations.</p>
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## NOISE

<b>2035 Plumas County General Plan Update</b>	<p>The 2035 Plumas County General Plan Update (2013) contains the following goals and policies applicable to the Proposed Project with regard to noise:</p> <p><b>Goal N3.1.</b> To establish and maintain a quiet and healthy environment with land uses arranged and managed to reduce annoyance and complaints and minimize the exposure of community residents to excessive noise.</p> <p><b>Policy N3.1.3 Noise/Land Use Compatibility Standards.</b> When considering a discretionary project, the County shall refer to the Noise Land Use Compatibility Standards, as shown in Figure 21 (General Plan), as a guide to ensure compatibility of land uses. New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise which exceed the levels specified in Figure 21 unless the project design includes effective mitigation measures to reduce exterior</p>
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noise and noise levels in interior spaces to the levels specified in Figure 21.

**Policy N3.1.4 Construction Noise.** The County shall seek to limit potential noise impacts of construction activities on surrounding land uses. The standards outlined below shall apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday and 8 a.m. and 5 p.m. on weekends or on federally recognized holidays. Exceptions are allowed if it can be shown that construction beyond these times is necessary to alleviate traffic congestion and safety hazards.

**General Plan Table 3-5. Maximum Allowable Noise Exposure within Planning Areas – Construction Noise**

Land Use Designation	Time Period	Noise Level (dB)	
		Leq	Lmax
Residential	7 am to 7 pm	55	75
	7 pm to 10 pm	50	65
	10 pm to 7 am	45	60
Commercial and Public Facilities	7 am to 7 pm	--	90
	7 pm to 7 am	--	75
Industrial	Any Time	--	90

**Policy N3.1.5. Development Surrounding Airports.** The County shall require that development around local public-use airports be consistent with the noise standards contained in the approved Airport Land Use Compatibility Plan.

**Policy N3.1.7. Noise Standard Exceptions.** The County may allow greater exterior noise levels for some proposed new developments when it is not feasible to reduce noise levels in outdoor activity areas to acceptable noise levels specified in General Plan Figure 21 or less using practical application of the best-available noise reduction measures.

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**Policy N3.1.8. Noise Source Exemptions.** The County shall consider the following noise sources to be exempt from the noise standards in this element:

- Emergency warning devices and equipment operated in conjunction with emergency situations, including sirens and generators which are activated during power outages. The routine testing of such warning devices and equipment shall also be exempt provided such testing occurs during daylight hours.
- Activities at schools, parks or playgrounds, provided such activities occur during daylight hours.
- Activities associated with County-permitted events and festivals.

**Policy N3.1.9. Environmental Review Process.** For noise-sensitive locations where noise contours do not exist, the County shall require a noise analysis and determine the appropriate noise abatement measures, to the extent practicable, consistent with the General Plan and State standards as part of the environmental review process for individual projects.

**Policy N3.1.10. Noise Buffering.** The County shall require noise buffering or construction treatments in new development that includes noise sensitive uses located near major streets, highways.

**Policy N3.1.11. Noise Study Requirements.** When a discretionary project has the potential to generate noise levels in excess of general plan standards, the County shall require the preparation of a noise study. The noise study shall measure or model as appropriate, CNEAL and  $L_{max}$  levels at property lines and, if feasible, receptor locations. Noise studies shall be prepared by qualified individuals using calibrated equipment under currently accepted professional standards and include an analysis of the characteristics of the project in relation to noise levels, all feasible mitigations and projected noise impacts. The Noise Guidebook published by the U.S. Department of Housing and Urban Development, or its equivalent, shall be used to guide analysis and mitigation recommendations. The noise or acoustic analysis should be the responsibility of the project applicant.

**Law, Regulation,  
or Policy****Overview****POPULATION AND HOUSING**

No local regulations are applicable to population and housing in relation to the Proposed Project.

**PUBLIC SERVICES****Plumas County  
General Plan Update  
(2013)**

The Plumas County General Plan Update (2013) contains the following goals and policies related to public services and the Proposed Project.

**Goal 6.3. Wildland Fire Hazards and Fire Protection.** To minimize the possibility of the loss of life, injury, damage to property, and loss of habitat and natural resources as a result of fire.

**Policy 6.3.3. Structural Fire Protection.** All developments within the service boundaries of an entity which provides structural fire protection may be required to make contribution to the maintenance of the existing level of structural service proportionate to the increase in demand for service structural fire protection and Emergency Medical Services resulting from the development.

**Policy 6.3.4. New Development Requirements.** As a requirement for approving new development, the County must find (based on information provided by the applicant and the responsible fire protection district), that concurrent with development, adequate emergency water flow, fire access and fire-fighting personnel and equipment, will be available in accordance with applicable State, County, and local fire district standards.

**Policy 6.3.5. Emergency Access.** As a requirement of new development, the applicant must demonstrate that adequate emergency access exists or can be provided to ensure that emergency vehicles can access the site and that private vehicles can evacuate the area.

**Goal 6.7. Emergency Operations Management and Planning.** To provide effective emergency response to natural or human-made hazards and disasters.

**RECREATION****Plumas County  
General Plan Update  
(2013)**

The Plumas County General Plan Update (2013) contains the following goals and policies related to recreation and the Proposed Project.

**Goal 7.7. Parks and Recreation.** To maintain an equitable and quality system of parks, recreation areas, multi-use trail systems, and

Law, Regulation, or Policy	Overview
	access to local, state, and federal recreation opportunities within Plumas County.
	<b>Policy 7.7.6. Park Dedication Requirements.</b> The County shall require the dedication of land and/or payment of fees in conjunction with new development, in accordance with local authority and State law, as deemed necessary, to ensure funding for the acquisition and development of public and private recreation facilities.

## TRANSPORTATION AND TRAFFIC

<b>Plumas County Regional Transportation Plan 2010</b>	The Plumas County 2010 Regional Transportation Plan (Lumos & Associates, Inc. 2011) specifies the policies, project and programs necessary for a 20-year period to maintain, manage, and improve the region's transportation system.
<b>Plumas County General Plan Update (2013)</b>	<p>The Plumas County General Plan Update (2013) contains the following goals and policies related to traffic and transportation and the Proposed Project.</p> <p><b>Policy 4.1.2. Level of Service Standard.</b> The County shall maintain a minimum Level of Standard (LOS) standard of LOS D in areas for which Community Plans or Specific Plans have been prepared, and LOS C in other areas of Plumas County. For signalized intersections, LOS standards should be applied to the total intersection LOS. For roundabouts and stop-sign controlled intersections, Level of Service standards shall be applied to the worst approach Level of Service.</p> <p><b>Policy 4.1.3. Required Roadway Access.</b> The County shall require that every parcel created and all developments are provided with roadway access that will accommodate all developments are provided with roadway access that will accommodate the permitted density and intensity of development. General Plan Table 4-2 presents general roadway standards. The requirements for road standards shall be based on the planned density of development and projected traffic volumes as determined by the general plan designation of areas to be served, and the ability to accommodate emergency response and safe ingress/egress. Uses in industrial areas served by roadways that cannot accommodate all types of industrial uses shall be limited to those uses consistent with road conditions unless conditions are improved.</p>



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Law, Regulation, or Policy	Overview
<b>2015 Plumas County Short Range Transit Plan</b>	The 2015 Plumas County Short Range Transit Plan (Plumas County Transportation Commission 2015) provides insight into the various elements of transit service offered in Plumas County and provides guidance and recommendations regarding effectiveness and efficiency improvements that will ensure transit service meets the needs of Plumas County residents.
<b>2018 Plumas County Active Transportation Program Pedestrian/Bicycle Plan</b>	The 2018 Plumas County Active Transportation Program Pedestrian/Bicycle Plan (Plumas County Transportation Commission 2018) performs a needs analysis on the existing transportation network for communities in the County, including Quincy, and provides recommendations to enhance and support pedestrian and bicycling transit.

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**Law, Regulation,  
or Policy****Overview**

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**UTILITIES AND SERVICE SYSTEMS****Plumas County  
General Plan Update  
(2013)**

The Plumas County General Plan Update (2013) contains the following goals and policies related to utilities and the Proposed Project.

**Policy 6.4.8. Storm Water Retention/Detention and Groundwater Infiltration.** As appropriate, the County shall require development to incorporate storm-water retention/detention ponds to encourage groundwater recharge and to make efficient use of storm water.

**Goal 7.11. Energy Conservation.** To ensure that the extension of electrical power supply is sufficiently mitigated to reduce impacts to a level of insignificance, preventing irreversible changes to significant environmental features.

**Policy 7.11.1. Alternative Energy Design.** The County shall encourage all new development, including rehabilitation, renovation, and redevelopment, to incorporate energy conservation and green building practices to the maximum extent feasible. Such practices include, but are not limited to: building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

**Policy 7.11.3. Energy Efficient Appliances.** The County shall encourage the use of Energy Star certified appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units, in all new developments.

**Policy 7.11.8. Electric Vehicle Support.** The County shall encourage and provide incentives for commercial and residential design that supports the charging of electric vehicles.

**Goal 9.5. Public Water Supply.** To encourage public water systems and their sources to provide an adequate supply to meet long-term needs and that is provided in a manner that maintains water resources for other water users while protecting the natural environment.

**Policy 9.5.1. Adequate Water Supply Facilities and Services.** The County shall support water purveyors' plans to develop new reliable future sources of supply, while promoting water conservation and water recycling/reuse. Additionally, through the development review process, the County shall ensure that public water facilities and services will be adequate and operational to serve new development and meet capacity

**Law, Regulation,  
or Policy****Overview**

demands when needed. Such needs shall include capacities necessary to comply with public safety.

**Policy 9.5.4. Water Supply for New Development.** The County shall ensure a sufficient water supply for all new residential/non-residential development. To do this, the County shall enforce Water Code Section 10910 (Senate Bill 610) and Government Code Section 66473.7 (Senate Bill 221), or more current state code requirements. Where these codes do not apply, the County shall impose conditions similar to Water Code Section 10910 (Senate Bill 610) and Government Code Section 66473.7 (Senate Bill 221), or more current state code requirements, and suitable for the size and scale of the development.

**Goal 9.6. Wastewater Management.** To ensure that wastewater is managed to provide for the long-term protection of public health, safety and welfare of the environment, including support of the logical and progressive expansion of community wastewater systems within the County.

**Policy 9.6.1. Adequate Facilities and Services.** The County shall ensure, through the development review process, that wastewater facilities and services will be adequate and operational to serve new development and meet capacity.

**Goal 9.7. Stormwater Management.** To manage stormwater from existing and future development in an efficient manner through methods that maintain natural water quality, enhance percolation for groundwater recharge, reduce potential flooding, support natural wetlands and provide opportunities for reuse.

**Policy 9.7.2. Downstream Peak Flows.** For new development, the County shall require that peak stormwater discharge not exceed the capacity limits of off-site drainage systems or cause downstream erosion, flooding, habitat destruction or impacts to wetlands and riparian areas.

**Goal 9.8. Water-Use Efficiency and Conservation.** To increase the role of conservation and water-use efficiency to help meet domestic or municipal water supply needs.

**Policy 9.8.2 Recycled Water Use.** The County shall encourage new development, redevelopment, and landscape and agricultural irrigators to use recycled water wherever practical and available; this includes striving for the highest possible quality of wastewater treatment to increase the potential use of recycled water for existing and future needs of the county.

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## ACRONYMS AND ABBREVIATIONS FOR APPENDIX A

ALUCP	Airport Land Use Compatibility Plan
ATCMs	airborne toxic control measures
CAL FIRE	The California Department of Forestry and Fire Protection
CEQA	California Environmental Quality Act
CUPA	Certified Unified Program Agency
DSOD	Division of Safety of Dams
DWR	State Department of Water Resources
GHG	greenhouse gas
HPM	Hazardous Mitigation Plan
NSAQMD	Northern Sierra Air Quality Management District
PCEHD	Plumas County Environmental Health Department
PM <sub>10</sub>	particulate matter of aerodynamic radius of 10 micrometers or less
UFRIRWMP	Upper Feather River Integrated Regional Water Management Plan

## REFERENCES

- Lumos & Associates, Inc. 2011. Plumas County Regional Transportation Plan – 2010. September 1. Accessed December 17, 2015, <http://ca-plumascounty.civicplus.com/DocumentCenter/Home/View/4362>.
- Northern Sierra Air Quality Management District. 2009. Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects. August 18.
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- Plumas County. 2006. Plumas County Hazard Mitigation Plan. Accessed March 20, 2015, <http://www.countyofplumas.com/index.aspx?NID=2218>.
- Plumas County. 2008. Plumas County Airport Land Use Compatibility Plan for Gansner Airport at Quincy. Accessed March 20, 2015, [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps\\_plumas.php](http://www.fire.ca.gov/fire_prevention/fhsz_maps_plumas.php).
- Plumas County. 2013. 2035 Plumas County General Plan Update. Accessed August 31, 2018, <http://www.countyofplumas.com/index.aspx?NID=2307>.
- Plumas County Transportation Commission. 2015. Administrative Draft 2015 Plumas County Short Range Transit Plan. Prepared for the Plumas County Transportation Commission. January 26. Accessed December 17, 2015, <http://countyofplumas.com/DocumentCenter/View/12384>.
- Plumas County Transportation Commission. 2018. Plumas County Active Transportation Program Pedestrian/Bicycle Plan. January. Prepared by Alta Planning + Design for Plumas County Public Works on behalf of the Plumas County Transportation Commission. Accessed: October 2018. Available: <http://ca-plumascounty.civicplus.com/index.aspx?NID=2285>.

- 1 Upper Feather River Regional Water Management Group. 2016. Upper Feather River Integrated
- 2 Regional Water Management Plan Update 2016. Submitted to California Department of
- 3 Water Resources. Accessed: October 2018. Available: [http://featherriver.org/ufr-irwm-](http://featherriver.org/ufr-irwm-plan/)
- 4 [plan/](http://featherriver.org/ufr-irwm-plan/).

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Appendix B.  
**Air Quality Data**





Table 1: Construction Emissions  
Quincy CHP Facility

Construction Emissions	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	CO <sub>2</sub> e
	Total Construction Emissions								
	tons								Metric tons
2021	0.237	2.0821	1.925	0.00394	0.1439	0.0897	0.0578	0.0842	352
2022	0.573	0.7192	0.857	0.00153	0.0276	0.0331	0.00744	0.0311	135
Total	0.810	2.801	2.782	0.005	0.172	0.123	0.065	0.115	486
Peak Daily Emissions (pounds/day)									
Peak Daily	53.3	139.5	39.5	0.280	23.8	2.5	11.5	2.3	29645

Notes

1. Emissions are based on CalEEMod defaults for a 3.8 acre site plus 0.16 acres of heated sidewalk.

Table 2: Operational Emissions  
Quincy CHP Facility

Operational Source	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	CO <sub>2</sub> e
	tons/year								Metric tons/year
Area	0.205	0.00001	0.0012			0		0	0.003
Electricity									92.2
Natural Gas	0.0021	0.02	0.016	0.00012	--	0.0015	--	0.0015	21.2
Mobile	0.085	0.38	1.12	0.0023	0.17	0.0031	0.046	0.003	213
Vehicle Idling	0.051404	0.074065	0.114561	--	--	1.77E-04	--	0.002188	100
Refueling Pump	0.038075								
Emergency Generator	0.0192	0.008	0.071	0.00016	--	0.00026	--	0.00026	15
Solid Waste									26
Water & Wastewater									24.97
<b>Total</b>	<b>0.40</b>	<b>0.48</b>	<b>1.32</b>	<b>0.003</b>	<b>0.17</b>	<b>5.04E-03</b>	<b>0.05</b>	<b>0.01</b>	<b>493</b>

Operational Source	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>
	Maximum Pounds per Day							
Area	1.12	0.0001	0.013	0		5.00E-05		5.00E-05
Electricity								
Natural Gas	0.012	0.106	0.0889	0.0006	--	0.008	--	0.008
Mobile	0.518	2.16	6.5	0.014	0.98	0.017	0.2626	0.016
Vehicle Idling	0.28	0.63	4.42	--	--	0.01	--	0.01
Refueling Pump	0.20863							
Emergency Generator	0.38	0.17	1.41	0.0032	--	0.005	--	0.005
Solid Waste								
Water & Wastewater								
<b>Total</b>	<b>2.52</b>	<b>3.06</b>	<b>12.43</b>	<b>0.02</b>	<b>0.98</b>	<b>0.04</b>	<b>0.26</b>	<b>0.04</b>

Table 3: Refueling Pump Emissions  
Quincy CHP Facility

Emission Source Category	Emission Factors					Annual Emissions				
	ROG	Benzene	Ethyl Benzene	Toulene	Xylene	ROG	Benzene	Ethyl Benzene	Toulene	Xylene
	pounds/1000gallon					pounds				
Loading	0.42	0.00126				21	0.063			
Breathing	0.053	0.000159				2.65	0.00795			
Refueling	0.63	0.00189				31.5	0.0945			
Spillage	0.42	0.0042	0.00672	0.0336	0.01	21	0.21	0.336	1.68	0.504

Notes

1. The tanks are assumed to be Above Ground Storage Tanks with Phase II vapor recovery systems.
2. Emission factors are based on CAPCOA 1997.
3. The liquid percentage of benzene was 1.0, ethyl benzene 1.6, toluene 8.0, xylene 2.4 based on CAPCOA 1997. MTBE is no longer in gasoline.
4. The vapor percentage of benzene was 0.3 based on CAPCOA 1997.
5. Throughput for Quincy was assumed to be 50,000 gallons per year.

Source

CAPCOA. 1997. Gasoline Service Station Industrywide Risk Assessment Guidelines.

Table 4: Vehicle Idling Emissions  
Quincy CHP Facility

		ROG	TOG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	CO <sub>2</sub> e
Emission Factors		grams/hour									
	CHP vehicle	2.567662006	3.72805415	3.9584759	41.4391294	--	--	0.116155	--	0.106852975	5390.662353
	Trucks	4.512346828	5.13696338	94.728033	15.2873112	--	--	0.324357	--	0.310325343	15923.34979
		tons/year									
Vehicle Emissions		Metric tons/year									
	CHP vehicle	0.050	0.072	0.076	0.800	--	--	0.00005	--	0.002	94.444
	Trucks	0.002	0.002	0.038	0.006	--	--	0.00013	--	0.000	5.812
		pounds/day									
	CHP vehicle	0.27	0.39	0.42	4.39	--	--	0.01	--	0.01	570.45
	Trucks	0.01	0.01	0.21	0.03	--	--	0.00	--	0.00	35.11

Notes:

1. Based on EMFAC 2014 Emission Rates to be consistent with CalEEMod emission factors.
2. It was assumed 2 worker vehicles idling 24 hours per day. It was conservatively assumed that this was equivalent to a LDT1.
3. It was assumed that HHDT would idle for up to 1 hour per day.
4. Emissions for SO<sub>2</sub> and lead are negligible given fuel regulations limiting the content of sulfur and lead.

Toxic Air Components	EMFAC TOG Speciation <sup>1</sup>	Emission Rate (pounds/hr)	Acute REL <sup>2</sup> (m <sup>3</sup> /ug)	Chronic REL <sup>2</sup> (m <sup>3</sup> /ug)	Cancer Potency Factor <sup>2</sup> (kg-day/mg)
Acetaldehyde	0.0028	1.32126E-06	470	140	1.00E-02
Acrolein	0.0013	6.13442E-07	2.5	0.35	
Benzene	0.0247	1.16554E-05	27	3	1.00E-01
1,3-Butadiene	0.0055	2.59533E-06		20	6.00E-01
Ethylbenzene	0.0105	4.95472E-06		2000	8.70E-03
Formaldehyde	0.0158	7.45567E-06	55	9	2.10E-02
Hexane	0.016	7.55005E-06		7000	
Methanol	0.0012	5.66254E-07	28000	4000	
Methyl Ethyl Ketone	0.0002	9.43756E-08	13000		
Naphthalene	0.0005	2.35939E-07		9	1.20E-01
Propylene	0.0306	1.44395E-05		3000	
Styrene	0.0012	5.66254E-07	21000	900	
Toluene	0.0576	2.71802E-05	37000	300	
Xylenes	0.048	2.26501E-05	22000	700	

Notes:

1. TOG Speciation from BAAQMD 2012.
2. Toxicity factors are based on the latest values published by OEHHA.

Sources:

BAAQMD. 2012. Recommended Methods for Screening and Modeling Local Risks and Hazards.  
 OEHHA. 2014. All OEHHA Acute, 8-hour and Chronic Reference Exposure Levels (chRELs) as of June 2014.  
 OEHHA. 2009. Hot Spots Unit Risk and Cancer Potency Values.

Operational Emissions  
Existing Quincy CHP Facility

Operational Source	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>	CO <sub>2</sub> e
	tons/year								Metric tons/year
Area	0.0228	0	4.00E-05	0	--	0	--	0	9.00E-05
Electricity									17.4
Natural Gas	5.90E-04	5.39E-03	4.52E-03	3.00E-05	--	4.10E-04	--	4.10E-04	5.899
Mobile	0.1551	0.6457	2.148	3.19E-03	0.2113	6.46E-03	0.0569	6.10E-03	289.63
Vehicle Idling	0.051404	0.074064909	0.114561	--	--	0.000177237	--	0.002188457	100
Refueling Pump	0.038075								
Emergency Generator	--	--	--	--	--	--	--	--	--
Solid Waste									2.1072
Water & Wastewater									3.1896
<b>Total</b>	<b>0.27</b>	<b>0.73</b>	<b>2.27</b>	<b>0.00</b>	<b>0.21</b>	<b>7.05E-03</b>	<b>0.06</b>	<b>0.01</b>	<b>418</b>

Operational Source	ROG	NOx	CO	SO <sub>2</sub>	Fugitive PM <sub>10</sub>	Exhaust PM <sub>10</sub>	Fugitive PM <sub>2.5</sub>	Exhaust PM <sub>2.5</sub>
	Maximum Pounds per Day							
Area	0.1249	0	4.70E-04	0		0		0
Electricity								
Natural Gas	3.25E-03	2.95E-02	2.48E-02	1.80E-04	--	2.24E-03	--	2.24E-03
Mobile	0.916	3.7134	12.5408	0.0184	1.21	0.0357	0.3252	0.0337
Vehicle Idling	0.28	0.63	4.42	--	--	0.01	--	0.01
Refueling Pump	0.20863							
Emergency Generator	--	--	--	--	--	--	--	--
Solid Waste								
Water & Wastewater								
<b>Total</b>	<b>1.53</b>	<b>4.37</b>	<b>16.98</b>	<b>0.02</b>	<b>1</b>	<b>0.05</b>	<b>0.33</b>	<b>0.05</b>

### Quincy Operations Trip Calculations - New Facility

	Trip Generation		
	Inbound	Outbound	Total
Annual Average Daily Trips for CHP station (worker + nonworker)	-	-	115
Percentage of AADT that are nonworker trips	47%	47%	47%

(Assumed from other CHP offices)

### Assumptions and Calculations:

	Total Employees	Uniformed	Non - uniformed
	37	30	7
	Fraction of Total:	0.81	0.19

Nonworker Trips	Worker Trips
54.05	61

	Uniform	Non-uniform
	(Assume 2/3 of workers)	(Assume 1/3 of Workers)
	49.4	11.5
Total Worker Miles/Day	2500.000	
Worker Miles/Day	50.588	
Trips (Fraction of Total)	0.430	0.100

### Quincy Operations Trip Calculations - Existing Facility

	Trip Generation		
	Inbound	Outbound	Total
Annual Average Daily Trips for CHP station (worker + nonworker)	-	-	100
Percentage of AADT that are nonworker trips	47%	47%	47%

(Assumed from other CHP offices)

### Assumptions and Calculations:

	Total Employees	Uniformed	Non - uniformed
	27	18	9
	Fraction of Total:	0.67	0.33

Nonworker Trips	Worker Trips
47.00	53

	Uniform	Non-uniform
	(Assume 2/3 of workers)	(Assume 1/3 of Workers)
	35.3	17.7
Total Worker Miles/Day	1500.000	
Worker Miles/Day	42.453	
Trips (Fraction of Total)	0.353	0.177



## CHP Quincy - Plumas County, Annual

## CHP Quincy

### Plumas County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	19.20	1000sqft	1.44	19,200.00	0
Unrefrigerated Warehouse-No Rail	14.04	1000sqft	0.32	14,035.00	0
Other Asphalt Surfaces	54.37	1000sqft	1.25	54,370.00	0
Other Non-Asphalt Surfaces	7.00	1000sqft	0.16	7,000.00	0
Parking Lot	29.00	1000sqft	0.67	29,000.00	0
Automobile Care Center	5.40	1000sqft	0.12	5,400.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	73
Climate Zone	1			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## CHP Quincy - Plumas County, Annual

## Project Characteristics -

Land Use - Heated/Enclosed Parking included under Warehouse area along with all facilities other than office and auto care. Other Non-Asphalt is for heated sidewalk.

## Construction Phase -

## Trips and VMT -

## Grading -

Vehicle Trips - Updated based on traffic counts and assumptions.

Energy Use - Other Non-Asphalt used to estimate heated sidewalks/asphalt. Factor based on estimate of 10,000kWhr per 1000 sqft per year

## Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - Values updated for Tier 4 Final which is the tier required for any new engine.

## Area Coating -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	5,422.00	5,002.00
tblEnergyUse	NT24E	0.00	10.00
tblGrading	MaterialImported	0.00	12,260.00
tblLandUse	LandUseSquareFeet	14,040.00	14,035.00
tblLandUse	LotAcreage	0.44	1.44
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	2.20
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.26
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	1.3160e-003
tblTripsAndVMT	VendorTripNumber	21.00	20.00
tblTripsAndVMT	WorkerTripNumber	52.00	49.00
tblVehicleTrips	CC_TTP	62.00	47.00

## CHP Quincy - Plumas County, Annual

tblVehicleTrips	CNW_TTP	5.00	42.97
tblVehicleTrips	CW_TL	14.70	50.60
tblVehicleTrips	CW_TTP	33.00	10.03
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	0.00	5.99
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	0.00	5.99
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	68.93	5.99
tblVehicleTrips	WD_TR	1.68	0.00

## 2.0 Emissions Summary

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## CHP Quincy - Plumas County, Annual

## 2.1 Overall Construction

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2373	2.0823	1.9254	3.9400e-003	0.1439	0.0897	0.2336	0.0578	0.0842	0.1420	0.0000	350.5543	350.5543	0.0590	0.0000	352.0300
2022	0.5731	0.7192	0.8567	1.5300e-003	0.0276	0.0331	0.0608	7.4400e-003	0.0311	0.0386	0.0000	133.8525	133.8525	0.0259	0.0000	134.5009
Maximum	0.5731	2.0823	1.9254	3.9400e-003	0.1439	0.0897	0.2336	0.0578	0.0842	0.1420	0.0000	350.5543	350.5543	0.0590	0.0000	352.0300

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2373	2.0823	1.9254	3.9400e-003	0.1439	0.0897	0.2336	0.0578	0.0842	0.1420	0.0000	350.5541	350.5541	0.0590	0.0000	352.0298
2022	0.5731	0.7192	0.8567	1.5300e-003	0.0276	0.0331	0.0608	7.4400e-003	0.0311	0.0386	0.0000	133.8523	133.8523	0.0259	0.0000	134.5007
Maximum	0.5731	2.0823	1.9254	3.9400e-003	0.1439	0.0897	0.2336	0.0578	0.0842	0.1420	0.0000	350.5541	350.5541	0.0590	0.0000	352.0298

[illegible]

## CHP Quincy - Plumas County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2021	7-31-2021	1.0670	1.0670
2	8-1-2021	10-31-2021	0.7473	0.7473
3	11-1-2021	1-31-2022	0.7282	0.7282
4	2-1-2022	4-30-2022	0.5751	0.5751
5	5-1-2022	7-31-2022	0.4773	0.4773
		Highest	1.0670	1.0670

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2048	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3100e-003	2.3100e-003	1.0000e-005	0.0000	2.4600e-003
Energy	2.1300e-003	0.0193	0.0162	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	112.8476	112.8476	4.5500e-003	1.2400e-003	113.3323
Mobile	0.0852	0.3770	1.1236	2.3300e-003	0.1709	3.1000e-003	0.1740	0.0459	2.9100e-003	0.0488	0.0000	212.4670	212.4670	0.0133	0.0000	212.8004
Stationary	0.0192	8.3700e-003	0.0708	1.6000e-004		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	15.2319	15.2319	2.1400e-003	0.0000	15.2853
Waste						0.0000	0.0000		0.0000	0.0000	10.4926	0.0000	10.4926	0.6201	0.0000	25.9950
Water						0.0000	0.0000		0.0000	0.0000	2.4013	14.6120	17.0133	0.2473	5.9600e-003	24.9719
<b>Total</b>	<b>0.3113</b>	<b>0.4047</b>	<b>1.2119</b>	<b>2.6100e-003</b>	<b>0.1709</b>	<b>4.8300e-003</b>	<b>0.1757</b>	<b>0.0459</b>	<b>4.6400e-003</b>	<b>0.0506</b>	<b>12.8939</b>	<b>355.1607</b>	<b>368.0546</b>	<b>0.8874</b>	<b>7.2000e-003</b>	<b>392.3873</b>

## CHP Quincy - Plumas County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2048	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3100e-003	2.3100e-003	1.0000e-005	0.0000	2.4600e-003
Energy	2.1300e-003	0.0193	0.0162	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	112.8476	112.8476	4.5500e-003	1.2400e-003	113.3323
Mobile	0.0852	0.3770	1.1236	2.3300e-003	0.1709	3.1000e-003	0.1740	0.0459	2.9100e-003	0.0488	0.0000	212.4670	212.4670	0.0133	0.0000	212.8004
Stationary	0.0192	8.3700e-003	0.0708	1.6000e-004		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	15.2319	15.2319	2.1400e-003	0.0000	15.2853
Waste						0.0000	0.0000		0.0000	0.0000	10.4926	0.0000	10.4926	0.6201	0.0000	25.9950
Water						0.0000	0.0000		0.0000	0.0000	2.4013	14.6120	17.0133	0.2473	5.9600e-003	24.9719
<b>Total</b>	<b>0.3113</b>	<b>0.4047</b>	<b>1.2119</b>	<b>2.6100e-003</b>	<b>0.1709</b>	<b>4.8300e-003</b>	<b>0.1757</b>	<b>0.0459</b>	<b>4.6400e-003</b>	<b>0.0506</b>	<b>12.8939</b>	<b>355.1607</b>	<b>368.0546</b>	<b>0.8874</b>	<b>7.2000e-003</b>	<b>392.3873</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## CHP Quincy - Plumas County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2021	5/7/2021	5	5	
2	Grading	Grading	5/8/2021	5/19/2021	5	8	
3	Building Construction	Building Construction	5/20/2021	4/6/2022	5	230	
4	Paving	Paving	4/7/2022	5/2/2022	5	18	
5	Architectural Coating	Architectural Coating	5/3/2022	5/26/2022	5	18	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 2.08**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 57,953; Non-Residential Outdoor: 19,318; Striped Parking Area: 5,002 (Architectural Coating – sqft)**

**OffRoad Equipment**

## CHP Quincy - Plumas County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	1,533.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	49.00	20.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT



## CHP Quincy - Plumas County, Annual

**3.1 Mitigation Measures Construction****3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0459	0.0000	0.0459	0.0249	0.0000	0.0249	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1012</b>	<b>0.0529</b>	<b>1.0000e-004</b>	<b>0.0459</b>	<b>5.1100e-003</b>	<b>0.0510</b>	<b>0.0249</b>	<b>4.7000e-003</b>	<b>0.0296</b>	<b>0.0000</b>	<b>8.3589</b>	<b>8.3589</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4265</b>

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**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.2000e-003	0.2470	0.0396	6.0000e-004	0.0126	1.0900e-003	0.0137	3.4500e-003	1.0400e-003	4.4900e-003	0.0000	57.8950	57.8950	2.1000e-003	0.0000	57.9476
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.2000e-004	3.9800e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.6000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5400	0.5400	4.0000e-005	0.0000	0.5410
<b>Total</b>	<b>6.7600e-003</b>	<b>0.2475</b>	<b>0.0436</b>	<b>6.1000e-004</b>	<b>0.0132</b>	<b>1.1000e-003</b>	<b>0.0143</b>	<b>3.6000e-003</b>	<b>1.0500e-003</b>	<b>4.6400e-003</b>	<b>0.0000</b>	<b>58.4351</b>	<b>58.4351</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>58.4886</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0459	0.0000	0.0459	0.0249	0.0000	0.0249	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
<b>Total</b>	<b>9.7200e-003</b>	<b>0.1012</b>	<b>0.0529</b>	<b>1.0000e-004</b>	<b>0.0459</b>	<b>5.1100e-003</b>	<b>0.0510</b>	<b>0.0249</b>	<b>4.7000e-003</b>	<b>0.0296</b>	<b>0.0000</b>	<b>8.3589</b>	<b>8.3589</b>	<b>2.7000e-003</b>	<b>0.0000</b>	<b>8.4265</b>

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**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.2000e-003	0.2470	0.0396	6.0000e-004	0.0126	1.0900e-003	0.0137	3.4500e-003	1.0400e-003	4.4900e-003	0.0000	57.8950	57.8950	2.1000e-003	0.0000	57.9476
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	4.2000e-004	3.9800e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.6000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5400	0.5400	4.0000e-005	0.0000	0.5410
<b>Total</b>	<b>6.7600e-003</b>	<b>0.2475</b>	<b>0.0436</b>	<b>6.1000e-004</b>	<b>0.0132</b>	<b>1.1000e-003</b>	<b>0.0143</b>	<b>3.6000e-003</b>	<b>1.0500e-003</b>	<b>4.6400e-003</b>	<b>0.0000</b>	<b>58.4351</b>	<b>58.4351</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>58.4886</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
<b>Total</b>	<b>9.1600e-003</b>	<b>0.0990</b>	<b>0.0634</b>	<b>1.2000e-004</b>	<b>0.0262</b>	<b>4.6400e-003</b>	<b>0.0309</b>	<b>0.0135</b>	<b>4.2700e-003</b>	<b>0.0177</b>	<b>0.0000</b>	<b>10.4215</b>	<b>10.4215</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5057</b>

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**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	5.6000e-004	5.3100e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.7200	0.7200	5.0000e-005	0.0000	0.7213
<b>Total</b>	<b>7.4000e-004</b>	<b>5.6000e-004</b>	<b>5.3100e-003</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.4000e-004</b>	<b>2.0000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.7200</b>	<b>0.7200</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.7213</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
<b>Total</b>	<b>9.1600e-003</b>	<b>0.0990</b>	<b>0.0634</b>	<b>1.2000e-004</b>	<b>0.0262</b>	<b>4.6400e-003</b>	<b>0.0309</b>	<b>0.0135</b>	<b>4.2700e-003</b>	<b>0.0177</b>	<b>0.0000</b>	<b>10.4215</b>	<b>10.4215</b>	<b>3.3700e-003</b>	<b>0.0000</b>	<b>10.5057</b>

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**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	5.6000e-004	5.3100e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	2.0000e-004	1.0000e-005	2.0000e-004	0.0000	0.7200	0.7200	5.0000e-005	0.0000	0.7213
<b>Total</b>	<b>7.4000e-004</b>	<b>5.6000e-004</b>	<b>5.3100e-003</b>	<b>1.0000e-005</b>	<b>7.3000e-004</b>	<b>1.0000e-005</b>	<b>7.4000e-004</b>	<b>2.0000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.7200</b>	<b>0.7200</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.7213</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1540	1.4120	1.3426	2.1800e-003		0.0777	0.0777		0.0730	0.0730	0.0000	187.6262	187.6262	0.0453	0.0000	188.7578
<b>Total</b>	<b>0.1540</b>	<b>1.4120</b>	<b>1.3426</b>	<b>2.1800e-003</b>		<b>0.0777</b>	<b>0.0777</b>		<b>0.0730</b>	<b>0.0730</b>	<b>0.0000</b>	<b>187.6262</b>	<b>187.6262</b>	<b>0.0453</b>	<b>0.0000</b>	<b>188.7578</b>

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**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8500e-003	0.1850	0.0667	3.9000e-004	9.4700e-003	6.5000e-004	0.0101	2.7300e-003	6.2000e-004	3.3500e-003	0.0000	37.3631	37.3631	2.1400e-003	0.0000	37.4166
Worker	0.0491	0.0371	0.3510	5.3000e-004	0.0485	5.4000e-004	0.0490	0.0129	5.0000e-004	0.0134	0.0000	47.6296	47.6296	3.3500e-003	0.0000	47.7134
<b>Total</b>	<b>0.0569</b>	<b>0.2221</b>	<b>0.4177</b>	<b>9.2000e-004</b>	<b>0.0580</b>	<b>1.1900e-003</b>	<b>0.0592</b>	<b>0.0156</b>	<b>1.1200e-003</b>	<b>0.0168</b>	<b>0.0000</b>	<b>84.9927</b>	<b>84.9927</b>	<b>5.4900e-003</b>	<b>0.0000</b>	<b>85.1301</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1540	1.4120	1.3426	2.1800e-003		0.0777	0.0777		0.0730	0.0730	0.0000	187.6260	187.6260	0.0453	0.0000	188.7576
<b>Total</b>	<b>0.1540</b>	<b>1.4120</b>	<b>1.3426</b>	<b>2.1800e-003</b>		<b>0.0777</b>	<b>0.0777</b>		<b>0.0730</b>	<b>0.0730</b>	<b>0.0000</b>	<b>187.6260</b>	<b>187.6260</b>	<b>0.0453</b>	<b>0.0000</b>	<b>188.7576</b>

## CHP Quincy - Plumas County, Annual

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8500e-003	0.1850	0.0667	3.9000e-004	9.4700e-003	6.5000e-004	0.0101	2.7300e-003	6.2000e-004	3.3500e-003	0.0000	37.3631	37.3631	2.1400e-003	0.0000	37.4166
Worker	0.0491	0.0371	0.3510	5.3000e-004	0.0485	5.4000e-004	0.0490	0.0129	5.0000e-004	0.0134	0.0000	47.6296	47.6296	3.3500e-003	0.0000	47.7134
<b>Total</b>	<b>0.0569</b>	<b>0.2221</b>	<b>0.4177</b>	<b>9.2000e-004</b>	<b>0.0580</b>	<b>1.1900e-003</b>	<b>0.0592</b>	<b>0.0156</b>	<b>1.1200e-003</b>	<b>0.0168</b>	<b>0.0000</b>	<b>84.9927</b>	<b>84.9927</b>	<b>5.4900e-003</b>	<b>0.0000</b>	<b>85.1301</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0580	0.5309	0.5564	9.2000e-004		0.0275	0.0275		0.0259	0.0259	0.0000	78.7866	78.7866	0.0189	0.0000	79.2585
<b>Total</b>	<b>0.0580</b>	<b>0.5309</b>	<b>0.5564</b>	<b>9.2000e-004</b>		<b>0.0275</b>	<b>0.0275</b>		<b>0.0259</b>	<b>0.0259</b>	<b>0.0000</b>	<b>78.7866</b>	<b>78.7866</b>	<b>0.0189</b>	<b>0.0000</b>	<b>79.2585</b>

## CHP Quincy - Plumas County, Annual

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9500e-003	0.0738	0.0242	1.6000e-004	3.9700e-003	2.4000e-004	4.2100e-003	1.1500e-003	2.3000e-004	1.3800e-003	0.0000	15.5674	15.5674	8.6000e-004	0.0000	15.5888
Worker	0.0192	0.0138	0.1291	2.1000e-004	0.0204	2.1000e-004	0.0206	5.4200e-003	2.0000e-004	5.6100e-003	0.0000	19.3297	19.3297	1.2200e-003	0.0000	19.3603
<b>Total</b>	<b>0.0222</b>	<b>0.0877</b>	<b>0.1533</b>	<b>3.7000e-004</b>	<b>0.0243</b>	<b>4.5000e-004</b>	<b>0.0248</b>	<b>6.5700e-003</b>	<b>4.3000e-004</b>	<b>6.9900e-003</b>	<b>0.0000</b>	<b>34.8970</b>	<b>34.8970</b>	<b>2.0800e-003</b>	<b>0.0000</b>	<b>34.9491</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0580	0.5309	0.5564	9.2000e-004		0.0275	0.0275		0.0259	0.0259	0.0000	78.7865	78.7865	0.0189	0.0000	79.2584
<b>Total</b>	<b>0.0580</b>	<b>0.5309</b>	<b>0.5564</b>	<b>9.2000e-004</b>		<b>0.0275</b>	<b>0.0275</b>		<b>0.0259</b>	<b>0.0259</b>	<b>0.0000</b>	<b>78.7865</b>	<b>78.7865</b>	<b>0.0189</b>	<b>0.0000</b>	<b>79.2584</b>



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**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9500e-003	0.0738	0.0242	1.6000e-004	3.9700e-003	2.4000e-004	4.2100e-003	1.1500e-003	2.3000e-004	1.3800e-003	0.0000	15.5674	15.5674	8.6000e-004	0.0000	15.5888
Worker	0.0192	0.0138	0.1291	2.1000e-004	0.0204	2.1000e-004	0.0206	5.4200e-003	2.0000e-004	5.6100e-003	0.0000	19.3297	19.3297	1.2200e-003	0.0000	19.3603
<b>Total</b>	<b>0.0222</b>	<b>0.0877</b>	<b>0.1533</b>	<b>3.7000e-004</b>	<b>0.0243</b>	<b>4.5000e-004</b>	<b>0.0248</b>	<b>6.5700e-003</b>	<b>4.3000e-004</b>	<b>6.9900e-003</b>	<b>0.0000</b>	<b>34.8970</b>	<b>34.8970</b>	<b>2.0800e-003</b>	<b>0.0000</b>	<b>34.9491</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	2.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0113</b>	<b>0.0857</b>	<b>0.1098</b>	<b>1.7000e-004</b>		<b>4.3900e-003</b>	<b>4.3900e-003</b>		<b>4.0500e-003</b>	<b>4.0500e-003</b>	<b>0.0000</b>	<b>14.7383</b>	<b>14.7383</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>14.8540</b>

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**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0800e-003	1.5000e-003	0.0140	2.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.1000e-004	0.0000	2.0884	2.0884	1.3000e-004	0.0000	2.0918
<b>Total</b>	<b>2.0800e-003</b>	<b>1.5000e-003</b>	<b>0.0140</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>2.0000e-005</b>	<b>2.2200e-003</b>	<b>5.9000e-004</b>	<b>2.0000e-005</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>2.0884</b>	<b>2.0884</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.0918</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	2.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0113</b>	<b>0.0857</b>	<b>0.1098</b>	<b>1.7000e-004</b>		<b>4.3900e-003</b>	<b>4.3900e-003</b>		<b>4.0500e-003</b>	<b>4.0500e-003</b>	<b>0.0000</b>	<b>14.7383</b>	<b>14.7383</b>	<b>4.6300e-003</b>	<b>0.0000</b>	<b>14.8540</b>

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**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0800e-003	1.5000e-003	0.0140	2.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.1000e-004	0.0000	2.0884	2.0884	1.3000e-004	0.0000	2.0918
<b>Total</b>	<b>2.0800e-003</b>	<b>1.5000e-003</b>	<b>0.0140</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>2.0000e-005</b>	<b>2.2200e-003</b>	<b>5.9000e-004</b>	<b>2.0000e-005</b>	<b>6.1000e-004</b>	<b>0.0000</b>	<b>2.0884</b>	<b>2.0884</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.0918</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
<b>Total</b>	<b>0.4785</b>	<b>0.0127</b>	<b>0.0163</b>	<b>3.0000e-005</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>2.3017</b>

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**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	7.5000e-004	6.9700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0442	1.0442	7.0000e-005	0.0000	1.0459
<b>Total</b>	<b>1.0400e-003</b>	<b>7.5000e-004</b>	<b>6.9700e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>1.1100e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>1.0442</b>	<b>1.0442</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0459</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
<b>Total</b>	<b>0.4785</b>	<b>0.0127</b>	<b>0.0163</b>	<b>3.0000e-005</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>		<b>7.4000e-004</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>2.2979</b>	<b>2.2979</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>2.3017</b>

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**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	7.5000e-004	6.9700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0442	1.0442	7.0000e-005	0.0000	1.0459
<b>Total</b>	<b>1.0400e-003</b>	<b>7.5000e-004</b>	<b>6.9700e-003</b>	<b>1.0000e-005</b>	<b>1.1000e-003</b>	<b>1.0000e-005</b>	<b>1.1100e-003</b>	<b>2.9000e-004</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>1.0442</b>	<b>1.0442</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0459</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0852	0.3770	1.1236	2.3300e-003	0.1709	3.1000e-003	0.1740	0.0459	2.9100e-003	0.0488	0.0000	212.4670	212.4670	0.0133	0.0000	212.8004
Unmitigated	0.0852	0.3770	1.1236	2.3300e-003	0.1709	3.1000e-003	0.1740	0.0459	2.9100e-003	0.0488	0.0000	212.4670	212.4670	0.0133	0.0000	212.8004

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Government Office Building	115.01	115.01	115.01	461,045	461,045
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	115.01	115.01	115.01	461,045	461,045

## 4.3 Trip Type Information

## CHP Quincy - Plumas County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
Government Office Building	50.60	6.60	6.60	10.03	47.00	42.97	100	0	0
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Government Office Building	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Other Asphalt Surfaces	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Other Non-Asphalt Surfaces	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Parking Lot	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Unrefrigerated Warehouse-No Rail	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## CHP Quincy - Plumas County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	91.8157	91.8157	4.1500e-003	8.6000e-004	92.1755
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	91.8157	91.8157	4.1500e-003	8.6000e-004	92.1755
NaturalGas Mitigated	2.1300e-003	0.0193	0.0162	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	21.0319	21.0319	4.0000e-004	3.9000e-004	21.1568
NaturalGas Unmitigated	2.1300e-003	0.0193	0.0162	1.2000e-004		1.4700e-003	1.4700e-003		1.4700e-003	1.4700e-003	0.0000	21.0319	21.0319	4.0000e-004	3.9000e-004	21.1568



## CHP Quincy - Plumas County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	18954	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0115	1.0115	2.0000e-005	2.0000e-005	1.0175
Government Office Building	375168	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0204	20.0204	3.8000e-004	3.7000e-004	20.1394
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.1200e-003</b>	<b>0.0193</b>	<b>0.0162</b>	<b>1.2000e-004</b>		<b>1.4700e-003</b>	<b>1.4700e-003</b>		<b>1.4700e-003</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>21.0319</b>	<b>21.0319</b>	<b>4.0000e-004</b>	<b>3.9000e-004</b>	<b>21.1568</b>

## CHP Quincy - Plumas County, Annual

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	18954	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0115	1.0115	2.0000e-005	2.0000e-005	1.0175
Government Office Building	375168	2.0200e-003	0.0184	0.0155	1.1000e-004		1.4000e-003	1.4000e-003		1.4000e-003	1.4000e-003	0.0000	20.0204	20.0204	3.8000e-004	3.7000e-004	20.1394
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.1200e-003</b>	<b>0.0193</b>	<b>0.0162</b>	<b>1.2000e-004</b>		<b>1.4700e-003</b>	<b>1.4700e-003</b>		<b>1.4700e-003</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>21.0319</b>	<b>21.0319</b>	<b>4.0000e-004</b>	<b>3.9000e-004</b>	<b>21.1568</b>

## CHP Quincy - Plumas County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	23112	6.7236	3.0000e-004	6.0000e-005	6.7499
Government Office Building	212352	61.7756	2.7900e-003	5.8000e-004	62.0177
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	70000	20.3638	9.2000e-004	1.9000e-004	20.4436
Parking Lot	10150	2.9528	1.3000e-004	3.0000e-005	2.9643
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>91.8157</b>	<b>4.1400e-003</b>	<b>8.6000e-004</b>	<b>92.1755</b>

## CHP Quincy - Plumas County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	23112	6.7236	3.0000e-004	6.0000e-005	6.7499
Government Office Building	212352	61.7756	2.7900e-003	5.8000e-004	62.0177
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	70000	20.3638	9.2000e-004	1.9000e-004	20.4436
Parking Lot	10150	2.9528	1.3000e-004	3.0000e-005	2.9643
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>91.8157</b>	<b>4.1400e-003</b>	<b>8.6000e-004</b>	<b>92.1755</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## CHP Quincy - Plumas County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2048	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3100e-003	2.3100e-003	1.0000e-005	0.0000	2.4600e-003
Unmitigated	0.2048	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3100e-003	2.3100e-003	1.0000e-005	0.0000	2.4600e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0479					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3100e-003	2.3100e-003	1.0000e-005	0.0000	2.4600e-003
<b>Total</b>	<b>0.2048</b>	<b>1.0000e-005</b>	<b>1.1900e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3100e-003</b>	<b>2.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.4600e-003</b>

## CHP Quincy - Plumas County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0479					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1567					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3100e-003	2.3100e-003	1.0000e-005	0.0000	2.4600e-003
<b>Total</b>	<b>0.2048</b>	<b>1.0000e-005</b>	<b>1.1900e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3100e-003</b>	<b>2.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.4600e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## CHP Quincy - Plumas County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.0133	0.2473	5.9600e-003	24.9719
Unmitigated	17.0133	0.2473	5.9600e-003	24.9719

## CHP Quincy - Plumas County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.508038 / 0.311378	1.2779	0.0166	4.0000e-004	1.8127
Government Office Building	3.81427 / 2.33778	9.5945	0.1247	3.0100e-003	13.6091
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.24675 / 0	6.1408	0.1060	2.5500e-003	9.5502
<b>Total</b>		<b>17.0133</b>	<b>0.2473</b>	<b>5.9600e-003</b>	<b>24.9719</b>



## CHP Quincy - Plumas County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.508038 / 0.311378	1.2779	0.0166	4.0000e-004	1.8127
Government Office Building	3.81427 / 2.33778	9.5945	0.1247	3.0100e-003	13.6091
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.24675 / 0	6.1408	0.1060	2.5500e-003	9.5502
<b>Total</b>		<b>17.0133</b>	<b>0.2473</b>	<b>5.9600e-003</b>	<b>24.9719</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## CHP Quincy - Plumas County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.4926	0.6201	0.0000	25.9950
Unmitigated	10.4926	0.6201	0.0000	25.9950

## CHP Quincy - Plumas County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	20.63	4.1877	0.2475	0.0000	10.3749
Government Office Building	17.86	3.6254	0.2143	0.0000	8.9818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	13.2	2.6795	0.1584	0.0000	6.6383
<b>Total</b>		<b>10.4926</b>	<b>0.6201</b>	<b>0.0000</b>	<b>25.9950</b>

## CHP Quincy - Plumas County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	20.63	4.1877	0.2475	0.0000	10.3749
Government Office Building	17.86	3.6254	0.2143	0.0000	8.9818
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	13.2	2.6795	0.1584	0.0000	6.6383
<b>Total</b>		<b>10.4926</b>	<b>0.6201</b>	<b>0.0000</b>	<b>25.9950</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	100	400	0.73	Diesel

## CHP Quincy - Plumas County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)	0.0192	8.3700e-003	0.0708	1.6000e-004		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	15.2319	15.2319	2.1400e-003	0.0000	15.2853
<b>Total</b>	<b>0.0192</b>	<b>8.3700e-003</b>	<b>0.0708</b>	<b>1.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>15.2319</b>	<b>15.2319</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>15.2853</b>

**11.0 Vegetation**

## CHP Quincy - Plumas County, Summer

## CHP Quincy

### Plumas County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	19.20	1000sqft	1.44	19,200.00	0
Unrefrigerated Warehouse-No Rail	14.04	1000sqft	0.32	14,035.00	0
Other Asphalt Surfaces	54.37	1000sqft	1.25	54,370.00	0
Other Non-Asphalt Surfaces	7.00	1000sqft	0.16	7,000.00	0
Parking Lot	29.00	1000sqft	0.67	29,000.00	0
Automobile Care Center	5.40	1000sqft	0.12	5,400.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	73
Climate Zone	1			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## CHP Quincy - Plumas County, Summer

## Project Characteristics -

Land Use - Heated/Enclosed Parking included under Warehouse area along with all facilities other than office and auto care. Other Non-Asphalt is for heated sidewalk.

## Construction Phase -

## Trips and VMT -

## Grading -

Vehicle Trips - Updated based on traffic counts and assumptions.

Energy Use - Other Non-Asphalt used to estimate heated sidewalks/asphalt. Factor based on estimate of 10,000kWhr per 1000 sqft per year

## Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - Values updated for Tier 4 Final which is the tier required for any new engine.

## Area Coating -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	5,422.00	5,002.00
tblEnergyUse	NT24E	0.00	10.00
tblGrading	MaterialImported	0.00	12,260.00
tblLandUse	LandUseSquareFeet	14,040.00	14,035.00
tblLandUse	LotAcreage	0.44	1.44
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	2.20
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.26
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	1.3160e-003
tblTripsAndVMT	VendorTripNumber	21.00	20.00
tblTripsAndVMT	WorkerTripNumber	52.00	49.00
tblVehicleTrips	CC_TTP	62.00	47.00

## CHP Quincy - Plumas County, Summer

tblVehicleTrips	CNW_TTP	5.00	42.97
tblVehicleTrips	CW_TL	14.70	50.60
tblVehicleTrips	CW_TTP	33.00	10.03
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	0.00	5.99
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	0.00	5.99
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	68.93	5.99
tblVehicleTrips	WD_TR	1.68	0.00

## 2.0 Emissions Summary

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## CHP Quincy - Plumas County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.5539	137.0811	37.8526	0.2836	23.8217	2.4764	26.2981	11.4622	2.2940	13.7562	0.0000	29,592.67 16	29,592.67 16	2.0872	0.0000	29,644.85 07
2022	53.2843	18.0868	20.9107	0.0385	0.7471	0.8222	1.5693	0.2008	0.7735	0.9743	0.0000	3,731.302 5	3,731.302 5	0.6798	0.0000	3,748.296 5
Maximum	53.2843	137.0811	37.8526	0.2836	23.8217	2.4764	26.2981	11.4622	2.2940	13.7562	0.0000	29,592.67 16	29,592.67 16	2.0872	0.0000	29,644.85 07

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.5539	137.0811	37.8526	0.2836	23.8217	2.4764	26.2981	11.4622	2.2940	13.7562	0.0000	29,592.6716	29,592.6716	2.0872	0.0000	29,644.8507
2022	53.2843	18.0868	20.9107	0.0385	0.7471	0.8222	1.5693	0.2008	0.7735	0.9743	0.0000	3,731.3025	3,731.3025	0.6798	0.0000	3,748.2965
Maximum	53.2843	137.0811	37.8526	0.2836	23.8217	2.4764	26.2981	11.4622	2.2940	13.7562	0.0000	29,592.6716	29,592.6716	2.0872	0.0000	29,644.8507

[illegible]

## CHP Quincy - Plumas County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
Energy	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886
Mobile	0.5176	1.9142	6.1907	0.0135	0.9809	0.0170	0.9979	0.2626	0.0160	0.2786		1,351.6333	1,351.6333	0.0827		1,353.6999
Stationary	0.3843	0.1674	1.4163	3.1500e-003		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003		335.8057	335.8057	0.0471		336.9827
<b>Total</b>	<b>2.0360</b>	<b>2.1875</b>	<b>7.7090</b>	<b>0.0173</b>	<b>0.9809</b>	<b>0.0302</b>	<b>1.0111</b>	<b>0.2626</b>	<b>0.0292</b>	<b>0.2918</b>		<b>1,814.5009</b>	<b>1,814.5009</b>	<b>0.1322</b>	<b>2.3300e-003</b>	<b>1,818.5012</b>

## CHP Quincy - Plumas County, Summer

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
Energy	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886
Mobile	0.5176	1.9142	6.1907	0.0135	0.9809	0.0170	0.9979	0.2626	0.0160	0.2786		1,351.6333	1,351.6333	0.0827		1,353.6999
Stationary	0.3843	0.1674	1.4163	3.1500e-003		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003		335.8057	335.8057	0.0471		336.9827
<b>Total</b>	<b>2.0360</b>	<b>2.1875</b>	<b>7.7090</b>	<b>0.0173</b>	<b>0.9809</b>	<b>0.0302</b>	<b>1.0111</b>	<b>0.2626</b>	<b>0.0292</b>	<b>0.2918</b>		<b>1,814.5009</b>	<b>1,814.5009</b>	<b>0.1322</b>	<b>2.3300e-003</b>	<b>1,818.5012</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## CHP Quincy - Plumas County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2021	5/7/2021	5	5	
2	Grading	Grading	5/8/2021	5/19/2021	5	8	
3	Building Construction	Building Construction	5/20/2021	4/6/2022	5	230	
4	Paving	Paving	4/7/2022	5/2/2022	5	18	
5	Architectural Coating	Architectural Coating	5/3/2022	5/26/2022	5	18	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 2.08**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 57,953; Non-Residential Outdoor: 19,318; Striped Parking Area: 5,002 (Architectural Coating – sqft)**

**OffRoad Equipment**

## CHP Quincy - Plumas County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	1,533.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	49.00	20.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

## CHP Quincy - Plumas County, Summer

**3.1 Mitigation Measures Construction****3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3436	0.0000	18.3436	9.9727	0.0000	9.9727			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.3436</b>	<b>2.0445</b>	<b>20.3880</b>	<b>9.9727</b>	<b>1.8809</b>	<b>11.8536</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

## CHP Quincy - Plumas County, Summer

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4410	96.4453	15.0676	0.2430	5.2483	0.4295	5.6777	1.4285	0.4109	1.8394		25,653.25 12	25,653.25 12	0.8776		25,675.19 20
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2247	0.1388	1.6307	2.5600e-003	0.2299	2.4600e-003	0.2324	0.0610	2.2700e-003	0.0632		253.7635	253.7635	0.0175		254.2014
<b>Total</b>	<b>2.6657</b>	<b>96.5840</b>	<b>16.6984</b>	<b>0.2456</b>	<b>5.4782</b>	<b>0.4319</b>	<b>5.9101</b>	<b>1.4895</b>	<b>0.4131</b>	<b>1.9026</b>		<b>25,907.01 47</b>	<b>25,907.01 47</b>	<b>0.8952</b>		<b>25,929.39 34</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3436	0.0000	18.3436	9.9727	0.0000	9.9727			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.3436</b>	<b>2.0445</b>	<b>20.3880</b>	<b>9.9727</b>	<b>1.8809</b>	<b>11.8536</b>	<b>0.0000</b>	<b>3,685.656 9</b>	<b>3,685.656 9</b>	<b>1.1920</b>		<b>3,715.457 3</b>

## CHP Quincy - Plumas County, Summer

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.4410	96.4453	15.0676	0.2430	5.2483	0.4295	5.6777	1.4285	0.4109	1.8394		25,653.25 12	25,653.25 12	0.8776		25,675.19 20
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2247	0.1388	1.6307	2.5600e-003	0.2299	2.4600e-003	0.2324	0.0610	2.2700e-003	0.0632		253.7635	253.7635	0.0175		254.2014
<b>Total</b>	<b>2.6657</b>	<b>96.5840</b>	<b>16.6984</b>	<b>0.2456</b>	<b>5.4782</b>	<b>0.4319</b>	<b>5.9101</b>	<b>1.4895</b>	<b>0.4131</b>	<b>1.9026</b>		<b>25,907.01 47</b>	<b>25,907.01 47</b>	<b>0.8952</b>		<b>25,929.39 34</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895,149 5
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>		<b>2,871.928 5</b>	<b>2,871.928 5</b>	<b>0.9288</b>		<b>2,895,149 5</b>



## CHP Quincy - Plumas County, Summer

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1873	0.1156	1.3590	2.1300e-003	0.1916	2.0500e-003	0.1937	0.0508	1.8900e-003	0.0527		211.4696	211.4696	0.0146		211.8345
<b>Total</b>	<b>0.1873</b>	<b>0.1156</b>	<b>1.3590</b>	<b>2.1300e-003</b>	<b>0.1916</b>	<b>2.0500e-003</b>	<b>0.1937</b>	<b>0.0508</b>	<b>1.8900e-003</b>	<b>0.0527</b>		<b>211.4696</b>	<b>211.4696</b>	<b>0.0146</b>		<b>211.8345</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>	<b>0.0000</b>	<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895,1495</b>

## CHP Quincy - Plumas County, Summer

**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1873	0.1156	1.3590	2.1300e-003	0.1916	2.0500e-003	0.1937	0.0508	1.8900e-003	0.0527		211.4696	211.4696	0.0146		211.8345
<b>Total</b>	<b>0.1873</b>	<b>0.1156</b>	<b>1.3590</b>	<b>2.1300e-003</b>	<b>0.1916</b>	<b>2.0500e-003</b>	<b>0.1937</b>	<b>0.0508</b>	<b>1.8900e-003</b>	<b>0.0527</b>		<b>211.4696</b>	<b>211.4696</b>	<b>0.0146</b>		<b>211.8345</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

## CHP Quincy - Plumas County, Summer

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0932	2.2433	0.7231	4.8900e-003	0.1213	7.7800e-003	0.1291	0.0348	7.4400e-003	0.0423		512.7617	512.7617	0.0272		513.4424
Worker	0.6117	0.3777	4.4392	6.9700e-003	0.6259	6.7100e-003	0.6326	0.1660	6.1800e-003	0.1722		690.8006	690.8006	0.0477		691.9927
<b>Total</b>	<b>0.7049</b>	<b>2.6210</b>	<b>5.1624</b>	<b>0.0119</b>	<b>0.7472</b>	<b>0.0145</b>	<b>0.7616</b>	<b>0.2008</b>	<b>0.0136</b>	<b>0.2144</b>		<b>1,203.562 2</b>	<b>1,203.562 2</b>	<b>0.0749</b>		<b>1,205.435 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.363 9</b>	<b>2,553.363 9</b>	<b>0.6160</b>		<b>2,568.764 3</b>

## CHP Quincy - Plumas County, Summer

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0932	2.2433	0.7231	4.8900e-003	0.1213	7.7800e-003	0.1291	0.0348	7.4400e-003	0.0423		512.7617	512.7617	0.0272		513.4424
Worker	0.6117	0.3777	4.4392	6.9700e-003	0.6259	6.7100e-003	0.6326	0.1660	6.1800e-003	0.1722		690.8006	690.8006	0.0477		691.9927
<b>Total</b>	<b>0.7049</b>	<b>2.6210</b>	<b>5.1624</b>	<b>0.0119</b>	<b>0.7472</b>	<b>0.0145</b>	<b>0.7616</b>	<b>0.2008</b>	<b>0.0136</b>	<b>0.2144</b>		<b>1,203.562 2</b>	<b>1,203.562 2</b>	<b>0.0749</b>		<b>1,205.435 2</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.333 6</b>	<b>2,554.333 6</b>	<b>0.6120</b>		<b>2,569.632 2</b>

## CHP Quincy - Plumas County, Summer

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0834	2.1348	0.6294	4.8500e-003	0.1212	6.8700e-003	0.1281	0.0348	6.5700e-003	0.0414		509.0065	509.0065	0.0261		509.6581
Worker	0.5709	0.3363	3.9179	6.7300e-003	0.6259	6.2900e-003	0.6322	0.1660	5.7900e-003	0.1718		667.9624	667.9624	0.0418		669.0062
<b>Total</b>	<b>0.6543</b>	<b>2.4711</b>	<b>4.5473</b>	<b>0.0116</b>	<b>0.7471</b>	<b>0.0132</b>	<b>0.7603</b>	<b>0.2008</b>	<b>0.0124</b>	<b>0.2132</b>		<b>1,176.9689</b>	<b>1,176.9689</b>	<b>0.0678</b>		<b>1,178.6643</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

## CHP Quincy - Plumas County, Summer

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0834	2.1348	0.6294	4.8500e-003	0.1212	6.8700e-003	0.1281	0.0348	6.5700e-003	0.0414		509.0065	509.0065	0.0261		509.6581
Worker	0.5709	0.3363	3.9179	6.7300e-003	0.6259	6.2900e-003	0.6322	0.1660	5.7900e-003	0.1718		667.9624	667.9624	0.0418		669.0062
<b>Total</b>	<b>0.6543</b>	<b>2.4711</b>	<b>4.5473</b>	<b>0.0116</b>	<b>0.7471</b>	<b>0.0132</b>	<b>0.7603</b>	<b>0.2008</b>	<b>0.0124</b>	<b>0.2132</b>		<b>1,176.9689</b>	<b>1,176.9689</b>	<b>0.0678</b>		<b>1,178.6643</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.2795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2560</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>		<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>

## CHP Quincy - Plumas County, Summer

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2330	0.1373	1.5992	2.7500e-003	0.2555	2.5700e-003	0.2580	0.0678	2.3600e-003	0.0701		272.6377	272.6377	0.0170		273.0638
<b>Total</b>	<b>0.2330</b>	<b>0.1373</b>	<b>1.5992</b>	<b>2.7500e-003</b>	<b>0.2555</b>	<b>2.5700e-003</b>	<b>0.2580</b>	<b>0.0678</b>	<b>2.3600e-003</b>	<b>0.0701</b>		<b>272.6377</b>	<b>272.6377</b>	<b>0.0170</b>		<b>273.0638</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.2795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2560</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>	<b>0.0000</b>	<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>

## CHP Quincy - Plumas County, Summer

**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2330	0.1373	1.5992	2.7500e-003	0.2555	2.5700e-003	0.2580	0.0678	2.3600e-003	0.0701		272.6377	272.6377	0.0170		273.0638
<b>Total</b>	<b>0.2330</b>	<b>0.1373</b>	<b>1.5992</b>	<b>2.7500e-003</b>	<b>0.2555</b>	<b>2.5700e-003</b>	<b>0.2580</b>	<b>0.0678</b>	<b>2.3600e-003</b>	<b>0.0701</b>		<b>272.6377</b>	<b>272.6377</b>	<b>0.0170</b>		<b>273.0638</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>53.1678</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>



## CHP Quincy - Plumas County, Summer

**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1165	0.0686	0.7996	1.3700e-003	0.1277	1.2800e-003	0.1290	0.0339	1.1800e-003	0.0351		136.3189	136.3189	8.5200e-003		136.5319
<b>Total</b>	<b>0.1165</b>	<b>0.0686</b>	<b>0.7996</b>	<b>1.3700e-003</b>	<b>0.1277</b>	<b>1.2800e-003</b>	<b>0.1290</b>	<b>0.0339</b>	<b>1.1800e-003</b>	<b>0.0351</b>		<b>136.3189</b>	<b>136.3189</b>	<b>8.5200e-003</b>		<b>136.5319</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>53.1678</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## CHP Quincy - Plumas County, Summer

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1165	0.0686	0.7996	1.3700e-003	0.1277	1.2800e-003	0.1290	0.0339	1.1800e-003	0.0351		136.3189	136.3189	8.5200e-003		136.5319
<b>Total</b>	<b>0.1165</b>	<b>0.0686</b>	<b>0.7996</b>	<b>1.3700e-003</b>	<b>0.1277</b>	<b>1.2800e-003</b>	<b>0.1290</b>	<b>0.0339</b>	<b>1.1800e-003</b>	<b>0.0351</b>		<b>136.3189</b>	<b>136.3189</b>	<b>8.5200e-003</b>		<b>136.5319</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## CHP Quincy - Plumas County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5176	1.9142	6.1907	0.0135	0.9809	0.0170	0.9979	0.2626	0.0160	0.2786		1,351.633 3	1,351.633 3	0.0827		1,353.699 9
Unmitigated	0.5176	1.9142	6.1907	0.0135	0.9809	0.0170	0.9979	0.2626	0.0160	0.2786		1,351.633 3	1,351.633 3	0.0827		1,353.699 9

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Government Office Building	115.01	115.01	115.01	461,045	461,045
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	115.01	115.01	115.01	461,045	461,045

## 4.3 Trip Type Information

## CHP Quincy - Plumas County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
Government Office Building	50.60	6.60	6.60	10.03	47.00	42.97	100	0	0
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Government Office Building	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Other Asphalt Surfaces	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Other Non-Asphalt Surfaces	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Parking Lot	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Unrefrigerated Warehouse-No Rail	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## CHP Quincy - Plumas County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886
NaturalGas Unmitigated	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886

## CHP Quincy - Plumas County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	51.9288	5.6000e-004	5.0900e-003	4.2800e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1093	6.1093	1.2000e-004	1.1000e-004	6.1456
Government Office Building	1027.86	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9244	120.9244	2.3200e-003	2.2200e-003	121.6430
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0116</b>	<b>0.1059</b>	<b>0.0889</b>	<b>6.3000e-004</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>127.0337</b>	<b>127.0337</b>	<b>2.4400e-003</b>	<b>2.3300e-003</b>	<b>127.7886</b>

## CHP Quincy - Plumas County, Summer

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0.0519288	5.6000e-004	5.0900e-003	4.2800e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1093	6.1093	1.2000e-004	1.1000e-004	6.1456
Government Office Building	1.02786	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9244	120.9244	2.3200e-003	2.2200e-003	121.6430
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0116</b>	<b>0.1059</b>	<b>0.0889</b>	<b>6.3000e-004</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>127.0337</b>	<b>127.0337</b>	<b>2.4400e-003</b>	<b>2.3300e-003</b>	<b>127.7886</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## CHP Quincy - Plumas County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
Unmitigated	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
<b>Total</b>	<b>1.1226</b>	<b>1.2000e-004</b>	<b>0.0132</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0282</b>	<b>0.0282</b>	<b>7.0000e-005</b>		<b>0.0301</b>



## CHP Quincy - Plumas County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
<b>Total</b>	<b>1.1226</b>	<b>1.2000e-004</b>	<b>0.0132</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0282</b>	<b>0.0282</b>	<b>7.0000e-005</b>		<b>0.0301</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## CHP Quincy - Plumas County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	100	400	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (300 - 600 HP)	0.3843	0.1674	1.4163	3.1500e-003		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003		335.8057	335.8057	0.0471		336.9827
<b>Total</b>	<b>0.3843</b>	<b>0.1674</b>	<b>1.4163</b>	<b>3.1500e-003</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>335.8057</b>	<b>335.8057</b>	<b>0.0471</b>		<b>336.9827</b>

**11.0 Vegetation**

## CHP Quincy - Plumas County, Winter

**CHP Quincy**  
**Plumas County, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	19.20	1000sqft	1.44	19,200.00	0
Unrefrigerated Warehouse-No Rail	14.04	1000sqft	0.32	14,035.00	0
Other Asphalt Surfaces	54.37	1000sqft	1.25	54,370.00	0
Other Non-Asphalt Surfaces	7.00	1000sqft	0.16	7,000.00	0
Parking Lot	29.00	1000sqft	0.67	29,000.00	0
Automobile Care Center	5.40	1000sqft	0.12	5,400.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	73
Climate Zone	1			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## CHP Quincy - Plumas County, Winter

## Project Characteristics -

Land Use - Heated/Enclosed Parking included under Warehouse area along with all facilities other than office and auto care. Other Non-Asphalt is for heated sidewalk.

## Construction Phase -

## Trips and VMT -

## Grading -

Vehicle Trips - Updated based on traffic counts and assumptions.

Energy Use - Other Non-Asphalt used to estimate heated sidewalks/asphalt. Factor based on estimate of 10,000kWhr per 1000 sqft per year

## Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - Values updated for Tier 4 Final which is the tier required for any new engine.

## Area Coating -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	5,422.00	5,002.00
tblEnergyUse	NT24E	0.00	10.00
tblGrading	MaterialImported	0.00	12,260.00
tblLandUse	LandUseSquareFeet	14,040.00	14,035.00
tblLandUse	LotAcreage	0.44	1.44
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	2.20
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.26
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	1.3160e-003
tblTripsAndVMT	VendorTripNumber	21.00	20.00
tblTripsAndVMT	WorkerTripNumber	52.00	49.00
tblVehicleTrips	CC_TTP	62.00	47.00

## CHP Quincy - Plumas County, Winter

tblVehicleTrips	CNW_TTP	5.00	42.97
tblVehicleTrips	CW_TL	14.70	50.60
tblVehicleTrips	CW_TTP	33.00	10.03
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	0.00	5.99
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	0.00	5.99
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	68.93	5.99
tblVehicleTrips	WD_TR	1.68	0.00

## 2.0 Emissions Summary

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## CHP Quincy - Plumas County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.6696	139.5738	39.5081	0.2806	23.8217	2.4896	26.3113	11.4622	2.3067	13.7689	0.0000	29,273.8681	29,273.8681	2.1873	0.0000	29,328.5508
2022	53.2990	18.2373	21.1072	0.0379	0.7471	0.8226	1.5697	0.2008	0.7739	0.9747	0.0000	3,670.9321	3,670.9321	0.6816	0.0000	3,687.9715
Maximum	53.2990	139.5738	39.5081	0.2806	23.8217	2.4896	26.3113	11.4622	2.3067	13.7689	0.0000	29,273.8681	29,273.8681	2.1873	0.0000	29,328.5508

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.6696	139.5738	39.5081	0.2806	23.8217	2.4896	26.3113	11.4622	2.3067	13.7689	0.0000	29,273.8681	29,273.8681	2.1873	0.0000	29,328.5508
2022	53.2990	18.2373	21.1072	0.0379	0.7471	0.8226	1.5697	0.2008	0.7739	0.9747	0.0000	3,670.9321	3,670.9321	0.6816	0.0000	3,687.9715
Maximum	53.2990	139.5738	39.5081	0.2806	23.8217	2.4896	26.3113	11.4622	2.3067	13.7689	0.0000	29,273.8681	29,273.8681	2.1873	0.0000	29,328.5508

[illegible]

## CHP Quincy - Plumas County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
Energy	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886
Mobile	0.4724	2.1575	6.5011	0.0127	0.9809	0.0171	0.9980	0.2626	0.0161	0.2787		1,273.1756	1,273.1756	0.0821		1,275.2281
Stationary	0.3843	0.1674	1.4163	3.1500e-003		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003		335.8057	335.8057	0.0471		336.9827
<b>Total</b>	<b>1.9909</b>	<b>2.4308</b>	<b>8.0195</b>	<b>0.0165</b>	<b>0.9809</b>	<b>0.0304</b>	<b>1.0113</b>	<b>0.2626</b>	<b>0.0293</b>	<b>0.2920</b>		<b>1,736.0431</b>	<b>1,736.0431</b>	<b>0.1317</b>	<b>2.3300e-003</b>	<b>1,740.0294</b>

## CHP Quincy - Plumas County, Winter

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
Energy	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886
Mobile	0.4724	2.1575	6.5011	0.0127	0.9809	0.0171	0.9980	0.2626	0.0161	0.2787		1,273.1756	1,273.1756	0.0821		1,275.2281
Stationary	0.3843	0.1674	1.4163	3.1500e-003		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003		335.8057	335.8057	0.0471		336.9827
<b>Total</b>	<b>1.9909</b>	<b>2.4308</b>	<b>8.0195</b>	<b>0.0165</b>	<b>0.9809</b>	<b>0.0304</b>	<b>1.0113</b>	<b>0.2626</b>	<b>0.0293</b>	<b>0.2920</b>		<b>1,736.0431</b>	<b>1,736.0431</b>	<b>0.1317</b>	<b>2.3300e-003</b>	<b>1,740.0294</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**



## CHP Quincy - Plumas County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/1/2021	5/7/2021	5	5	
2	Grading	Grading	5/8/2021	5/19/2021	5	8	
3	Building Construction	Building Construction	5/20/2021	4/6/2022	5	230	
4	Paving	Paving	4/7/2022	5/2/2022	5	18	
5	Architectural Coating	Architectural Coating	5/3/2022	5/26/2022	5	18	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 2.08**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 57,953; Non-Residential Outdoor: 19,318; Striped Parking Area: 5,002 (Architectural Coating – sqft)**

**OffRoad Equipment**

## CHP Quincy - Plumas County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	1,533.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	49.00	20.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

## CHP Quincy - Plumas County, Winter

**3.1 Mitigation Measures Construction****3.2 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3436	0.0000	18.3436	9.9727	0.0000	9.9727			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.3436</b>	<b>2.0445</b>	<b>20.3880</b>	<b>9.9727</b>	<b>1.8809</b>	<b>11.8536</b>		<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

## CHP Quincy - Plumas County, Winter

**3.2 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5290	98.8895	16.6868	0.2402	5.2483	0.4427	5.6910	1.4285	0.4235	1.8521		25,353.4670	25,353.4670	0.9783		25,377.9241
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2525	0.1873	1.6671	2.3700e-003	0.2299	2.4600e-003	0.2324	0.0610	2.2700e-003	0.0632		234.7442	234.7442	0.0170		235.1695
<b>Total</b>	<b>2.7814</b>	<b>99.0767</b>	<b>18.3538</b>	<b>0.2426</b>	<b>5.4782</b>	<b>0.4451</b>	<b>5.9233</b>	<b>1.4895</b>	<b>0.4258</b>	<b>1.9153</b>		<b>25,588.2112</b>	<b>25,588.2112</b>	<b>0.9953</b>		<b>25,613.0936</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.3436	0.0000	18.3436	9.9727	0.0000	9.9727			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
<b>Total</b>	<b>3.8882</b>	<b>40.4971</b>	<b>21.1543</b>	<b>0.0380</b>	<b>18.3436</b>	<b>2.0445</b>	<b>20.3880</b>	<b>9.9727</b>	<b>1.8809</b>	<b>11.8536</b>	<b>0.0000</b>	<b>3,685.6569</b>	<b>3,685.6569</b>	<b>1.1920</b>		<b>3,715.4573</b>

## CHP Quincy - Plumas County, Winter

**3.2 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5290	98.8895	16.6868	0.2402	5.2483	0.4427	5.6910	1.4285	0.4235	1.8521		25,353.4670	25,353.4670	0.9783		25,377.9241
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2525	0.1873	1.6671	2.3700e-003	0.2299	2.4600e-003	0.2324	0.0610	2.2700e-003	0.0632		234.7442	234.7442	0.0170		235.1695
<b>Total</b>	<b>2.7814</b>	<b>99.0767</b>	<b>18.3538</b>	<b>0.2426</b>	<b>5.4782</b>	<b>0.4451</b>	<b>5.9233</b>	<b>1.4895</b>	<b>0.4258</b>	<b>1.9153</b>		<b>25,588.2112</b>	<b>25,588.2112</b>	<b>0.9953</b>		<b>25,613.0936</b>

**3.3 Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895,1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>		<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895,1495</b>

## CHP Quincy - Plumas County, Winter

**3.3 Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2104	0.1560	1.3892	1.9800e-003	0.1916	2.0500e-003	0.1937	0.0508	1.8900e-003	0.0527		195.6202	195.6202	0.0142		195.9746
<b>Total</b>	<b>0.2104</b>	<b>0.1560</b>	<b>1.3892</b>	<b>1.9800e-003</b>	<b>0.1916</b>	<b>2.0500e-003</b>	<b>0.1937</b>	<b>0.0508</b>	<b>1.8900e-003</b>	<b>0.0527</b>		<b>195.6202</b>	<b>195.6202</b>	<b>0.0142</b>		<b>195.9746</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895,1495
<b>Total</b>	<b>2.2903</b>	<b>24.7367</b>	<b>15.8575</b>	<b>0.0296</b>	<b>6.5523</b>	<b>1.1599</b>	<b>7.7123</b>	<b>3.3675</b>	<b>1.0671</b>	<b>4.4346</b>	<b>0.0000</b>	<b>2,871.9285</b>	<b>2,871.9285</b>	<b>0.9288</b>		<b>2,895,1495</b>

## CHP Quincy - Plumas County, Winter

**3.3 Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2104	0.1560	1.3892	1.9800e-003	0.1916	2.0500e-003	0.1937	0.0508	1.8900e-003	0.0527		195.6202	195.6202	0.0142		195.9746
<b>Total</b>	<b>0.2104</b>	<b>0.1560</b>	<b>1.3892</b>	<b>1.9800e-003</b>	<b>0.1916</b>	<b>2.0500e-003</b>	<b>0.1937</b>	<b>0.0508</b>	<b>1.8900e-003</b>	<b>0.0527</b>		<b>195.6202</b>	<b>195.6202</b>	<b>0.0142</b>		<b>195.9746</b>

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

## CHP Quincy - Plumas County, Winter

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1025	2.2824	0.9134	4.7900e-003	0.1213	8.2400e-003	0.1295	0.0348	7.8800e-003	0.0427		502.5423	502.5423	0.0311		503.3197
Worker	0.6873	0.5098	4.5381	6.4500e-003	0.6259	6.7100e-003	0.6326	0.1660	6.1800e-003	0.1722		639.0259	639.0259	0.0463		640.1837
<b>Total</b>	<b>0.7898</b>	<b>2.7921</b>	<b>5.4515</b>	<b>0.0112</b>	<b>0.7472</b>	<b>0.0150</b>	<b>0.7621</b>	<b>0.2008</b>	<b>0.0141</b>	<b>0.2149</b>		<b>1,141.5682</b>	<b>1,141.5682</b>	<b>0.0774</b>		<b>1,143.5033</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>



## CHP Quincy - Plumas County, Winter

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1025	2.2824	0.9134	4.7900e-003	0.1213	8.2400e-003	0.1295	0.0348	7.8800e-003	0.0427		502.5423	502.5423	0.0311		503.3197
Worker	0.6873	0.5098	4.5381	6.4500e-003	0.6259	6.7100e-003	0.6326	0.1660	6.1800e-003	0.1722		639.0259	639.0259	0.0463		640.1837
<b>Total</b>	<b>0.7898</b>	<b>2.7921</b>	<b>5.4515</b>	<b>0.0112</b>	<b>0.7472</b>	<b>0.0150</b>	<b>0.7621</b>	<b>0.2008</b>	<b>0.0141</b>	<b>0.2149</b>		<b>1,141.5682</b>	<b>1,141.5682</b>	<b>0.0774</b>		<b>1,143.5033</b>

**3.4 Building Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

## CHP Quincy - Plumas County, Winter

**3.4 Building Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0914	2.1686	0.7882	4.7600e-003	0.1212	7.2800e-003	0.1285	0.0348	6.9600e-003	0.0418		498.7790	498.7790	0.0296		499.5186
Worker	0.6428	0.4531	3.9557	6.2300e-003	0.6259	6.2900e-003	0.6322	0.1660	5.7900e-003	0.1718		617.8196	617.8196	0.0400		618.8207
<b>Total</b>	<b>0.7342</b>	<b>2.6217</b>	<b>4.7438</b>	<b>0.0110</b>	<b>0.7471</b>	<b>0.0136</b>	<b>0.7607</b>	<b>0.2008</b>	<b>0.0128</b>	<b>0.2136</b>		<b>1,116.5986</b>	<b>1,116.5986</b>	<b>0.0696</b>		<b>1,118.3393</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

## CHP Quincy - Plumas County, Winter

**3.4 Building Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0914	2.1686	0.7882	4.7600e-003	0.1212	7.2800e-003	0.1285	0.0348	6.9600e-003	0.0418		498.7790	498.7790	0.0296		499.5186
Worker	0.6428	0.4531	3.9557	6.2300e-003	0.6259	6.2900e-003	0.6322	0.1660	5.7900e-003	0.1718		617.8196	617.8196	0.0400		618.8207
<b>Total</b>	<b>0.7342</b>	<b>2.6217</b>	<b>4.7438</b>	<b>0.0110</b>	<b>0.7471</b>	<b>0.0136</b>	<b>0.7607</b>	<b>0.2008</b>	<b>0.0128</b>	<b>0.2136</b>		<b>1,116.5986</b>	<b>1,116.5986</b>	<b>0.0696</b>		<b>1,118.3393</b>

**3.5 Paving - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.2795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2560</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>		<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>

## CHP Quincy - Plumas County, Winter

**3.5 Paving - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2624	0.1849	1.6146	2.5400e-003	0.2555	2.5700e-003	0.2580	0.0678	2.3600e-003	0.0701		252.1713	252.1713	0.0163		252.5799
<b>Total</b>	<b>0.2624</b>	<b>0.1849</b>	<b>1.6146</b>	<b>2.5400e-003</b>	<b>0.2555</b>	<b>2.5700e-003</b>	<b>0.2580</b>	<b>0.0678</b>	<b>2.3600e-003</b>	<b>0.0701</b>		<b>252.1713</b>	<b>252.1713</b>	<b>0.0163</b>		<b>252.5799</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.2795					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2560</b>	<b>9.5221</b>	<b>12.1940</b>	<b>0.0189</b>		<b>0.4877</b>	<b>0.4877</b>		<b>0.4504</b>	<b>0.4504</b>	<b>0.0000</b>	<b>1,805.1297</b>	<b>1,805.1297</b>	<b>0.5672</b>		<b>1,819.3091</b>

## CHP Quincy - Plumas County, Winter

**3.5 Paving - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2624	0.1849	1.6146	2.5400e-003	0.2555	2.5700e-003	0.2580	0.0678	2.3600e-003	0.0701		252.1713	252.1713	0.0163		252.5799
<b>Total</b>	<b>0.2624</b>	<b>0.1849</b>	<b>1.6146</b>	<b>2.5400e-003</b>	<b>0.2555</b>	<b>2.5700e-003</b>	<b>0.2580</b>	<b>0.0678</b>	<b>2.3600e-003</b>	<b>0.0701</b>		<b>252.1713</b>	<b>252.1713</b>	<b>0.0163</b>		<b>252.5799</b>

**3.6 Architectural Coating - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>53.1678</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## CHP Quincy - Plumas County, Winter

**3.6 Architectural Coating - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1312	0.0925	0.8073	1.2700e-003	0.1277	1.2800e-003	0.1290	0.0339	1.1800e-003	0.0351		126.0856	126.0856	8.1700e-003		126.2899
<b>Total</b>	<b>0.1312</b>	<b>0.0925</b>	<b>0.8073</b>	<b>1.2700e-003</b>	<b>0.1277</b>	<b>1.2800e-003</b>	<b>0.1290</b>	<b>0.0339</b>	<b>1.1800e-003</b>	<b>0.0351</b>		<b>126.0856</b>	<b>126.0856</b>	<b>8.1700e-003</b>		<b>126.2899</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	52.9632					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>53.1678</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## CHP Quincy - Plumas County, Winter

**3.6 Architectural Coating - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1312	0.0925	0.8073	1.2700e-003	0.1277	1.2800e-003	0.1290	0.0339	1.1800e-003	0.0351		126.0856	126.0856	8.1700e-003		126.2899
<b>Total</b>	<b>0.1312</b>	<b>0.0925</b>	<b>0.8073</b>	<b>1.2700e-003</b>	<b>0.1277</b>	<b>1.2800e-003</b>	<b>0.1290</b>	<b>0.0339</b>	<b>1.1800e-003</b>	<b>0.0351</b>		<b>126.0856</b>	<b>126.0856</b>	<b>8.1700e-003</b>		<b>126.2899</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## CHP Quincy - Plumas County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4724	2.1575	6.5011	0.0127	0.9809	0.0171	0.9980	0.2626	0.0161	0.2787		1,273.1756	1,273.1756	0.0821		1,275.2281
Unmitigated	0.4724	2.1575	6.5011	0.0127	0.9809	0.0171	0.9980	0.2626	0.0161	0.2787		1,273.1756	1,273.1756	0.0821		1,275.2281

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Government Office Building	115.01	115.01	115.01	461,045	461,045
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	115.01	115.01	115.01	461,045	461,045

## 4.3 Trip Type Information



## CHP Quincy - Plumas County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	14.70	6.60	6.60	33.00	48.00	19.00	21	51	28
Government Office Building	50.60	6.60	6.60	10.03	47.00	42.97	100	0	0
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Government Office Building	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Other Asphalt Surfaces	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Other Non-Asphalt Surfaces	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Parking Lot	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496
Unrefrigerated Warehouse-No Rail	0.462093	0.044877	0.228058	0.156156	0.045007	0.007766	0.016223	0.028198	0.001953	0.001738	0.005683	0.000751	0.001496

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## CHP Quincy - Plumas County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886
NaturalGas Unmitigated	0.0116	0.1059	0.0889	6.4000e-004		8.0500e-003	8.0500e-003		8.0500e-003	8.0500e-003		127.0337	127.0337	2.4300e-003	2.3300e-003	127.7886

## CHP Quincy - Plumas County, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	51.9288	5.6000e-004	5.0900e-003	4.2800e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1093	6.1093	1.2000e-004	1.1000e-004	6.1456
Government Office Building	1027.86	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9244	120.9244	2.3200e-003	2.2200e-003	121.6430
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0116</b>	<b>0.1059</b>	<b>0.0889</b>	<b>6.3000e-004</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>127.0337</b>	<b>127.0337</b>	<b>2.4400e-003</b>	<b>2.3300e-003</b>	<b>127.7886</b>

## CHP Quincy - Plumas County, Winter

**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	0.0519288	5.6000e-004	5.0900e-003	4.2800e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1093	6.1093	1.2000e-004	1.1000e-004	6.1456
Government Office Building	1.02786	0.0111	0.1008	0.0847	6.0000e-004		7.6600e-003	7.6600e-003		7.6600e-003	7.6600e-003		120.9244	120.9244	2.3200e-003	2.2200e-003	121.6430
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0116</b>	<b>0.1059</b>	<b>0.0889</b>	<b>6.3000e-004</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>8.0500e-003</b>	<b>8.0500e-003</b>		<b>127.0337</b>	<b>127.0337</b>	<b>2.4400e-003</b>	<b>2.3300e-003</b>	<b>127.7886</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## CHP Quincy - Plumas County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
Unmitigated	1.1226	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
<b>Total</b>	<b>1.1226</b>	<b>1.2000e-004</b>	<b>0.0132</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0282</b>	<b>0.0282</b>	<b>7.0000e-005</b>		<b>0.0301</b>

## CHP Quincy - Plumas County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2625					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8588					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2300e-003	1.2000e-004	0.0132	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0282	0.0282	7.0000e-005		0.0301
<b>Total</b>	<b>1.1226</b>	<b>1.2000e-004</b>	<b>0.0132</b>	<b>0.0000</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>0.0282</b>	<b>0.0282</b>	<b>7.0000e-005</b>		<b>0.0301</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## CHP Quincy - Plumas County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	100	400	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (300 - 600 HP)	0.3843	0.1674	1.4163	3.1500e-003		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003		335.8057	335.8057	0.0471		336.9827
<b>Total</b>	<b>0.3843</b>	<b>0.1674</b>	<b>1.4163</b>	<b>3.1500e-003</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>5.1500e-003</b>	<b>5.1500e-003</b>		<b>335.8057</b>	<b>335.8057</b>	<b>0.0471</b>		<b>336.9827</b>

**11.0 Vegetation**

## CHP Quincy - Existing - Plumas County, Annual

## CHP Quincy - Existing Plumas County, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	4.50	1000sqft	0.10	4,500.00	0

#### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	73
Climate Zone	1			Operational Year	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Office Building + Vehicle Maintenance

Construction Phase - No construction

Energy Use -

Vehicle Trips - Updated Based on Traffic Count Data and Assumptions



## CHP Quincy - Existing - Plumas County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TTP	62.00	47.00
tblVehicleTrips	CNW_TTP	5.00	17.67
tblVehicleTrips	CW_TL	14.70	42.45
tblVehicleTrips	CW_TTP	33.00	35.33
tblVehicleTrips	ST_TR	0.00	30.77
tblVehicleTrips	SU_TR	0.00	30.77
tblVehicleTrips	WD_TR	68.93	30.77

## 2.0 Emissions Summary

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## CHP Quincy - Existing - Plumas County, Annual

## 2.1 Overall Construction

### Unmitigated Construction

[illegible]

### Mitigated Construction

[illegible][illegible]

## CHP Quincy - Existing - Plumas County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0228	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	9.0000e-005
Energy	5.9000e-004	5.3900e-003	4.5200e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	23.1967	23.1967	9.0000e-004	2.7000e-004	23.2994
Mobile	0.1551	0.6457	2.1480	3.1900e-003	0.2113	6.4600e-003	0.2178	0.0569	6.1000e-003	0.0630	0.0000	289.0308	289.0308	0.0241	0.0000	289.6336
Waste						0.0000	0.0000		0.0000	0.0000	0.8505	0.0000	0.8505	0.0503	0.0000	2.1072
Water						0.0000	0.0000		0.0000	0.0000	0.2836	1.9651	2.2487	0.0292	7.1000e-004	3.1896
<b>Total</b>	<b>0.1785</b>	<b>0.6511</b>	<b>2.1526</b>	<b>3.2200e-003</b>	<b>0.2113</b>	<b>6.8700e-003</b>	<b>0.2182</b>	<b>0.0569</b>	<b>6.5100e-003</b>	<b>0.0634</b>	<b>1.1341</b>	<b>314.1926</b>	<b>315.3268</b>	<b>0.1045</b>	<b>9.8000e-004</b>	<b>318.2299</b>

## CHP Quincy - Existing - Plumas County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0228	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	9.0000e-005
Energy	5.9000e-004	5.3900e-003	4.5200e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	23.1967	23.1967	9.0000e-004	2.7000e-004	23.2994
Mobile	0.1551	0.6457	2.1480	3.1900e-003	0.2113	6.4600e-003	0.2178	0.0569	6.1000e-003	0.0630	0.0000	289.0308	289.0308	0.0241	0.0000	289.6336
Waste						0.0000	0.0000		0.0000	0.0000	0.8505	0.0000	0.8505	0.0503	0.0000	2.1072
Water						0.0000	0.0000		0.0000	0.0000	0.2836	1.9651	2.2487	0.0292	7.1000e-004	3.1896
<b>Total</b>	<b>0.1785</b>	<b>0.6511</b>	<b>2.1526</b>	<b>3.2200e-003</b>	<b>0.2113</b>	<b>6.8700e-003</b>	<b>0.2182</b>	<b>0.0569</b>	<b>6.5100e-003</b>	<b>0.0634</b>	<b>1.1341</b>	<b>314.1926</b>	<b>315.3268</b>	<b>0.1045</b>	<b>9.8000e-004</b>	<b>318.2299</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/13/2018	8/12/2018	5	0	

**Acres of Grading (Site Preparation Phase): 0**

## CHP Quincy - Existing - Plumas County, Annual

**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## CHP Quincy - Existing - Plumas County, Annual

### 3.2 Demolition - 2018

### Unmitigated Construction On-Site

[illegible]

### Unmitigated Construction Off-Site

[illegible]

## CHP Quincy - Existing - Plumas County, Annual

**3.2 Demolition - 2018****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

## CHP Quincy - Existing - Plumas County, Annual

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1551	0.6457	2.1480	3.1900e-003	0.2113	6.4600e-003	0.2178	0.0569	6.1000e-003	0.0630	0.0000	289.0308	289.0308	0.0241	0.0000	289.6336
Unmitigated	0.1551	0.6457	2.1480	3.1900e-003	0.2113	6.4600e-003	0.2178	0.0569	6.1000e-003	0.0630	0.0000	289.0308	289.0308	0.0241	0.0000	289.6336

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	138.47	138.47	138.47	568,854	568,854
Total	138.47	138.47	138.47	568,854	568,854

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	42.45	6.60	6.60	35.33	47.00	17.67	50	34	16

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.412157	0.057405	0.231307	0.175151	0.063398	0.010602	0.014016	0.022670	0.001822	0.002161	0.006316	0.000745	0.002249



## CHP Quincy - Existing - Plumas County, Annual

**5.0 Energy Detail**

Historical Energy Use: Y

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.3325	17.3325	7.8000e-004	1.6000e-004	17.4004
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.3325	17.3325	7.8000e-004	1.6000e-004	17.4004
NaturalGas Mitigated	5.9000e-004	5.3900e-003	4.5200e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8642	5.8642	1.1000e-004	1.1000e-004	5.8990
NaturalGas Unmitigated	5.9000e-004	5.3900e-003	4.5200e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8642	5.8642	1.1000e-004	1.1000e-004	5.8990

## CHP Quincy - Existing - Plumas County, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	109890	5.9000e-004	5.3900e-003	4.5200e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8642	5.8642	1.1000e-004	1.1000e-004	5.8990
<b>Total</b>		<b>5.9000e-004</b>	<b>5.3900e-003</b>	<b>4.5200e-003</b>	<b>3.0000e-005</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>5.8642</b>	<b>5.8642</b>	<b>1.1000e-004</b>	<b>1.1000e-004</b>	<b>5.8990</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	109890	5.9000e-004	5.3900e-003	4.5200e-003	3.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	5.8642	5.8642	1.1000e-004	1.1000e-004	5.8990
<b>Total</b>		<b>5.9000e-004</b>	<b>5.3900e-003</b>	<b>4.5200e-003</b>	<b>3.0000e-005</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>		<b>4.1000e-004</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>5.8642</b>	<b>5.8642</b>	<b>1.1000e-004</b>	<b>1.1000e-004</b>	<b>5.8990</b>

## CHP Quincy - Existing - Plumas County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	59580	17.3325	7.8000e-004	1.6000e-004	17.4004
<b>Total</b>		<b>17.3325</b>	<b>7.8000e-004</b>	<b>1.6000e-004</b>	<b>17.4004</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	59580	17.3325	7.8000e-004	1.6000e-004	17.4004
<b>Total</b>		<b>17.3325</b>	<b>7.8000e-004</b>	<b>1.6000e-004</b>	<b>17.4004</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## CHP Quincy - Existing - Plumas County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0228	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	9.0000e-005
Unmitigated	0.0228	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	9.0000e-005

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	9.0000e-005
<b>Total</b>	<b>0.0228</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>9.0000e-005</b>

## CHP Quincy - Existing - Plumas County, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	8.0000e-005	8.0000e-005	0.0000	0.0000	9.0000e-005
<b>Total</b>	<b>0.0228</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>9.0000e-005</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## CHP Quincy - Existing - Plumas County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2487	0.0292	7.1000e-004	3.1896
Unmitigated	2.2487	0.0292	7.1000e-004	3.1896

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	0.893969 / 0.547916	2.2487	0.0292	7.1000e-004	3.1896
<b>Total</b>		<b>2.2487</b>	<b>0.0292</b>	<b>7.1000e-004</b>	<b>3.1896</b>

## CHP Quincy - Existing - Plumas County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	0.893969 / 0.547916	2.2487	0.0292	7.1000e-004	3.1896
<b>Total</b>		<b>2.2487</b>	<b>0.0292</b>	<b>7.1000e-004</b>	<b>3.1896</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.8505	0.0503	0.0000	2.1072
Unmitigated	0.8505	0.0503	0.0000	2.1072

## CHP Quincy - Existing - Plumas County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	4.19	0.8505	0.0503	0.0000	2.1072
<b>Total</b>		<b>0.8505</b>	<b>0.0503</b>	<b>0.0000</b>	<b>2.1072</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	4.19	0.8505	0.0503	0.0000	2.1072
<b>Total</b>		<b>0.8505</b>	<b>0.0503</b>	<b>0.0000</b>	<b>2.1072</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## CHP Quincy - Existing - Plumas County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## CHP Quincy - Existing - Plumas County, Summer

## CHP Quincy - Existing

### Plumas County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	4.50	1000sqft	0.10	4,500.00	0

### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	73
Climate Zone	1			Operational Year	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Office Building + Vehicle Maintenance

Construction Phase - No construction

Energy Use -

Vehicle Trips - Updated Based on Traffic Count Data and Assumptions

## CHP Quincy - Existing - Plumas County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TTP	62.00	47.00
tblVehicleTrips	CNW_TTP	5.00	17.67
tblVehicleTrips	CW_TL	14.70	42.45
tblVehicleTrips	CW_TTP	33.00	35.33
tblVehicleTrips	ST_TR	0.00	30.77
tblVehicleTrips	SU_TR	0.00	30.77
tblVehicleTrips	WD_TR	68.93	30.77

## 2.0 Emissions Summary

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## CHP Quincy - Existing - Plumas County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

[illegible]

### Mitigated Construction

[illegible][illegible]

## CHP Quincy - Existing - Plumas County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
Energy	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
Mobile	0.9160	3.2503	11.6713	0.0184	1.2129	0.0354	1.2483	0.3252	0.0335	0.3587		1,839.4279	1,839.4279	0.1491		1,843.1560
<b>Total</b>	<b>1.0442</b>	<b>3.2798</b>	<b>11.6966</b>	<b>0.0186</b>	<b>1.2129</b>	<b>0.0377</b>	<b>1.2505</b>	<b>0.3252</b>	<b>0.0357</b>	<b>0.3609</b>		<b>1,874.8487</b>	<b>1,874.8487</b>	<b>0.1498</b>	<b>6.5000e-004</b>	<b>1,878.7873</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
Energy	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
Mobile	0.9160	3.2503	11.6713	0.0184	1.2129	0.0354	1.2483	0.3252	0.0335	0.3587		1,839.4279	1,839.4279	0.1491		1,843.1560
<b>Total</b>	<b>1.0442</b>	<b>3.2798</b>	<b>11.6966</b>	<b>0.0186</b>	<b>1.2129</b>	<b>0.0377</b>	<b>1.2505</b>	<b>0.3252</b>	<b>0.0357</b>	<b>0.3609</b>		<b>1,874.8487</b>	<b>1,874.8487</b>	<b>0.1498</b>	<b>6.5000e-004</b>	<b>1,878.7873</b>

## CHP Quincy - Existing - Plumas County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/13/2018	8/12/2018	5	0	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

## CHP Quincy - Existing - Plumas County, Summer

### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2018

### Unmitigated Construction On-Site

[illegible]

### Unmitigated Construction Off-Site

[illegible]

## CHP Quincy - Existing - Plumas County, Summer

**3.2 Demolition - 2018****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**



## CHP Quincy - Existing - Plumas County, Summer

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9160	3.2503	11.6713	0.0184	1.2129	0.0354	1.2483	0.3252	0.0335	0.3587		1,839.4279	1,839.4279	0.1491		1,843.1560
Unmitigated	0.9160	3.2503	11.6713	0.0184	1.2129	0.0354	1.2483	0.3252	0.0335	0.3587		1,839.4279	1,839.4279	0.1491		1,843.1560

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	138.47	138.47	138.47	568,854	568,854
Total	138.47	138.47	138.47	568,854	568,854

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	42.45	6.60	6.60	35.33	47.00	17.67	50	34	16

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.412157	0.057405	0.231307	0.175151	0.063398	0.010602	0.014016	0.022670	0.001822	0.002161	0.006316	0.000745	0.002249

## CHP Quincy - Existing - Plumas County, Summer

**5.0 Energy Detail**

Historical Energy Use: Y

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
NaturalGas Unmitigated	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303

## CHP Quincy - Existing - Plumas County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	301.068	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
<b>Total</b>		<b>3.2500e-003</b>	<b>0.0295</b>	<b>0.0248</b>	<b>1.8000e-004</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>35.4198</b>	<b>35.4198</b>	<b>6.8000e-004</b>	<b>6.5000e-004</b>	<b>35.6303</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	0.301068	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
<b>Total</b>		<b>3.2500e-003</b>	<b>0.0295</b>	<b>0.0248</b>	<b>1.8000e-004</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>35.4198</b>	<b>35.4198</b>	<b>6.8000e-004</b>	<b>6.5000e-004</b>	<b>35.6303</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

## CHP Quincy - Existing - Plumas County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
Unmitigated	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
<b>Total</b>	<b>0.1249</b>	<b>0.0000</b>	<b>4.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>	<b>0.0000</b>		<b>1.0500e-003</b>

## CHP Quincy - Existing - Plumas County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
<b>Total</b>	<b>0.1249</b>	<b>0.0000</b>	<b>4.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>	<b>0.0000</b>		<b>1.0500e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## CHP Quincy - Existing - Plumas County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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CHP Quincy - Existing - Plumas County, Winter

## CHP Quincy - Existing

### Plumas County, Winter

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	4.50	1000sqft	0.10	4,500.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	73
<b>Climate Zone</b>	1			<b>Operational Year</b>	2018
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Office Building + Vehicle Maintenance

Construction Phase - No construction

Energy Use -

Vehicle Trips - Updated Based on Traffic Count Data and Assumptions

## CHP Quincy - Existing - Plumas County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TTP	62.00	47.00
tblVehicleTrips	CNW_TTP	5.00	17.67
tblVehicleTrips	CW_TL	14.70	42.45
tblVehicleTrips	CW_TTP	33.00	35.33
tblVehicleTrips	ST_TR	0.00	30.77
tblVehicleTrips	SU_TR	0.00	30.77
tblVehicleTrips	WD_TR	68.93	30.77

## 2.0 Emissions Summary

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## CHP Quincy - Existing - Plumas County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

[illegible]

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.0000	0.0000	0.0000	0.0000	0.0000	0.6244	0.0000	0.0000	0.5958	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.6244	0.0000	0.0000	0.5958	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

[illegible]

## CHP Quincy - Existing - Plumas County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
Energy	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
Mobile	0.8738	3.7134	12.5408	0.0173	1.2129	0.0357	1.2485	0.3252	0.0337	0.3589		1,732.5340	1,732.5340	0.1489		1,736.2560
<b>Total</b>	<b>1.0019</b>	<b>3.7429</b>	<b>12.5661</b>	<b>0.0175</b>	<b>1.2129</b>	<b>0.0379</b>	<b>1.2508</b>	<b>0.3252</b>	<b>0.0360</b>	<b>0.3612</b>		<b>1,767.9548</b>	<b>1,767.9548</b>	<b>0.1496</b>	<b>6.5000e-004</b>	<b>1,771.8874</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
Energy	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
Mobile	0.8738	3.7134	12.5408	0.0173	1.2129	0.0357	1.2485	0.3252	0.0337	0.3589		1,732.5340	1,732.5340	0.1489		1,736.2560
<b>Total</b>	<b>1.0019</b>	<b>3.7429</b>	<b>12.5661</b>	<b>0.0175</b>	<b>1.2129</b>	<b>0.0379</b>	<b>1.2508</b>	<b>0.3252</b>	<b>0.0360</b>	<b>0.3612</b>		<b>1,767.9548</b>	<b>1,767.9548</b>	<b>0.1496</b>	<b>6.5000e-004</b>	<b>1,771.8874</b>

## CHP Quincy - Existing - Plumas County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/13/2018	8/12/2018	5	0	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

## CHP Quincy - Existing - Plumas County, Winter

### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2018

### Unmitigated Construction On-Site

[illegible]

### Unmitigated Construction Off-Site

[illegible]

## CHP Quincy - Existing - Plumas County, Winter

**3.2 Demolition - 2018****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

## CHP Quincy - Existing - Plumas County, Winter

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8738	3.7134	12.5408	0.0173	1.2129	0.0357	1.2485	0.3252	0.0337	0.3589		1,732.5340	1,732.5340	0.1489		1,736.2560
Unmitigated	0.8738	3.7134	12.5408	0.0173	1.2129	0.0357	1.2485	0.3252	0.0337	0.3589		1,732.5340	1,732.5340	0.1489		1,736.2560

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	138.47	138.47	138.47	568,854	568,854
Total	138.47	138.47	138.47	568,854	568,854

## 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	42.45	6.60	6.60	35.33	47.00	17.67	50	34	16

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.412157	0.057405	0.231307	0.175151	0.063398	0.010602	0.014016	0.022670	0.001822	0.002161	0.006316	0.000745	0.002249

## CHP Quincy - Existing - Plumas County, Winter

**5.0 Energy Detail**

Historical Energy Use: Y

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
NaturalGas Unmitigated	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303

## CHP Quincy - Existing - Plumas County, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	301.068	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
<b>Total</b>		<b>3.2500e-003</b>	<b>0.0295</b>	<b>0.0248</b>	<b>1.8000e-004</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>35.4198</b>	<b>35.4198</b>	<b>6.8000e-004</b>	<b>6.5000e-004</b>	<b>35.6303</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government Office Building	0.301068	3.2500e-003	0.0295	0.0248	1.8000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003		35.4198	35.4198	6.8000e-004	6.5000e-004	35.6303
<b>Total</b>		<b>3.2500e-003</b>	<b>0.0295</b>	<b>0.0248</b>	<b>1.8000e-004</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>35.4198</b>	<b>35.4198</b>	<b>6.8000e-004</b>	<b>6.5000e-004</b>	<b>35.6303</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**



## CHP Quincy - Existing - Plumas County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
Unmitigated	0.1249	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
<b>Total</b>	<b>0.1249</b>	<b>0.0000</b>	<b>4.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>	<b>0.0000</b>		<b>1.0500e-003</b>

## CHP Quincy - Existing - Plumas County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.8000e-004	9.8000e-004	0.0000		1.0500e-003
<b>Total</b>	<b>0.1249</b>	<b>0.0000</b>	<b>4.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>	<b>0.0000</b>		<b>1.0500e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## CHP Quincy - Existing - Plumas County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Appendix C.

**Health Risk Assessment Memorandum  
and Supporting Documentation**



# **CHP Quincy Area Office Replacement Project Human Health Risk Assessment**

Prepared by Horizon Water and Environment

October 2018



## ACRONYMS AND ABBREVIATIONS

A	absorption
ASF	age sensitivity factor
AT	averaging time
BAAQMD	Bay Area Air Quality Management District
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CF	conversion factor
CHP	California Highway Patrol
CPF	cancer potency factor
DBR	daily breathing rate
DPM	diesel particulate matter
ED	exposure duration
EF	exposure frequency
ET	exposure time
HI	hazard index
HQ	hazard quotient
HRA	health risk assessment
LDT1	light-duty truck 1
l/kg-day	liters per kilogram-day
m	meters
MBTE	methyl tertiary-butyl ether
mg/kg-day	milligrams per kilogram-day
OEHHA	[California] Office of Environmental Health Hazard Assessment
PM	particulate matter
REL	reference exposure level
TAC	toxic air contaminant
TAF	time adjustment factor



TOG	total organic gases
USEPA	U.S. Environmental Protection Agency
°F	degrees Fahrenheit
°K	degrees Kelvin
µg/m <sup>3</sup>	micrograms per cubic meter

## INTRODUCTION

The California Highway Patrol (CHP) is conducting a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of this memorandum is to document development of a set of air dispersion modeling parameters that can be combined with emission rates and location-to-sensitive-receptor information for the CHP Quincy Area Office activities to evaluate the health impacts from operation of the proposed CHP Area Office. Activities that are typical at CHP Area Offices include testing of emergency generators, use of refueling pumps, and vehicle idling.

This memorandum describes the methodology used to generate generic air dispersion factors, exposure factors, and toxicity information. In addition, it describes how the generic parameters can be combined with site-specific emission rate information to derive a final estimate of health impacts. Health impacts associated with construction emissions are evaluated qualitatively because the project construction periods are short in duration. This memorandum concludes with the site-specific results for the CHP Quincy Area Office Replacement Project.

## TOXIC AIR CONTAMINANTS

Diesel exhaust is a complex mixture that includes hundreds of individual constituents and is identified by the State of California as a known carcinogen. Diesel particulate matter (DPM) could be emitted from the emergency diesel generators during periodic testing, and various gasoline fuel-related toxic air contaminants (TACs) would be emitted from the refueling pump station and idling vehicles in the parking lots. Specifically, TACs such as benzene, toluene, ethylbenzene, 1,3-butadiene, acrolein, and xylenes may be emitted from the refueling pump station and idling vehicles. Because several types of sensitive receptors may be present in the project area, a screening-level quantitative health risk assessment (HRA) was conducted to estimate the potential health risks to these sensitive receptors during project operation.

## SCREENING-LEVEL HEALTH RISK ASSESSMENT

To evaluate the impacts of DPM and TACs on nearby sensitive receptors, an HRA was conducted consistent with the Office of Environmental Health Hazard Assessment (OEHHA) guidance for determining local community risks and hazards (OEHHA 2015). The HRA is used to evaluate the health risks associated with the CHP Quincy Area Office Replacement Project. The HRA evaluated project emissions associated with testing of the emergency generator, refueling pump emissions, and vehicle idling. Detailed information on the methodology and data used to conduct the HRA is summarized below. The screening-level HRA involved estimating emissions of DPM and TACs, followed by screening-level air dispersion modeling using the AERSCREEN modeling program to estimate ambient air concentrations at various distances from the source. After the ambient air concentrations were determined, these were combined with exposure parameters and toxicity information to determine health impacts on nearby sensitive receptors.

## EMISSIONS

The emissions for emergency generator testing were estimated using California Emissions Estimator Model (CalEEMod) version 2016.3.2; it was assumed that the generator would be in operation for 1 hour on 100 days per year. This allows for short weekly and longer monthly testing periods that are required for the CHP station facility. For chronic and cancer assessments, the emissions were amortized over a year.

The idling emission factors were taken from the EMFAC 2014 model to be consistent with the CalEEMod emission factors. Exhaust emissions used in this analysis were at the 5-mile-per-hour running exhaust emission rate. These emissions were converted to an hourly emission rate by multiplying with a unit conversion factor of 5. Overall exhaust emissions were speciated<sup>1</sup> into emissions of individual TACs based on a typical vehicle exhaust profile (Bay Area Air Quality Management District [BAAQMD] 2012). Vehicle type was conservatively assumed to be equivalent to a light duty truck 1 (LDT1) vehicle class.

Refueling pump emissions were estimated for an above-ground storage tank with Phase II vent valve control equipment according to values in the California Air Pollution Control Officers Association's (CAPCOA's) *Gasoline Service Station Industrywide Risk Assessment Guidelines* (CAPCOA 1997). Overall refueling pump emissions were speciated into emissions of individual TACs based on profiles presented by CAPCOA (1997) except that methyl tertiary-butyl ether (MTBE) was removed because it is no longer present in gasoline.

## AIR DISPERSION

The dispersion of emissions in ambient air was simulated using the U.S. Environmental Protection Agency's (USEPA's) approved model, AERSCREEN, which is a screening model based on the AERMOD modeling system. The model inputs and assumptions are summarized below.

**Emission Rate:** A unit emission rate was used in the AERSCREEN analysis, which allows for the AERSCREEN results or dispersion factors to be multiplied by project-specific emission rates to identify the project-specific ambient air concentrations.

**Meteorological Data:** AERSCREEN uses the MAKEMET program to generate worst-case meteorological data based on the range in temperatures and minimum wind speed. The default temperature range of 250-310 degrees Kelvin (approximately -10 degrees Fahrenheit [°F] to 100°F) was used. The default wind speed of 0.5 meter per second was used.

**Surface parameters:** AERSCREEN requires estimates of the surface roughness, albedo, and Bowen ratio<sup>2</sup>. AERSURFACE is a tool that processes land cover data to

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<sup>1</sup> Speciation profiles provide estimates of the chemical composition of emissions, and are used in emission inventory and air quality models (California Air Resources Board [CARB] 2015). As an example, CARB maintains and updates estimates of the chemical composition and size fractions of particulate matter (PM) and the chemical composition and reactive fractions of total organic gases (TOG) for a variety of emission source categories.

<sup>2</sup> Albedo is the fraction of solar energy reflected from the Earth back into space. The Bowen ratio is an indicator of surface moisture. The surface roughness length is related to the height of obstacles to wind flow and is an important factor in determining the magnitude of mechanical turbulence and the stability of the boundary layer.

determine surface characteristics for use in the meteorological inputs to AERSCREEN. Using information in the AERSURFACE user's guide (USEPA 2013), the albedo, Bowen ratio, and surface roughness for the "commercial/industrial/transportation not at an airport" land cover classification was selected and assumed to be constant throughout the year. Albedo was 0.18, Bowen ratio was 1.5, and surface roughness was 0.7.

**Terrain:** Terrain was assumed to be flat. Receptors were modeled at 25-meter increments from the source out to 5,000 meters and at a height of 1.5 meters.

**Source Parameters:** Emergency generators were modeled as point sources of large or small size. Vehicle idling emissions were modeled with a volume source equivalent to the size of a parking space. Refueling pump emissions used volume sources for refueling and spillage emissions and point sources for loading and breathing emissions, consistent with recommendations from CAPCOA's *Gasoline Service Station Industrywide Risk Assessment Guidelines* (CAPCOA 1997). Details of source parameters are shown in **Table C-1**.

The output of AERSCREEN is the 1-hour maximum air concentration under worst-case meteorological conditions. The AERSCREEN user's guide (USEPA 2016) recommends that a factor of 0.1 is used to adjust the 1-hour maximum air concentration to annual average air concentration.

**Table C-1** Model Source Parameters

Source	Model Source Type	Temperature (°K)	Exit Velocity (m/sec)	Diameter (m)	Stack Height (m)	Release Height (m)	Lateral Dimension (m)	Vertical Dimension (m)
Emergency Generator (Small)	Point	754.96	81.71	0.13	2.42	--	--	--
Emergency Generator (Large)	Point	793.56	92.45	0.16	3.71	--	--	--
Vehicle Idling	Volume	--	--	--	--	0.5	1.40	1.40
Refueling – Loading	Point	291	0.00177	0.0508	3.66	--	--	--
Refueling – Breathing	Point	298	0.000224	0.0508	3.66	--	--	--
Refueling – Refueling	Volume	--	--	--	--	1	3.02	1.86
Refueling – Spillage	Volume	--	--	--	--	0	3.02	1.86

**Notes:**

m = meters, m/sec = meters per second, °K = degrees Kelvin

**EXPOSURE FACTORS**

Potential sensitive receptors were characterized as residents, day-care children, school children, medical patients, senior center users, and recreational users. The maximally exposed receptor for each of these categories near the project site, if present, is reported.

The exposure parameters used to estimate excess lifetime cancer risks and chronic non-cancer Hazard Index (HI) for all potentially exposed populations were obtained using risk assessment guidelines from OEHHA (2015).

The inhalation dose is a function of the concentration of a chemical and the intake of that chemical. The dose can be calculated as follows:

$$Dose = \frac{Conc * DBR * ET * EF * ED * CF}{AT}$$

Where:

Dose	=	Dose of chemical (milligrams per kilogram-day [mg/kg-day])
Conc	=	Chemical concentration in air (micrograms per cubic meter [µg/m <sup>3</sup> ])
DBR	=	Daily Breathing Rate (liters per kilogram-day [l/kg-day])
ET	=	Exposure Time (hours/day)

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EF	=	Exposure Frequency (days/year)
ED	=	Exposure Duration (years)
AT	=	Averaging Time (days)
CF	=	Conversion Factor (cubic meters per liter [ $\text{m}^3/\text{l}$ ] and milligrams per microgram [ $\text{mg}/\mu\text{g}$ ])

The DBR was set to the 95th percentile for third trimester, 0-2 years, 2-15 years, and 16-70 years as recommended by OEHHA (2015). The exposure frequency for residents was 350 days per year, consistent with a resident being present at the home except for a 2-week vacation. Exposure frequency was 180 days and 250 days for school children and day-care children, respectively, as recommended by OEHHA (2015). The averaging time was based on 70 years. The details of the exposure factors for each receptor type are shown in **Table C-2**.

**Table C-2** Exposure Parameters and Age Specific Factors

<b>Sensitive Population Type</b>	<b>Age</b>	<b>DBR</b>	<b>EF</b>	<b>TAF</b>	<b>CF</b>	<b>A</b>	<b>ED</b>	<b>ASF</b>	<b>AT</b>
Resident Child	3rd trimester	361	350	1	1.00E-06	1	0.25	10	25550
	0<2	1090	350	1	1.00E-06	1	2	10	25550
	2<16	745	350	1	1.00E-06	1	14	3	25550
Resident Adult	16<70	290	350	1	1.00E-06	1	14	1	25550
Daycare	0<2	1200	250	1	1.00E-06	1	2	10	25550
	2<9	640	180	1	1.00E-06	1	4	3	25550
Preschool	2<9	640	180	1	1.00E-06	1	2.5	3	25550
School Child – Elementary	2<9	640	180	1	1.00E-06	1	6	3	25550
School Child – Middle	2<16	520	180	1	1.00E-06	1	3	3	25550
School Child – High School	2<16	520	180	1	1.00E-06	1	4	1.5	25550
Medical Patient – Child	0<2	1090	350	1	1.00E-06	1	1	10	25550
Medical Patient – Adult	16<70	290	350	1	1.00E-06	1	1	1	25550
Recreation Child	2<9	640	350	1	1.00E-06	1	9	3	25550
Recreation Adult	16<70	230	350	1	1.00E-06	1	40	1	25550
Senior Center	16<70	230	350	1	1.00E-06	1	40	1	25550

**Notes:**

1. A = absorption; ASF = age sensitivity factor; AT = averaging time; CF = conversion factor; DBR = daily breathing rate; ED = exposure duration; EF = exposure frequency; TAF = time adjustment factor.
2. It was assumed that the emergency generator is tested outside of normal school hours so schools and day-care children are not exposed to these emissions.
3. Exposure Frequency (EF) was assumed to be 350 days per year, except school children were assumed to be exposed 180 days per year and day-care children 250 days per year.
4. Residential exposure was assumed to be 30 years with a continuously aging child from third trimester onward from construction through operation.
5. Exposure duration (ED) of school children was assumed to be 6 years of elementary school, 3 years of middle school, and 4 years of high school. ED of recreation child was assumed to be 9 years. ED for recreation adult and senior center was assumed to be 40 years. ED for medical patients was assumed to be 1 year.
6. The school child, recreation user, and senior center breathing rates are based on the 8-hour breathing rate for moderate-intensity activities.
7. Averaging time is based on a 70-year lifetime cancer risk.

## TOXICITY ASSESSMENT

The toxicity assessment characterizes the relationship between the magnitude of exposure and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories: cancer and non-cancer endpoints. Toxicity values, used to estimate the likelihood of adverse effects occurring in humans at different exposure levels, are identified as part of the toxicity assessment component of a risk assessment.

In this HRA, diesel exhaust is the only chemical of potential concern that was quantified. Under California regulatory guidelines, DPM is used as a surrogate measure of carcinogen exposure for the mixture of chemicals that make up diesel exhaust as a whole. For gasoline and gasoline exhaust, the individual chemicals making up the primary components were used to estimate health effects based on common speciation profiles.

The estimated excess lifetime cancer risk for a resident was adjusted using the age sensitivity factors (ASFs) recommended by OEHHA (2015). This approach accounts for an “anticipated special sensitivity to carcinogens” of infants and children. Cancer risk estimates are weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to 2 years of age and by a factor of 3 for exposures that occur from 2 years through 15 years of age. No weighting factor (i.e., an ASF of 1, which is equivalent to no adjustment) is applied to exposure from ages 16 to 70 years. These ASFs are shown in **Table C-2**.

Excess lifetime cancer risks are estimated as the upper-bound incremental probability<sup>3</sup> that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs if the chemical is being inhaled) by the chemical-specific cancer potency factor (CPF).

The equation used to calculate the potential excess lifetime cancer risk for the inhalation pathway is as follows:

$$Risk_i = Dose * CPF_i * ASF$$

Where:

Risk<sub>i</sub> = Cancer Risk, the incremental probability of an individual developing cancer as a result of inhalation exposure to a particular potential carcinogen (unitless)

Dose = Dose of chemical (mg/kg-day)

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<sup>3</sup> The upper-bound incremental probability means that the “true carcinogenic risk” of an individual is unlikely to exceed the model-derived cancer risk estimates and, therefore, is likely to be less than the predicted (modeled) risk (USEPA 2012). Thus, the modeled cancer risks would represent a conservative scenario.



$CPF_i$  = Cancer Potency Factor for Chemical I (mg chemical/kg body weight-day)<sup>-1</sup>

ASF = Age Sensitivity Factor (unitless)

The CPFs for potential carcinogens that are anticipated to be present at the project site are shown in **Table C-3**.

The potential for exposure to result in chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) to the chemical-specific non-cancer chronic reference exposure level (RELs). When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient (HQ). To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the HQs for all chemicals are summed, yielding an HI.

The equations used to calculate the chemical-specific HQs and the overall HI are:

$$\text{Chronic } HQ_i = C_i / REL_i$$

$$\text{Chronic } HI = \sum HQ_i$$

Where:

Chronic  $HQ_i$  = Chronic Hazard Quotient for Chemical<sub>i</sub> (unitless)

Chronic HI = Hazard Index (unitless)

$C_i$  = Annual average air concentration for Chemical<sub>i</sub> (µg/m<sup>3</sup>)

$REL_i$  = Chronic Non-cancer Reference Exposure Level for Chemical<sub>i</sub> (µg/m<sup>3</sup>)

Acute non-cancer impacts were estimated in a similar manner to chronic non-cancer impacts, by estimating the HQs for all chemicals and summing them to yield an HI. Table C-3 contains the chronic and acute RELs used in this screening HRA.

For this screening HRA, the HQs were conservatively summed without considering end target organs or systems.

**Table C-3** Toxicity Parameters and Speciation Profiles

Toxic Air Components	Acute REL <sup>2</sup> (µg/m <sup>3</sup> )	Chronic REL <sup>2</sup> (µg/m <sup>3</sup> )	Cancer Potency Factor <sup>2</sup> (mg/kg-day)	Idling Speciation	Refueling Speciation – Vapor	Refueling Speciation – Liquid
Acetaldehyde	470	140	1.00E-02	0.0028	0	0
Acrolein	2.5	0.35	--	0.0013	0	0
Benzene	27	3	1.00E-01	0.0247	0.003	0.01
1,3-Butadiene	--	20	6.00E-01	0.0055	0	0
DPM	--	5	1.10E+00	0	0	0
Ethylbenzene	--	2000	8.70E-03	0.0105	0	0.016
Formaldehyde	55	9	2.10E-02	0.0158	0	0
Hexane	--	7000	--	0.016	0	0
Methanol	28000	4000	--	0.0012	0	0
Methyl Ethyl Ketone	13000	--	--	0.0002	0	0
Naphthalene	--	9	1.20E-01	0.0005	0	0
Propylene	--	3000	--	0.0306	0	0
Styrene	21000	900	--	0.0012	0	0
Toluene	37000	300	--	0.0576	0	0.08
Xylenes	22000	700	--	0.048	0	0.024

**Notes:**

µg/ m<sup>3</sup> = micrograms per cubic meter; mg/kg-day = milligrams per kilogram-day

Sources: BAAQMD 2012, CAPCOA 1997, EMFAC 2014 model, OEHHA/ARB 2017

## PROJECT-SPECIFIC HRA RESULTS

### CONSTRUCTION HEALTH EFFECTS

During project construction, DPM and gasoline fuel combustion emissions that are classified as TACs could be emitted from construction equipment. The construction period for the CHP Area Office facilities is short in duration (approximately 24 months with the majority of the work occurring within 15 months) and will not extend over a long period. Due to the variable nature of construction activity, the generation of TAC emissions would be temporary in most cases, especially considering the short amount of time such equipment is typically within an influential distance to expose sensitive receptors to substantial emission concentrations.

Chronic and cancer health effects estimated over short periods are uncertain for several reasons. CPFs are based on animal lifetime studies or worker studies with long-term exposure to the carcinogenic agent. Considerable uncertainty exists in trying to evaluate the cancer risk from a project that would last only a small fraction of a lifetime. Some studies indicate that the dose rate affects the potency of a given dose of a carcinogenic chemical. In other words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (OEHHA 2015). Furthermore, construction impacts are most substantial adjacent to the construction area and decrease rapidly with distance. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005). Given the uncertainty of estimating chronic health effects over a short period, combined with the uncertainty in conducting only a screening-level HRA, health effects from construction are not quantified.

## OPERATIONAL HEALTH IMPACTS

To estimate the health impacts at the CHP Quincy Area Office facilities during operations, the AERSCREEN model runs for each source type were tabulated by distance from the source to a sensitive receptor location. The distance of each source to the sensitive receptor location was rounded to the nearest 25-meter increment. When the distance was entered, the AERSCREEN dispersion factor for that specific source/receptor combination was determined and multiplied by the specific source emission factor to obtain the air concentration at the receptor location. Next, the exposure factors and toxicity information were combined with the air concentrations to estimate the health effects. Finally, the health effects were summed across all sources for each receptor type and location. The detailed values for these calculations are found in Attachment A. The health impacts for each receptor type at the proposed CHP Quincy Area Office are shown in **Table C-4**.

Emissions at the proposed CHP Quincy Area Office would not result in health impacts above the 10 in 1 million cancer significance threshold or exceed the chronic and acute HI of 1; standards commonly used by other air districts and state agencies. This is based on the operation of a small emergency generator for 100 hours of testing a year and a refueling pump station throughput of 50,000 gallons per year, as well as up to two vehicles idling at all times. The cancer health risk for all sensitive receptors would be substantially less and well below the threshold of 10 in 1 million cancers.

**Table C-4** CHP Quincy Area Office Health Risk Assessment Results

Emission Source	Resident	Daycare	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Senior Center
<b>Cancer Risk by Sensitive Receptor Type/Location</b>											
Emergency Generator (Small)	6.37E-08	5.78E-09	6.76E-10	2.24E-09	8.15E-10	5.43E-10	1.38E-09	6.01E-11	4.02E-09	2.14E-09	1.68E-09
Vehicle Idling	3.14E-06	5.63E-08	6.59E-09	3.93E-08	1.44E-08	9.61E-09	4.82E-09	2.38E-10	2.57E-08	1.37E-08	6.07E-09
Truck Idling	1.45E-06	2.59E-08	3.04E-09	1.81E-08	6.64E-09	4.43E-09	2.22E-09	1.10E-10	1.19E-08	6.31E-09	2.80E-09
Refueling-Loading	1.23E-08	3.96E-10	4.63E-11	2.09E-10	7.05E-11	4.70E-11	2.70E-11	1.35E-12	1.45E-10	7.72E-11	3.36E-11
Refueling-Breathing	1.55E-09	4.99E-11	5.85E-12	2.64E-11	8.89E-12	5.93E-12	3.41E-12	1.70E-13	1.83E-11	9.75E-12	4.25E-12
Refueling-Refueling	2.58E-08	8.36E-10	9.78E-11	4.41E-10	1.49E-10	9.91E-11	5.95E-11	2.96E-12	3.18E-10	1.69E-10	7.40E-11
Refueling-Spillage	8.03E-08	2.63E-09	3.08E-10	1.38E-09	4.67E-10	3.11E-10	1.90E-10	9.44E-12	1.01E-09	5.39E-10	2.36E-10
<b>Total</b>	<b>4.77E-06</b>	<b>9.19E-08</b>	<b>1.08E-08</b>	<b>6.18E-08</b>	<b>2.26E-08</b>	<b>1.50E-08</b>	<b>8.70E-09</b>	<b>4.22E-10</b>	<b>4.31E-08</b>	<b>2.30E-08</b>	<b>1.09E-08</b>
<b>Chronic Hazard Index</b>											
Emergency Generator (Small)	1.39E-05	3.63E-06	3.63E-06	5.01E-06	4.50E-06	4.50E-06	1.69E-06	2.75E-06	3.09E-06	3.09E-06	2.43E-06
Vehicle Idling	8.60E-03	4.45E-04	4.45E-04	1.11E-03	9.98E-04	9.98E-04	7.36E-05	1.37E-04	2.48E-04	2.48E-04	1.10E-04
Truck Idling	3.16E-04	1.63E-05	1.63E-05	4.06E-05	3.66E-05	3.66E-05	2.70E-06	5.02E-06	9.11E-06	9.11E-06	4.04E-06
Refueling-Loading	4.91E-05	4.57E-06	4.57E-06	8.59E-06	7.12E-06	7.12E-06	6.03E-07	1.13E-06	2.04E-06	2.04E-06	8.90E-07
Refueling-Breathing	6.20E-06	5.76E-07	5.76E-07	1.08E-06	8.99E-07	8.99E-07	7.61E-08	1.43E-07	2.58E-07	2.58E-07	1.12E-07
Refueling-Refueling	1.03E-04	9.64E-06	9.64E-06	1.81E-05	1.50E-05	1.50E-05	1.33E-06	2.49E-06	4.48E-06	4.48E-06	1.96E-06
Refueling-Spillage	3.08E-04	2.91E-05	2.91E-05	5.45E-05	4.53E-05	4.53E-05	4.06E-06	7.60E-06	1.37E-05	1.37E-05	5.98E-06
<b>Total</b>	<b>9.39E-03</b>	<b>5.08E-04</b>	<b>5.08E-04</b>	<b>1.23E-03</b>	<b>1.11E-03</b>	<b>1.11E-03</b>	<b>8.41E-05</b>	<b>1.56E-04</b>	<b>2.81E-04</b>	<b>2.81E-04</b>	<b>1.25E-04</b>

Emission Source	Resident	Daycare	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Senior Center
<b>Acute Hazard Index</b>											
Emergency Generator (Small)	4.88E-04	1.28E-04	1.28E-04	1.76E-04	1.58E-04	1.58E-04	5.92E-05	9.65E-05	1.08E-04	1.08E-04	8.51E-05
Vehicle Idling	1.04E-02	5.37E-04	5.37E-04	1.34E-03	1.21E-03	1.21E-03	8.89E-05	1.65E-04	3.00E-04	3.00E-04	1.33E-04
Truck Idling	7.58E-02	3.92E-03	3.92E-03	9.75E-03	8.79E-03	8.79E-03	6.49E-04	1.20E-03	2.19E-03	2.19E-03	9.69E-04
Refueling-Loading	5.45E-05	5.07E-06	5.07E-06	9.54E-06	7.92E-06	7.92E-06	6.70E-07	1.26E-06	2.27E-06	2.27E-06	9.88E-07
Refueling-Breathing	6.88E-06	6.40E-07	6.40E-07	1.20E-06	9.99E-07	9.99E-07	8.46E-08	1.59E-07	2.87E-07	2.87E-07	1.25E-07
Refueling-Refueling	1.15E-04	1.07E-05	1.07E-05	2.01E-05	1.67E-05	1.67E-05	1.48E-06	2.76E-06	4.97E-06	4.97E-06	2.17E-06
Refueling-Spillage	3.16E-04	2.98E-05	2.98E-05	5.59E-05	4.65E-05	4.65E-05	4.16E-06	7.79E-06	1.40E-05	1.40E-05	6.14E-06
<b>Total</b>	<b>8.71E-02</b>	<b>4.63E-03</b>	<b>4.63E-03</b>	<b>1.13E-02</b>	<b>1.02E-02</b>	<b>1.02E-02</b>	<b>8.03E-04</b>	<b>1.48E-03</b>	<b>2.62E-03</b>	<b>2.62E-03</b>	<b>1.20E-03</b>

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**Attachment A****Table C-A-1a** CHP Quincy Area Office – Specific Parameters

Parameter	Sensitive Receptor Type												1 hour max Emission Factor	Annual Emission Factor
	Resident Child	Resident Adult	Day Care	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Senior Center		
	Distance (m)												g/s	
Emergency Generator (Small)	135	135	508	508	365	420	420	5175	2165	975	975	3040	2.62495E-05	7.47932E-06
Vehicle Idling	93	93	640	640	330	370	370	5160	2270	1000	1000	3010	0.001426479	0.001426479
Truck Idling	93	93	640	640	330	370	370	5160	2270	1000	1000	3010	9.00991E-05	3.75413E-06
Refueling-Loading	123	123	570	570	370	420	420	5200	2225	1010	1010	3060	0.000302049	0.000302049
Refueling-Breathing	123	123	570	570	370	420	420	5200	2225	1010	1010	3060	3.81158E-05	3.81158E-05
Refueling-Refueling	123	123	570	570	370	420	420	5200	2225	1010	1010	3060	0.000453074	0.000453074
Refueling-Spillage	123	123	570	570	370	420	420	5200	2225	1010	1010	3060	0.000302049	0.000302049

**Table C-A-1b** CHP Quincy Area Office – Specific Parameters

Parameter	Sensitive Receptor Type											
	Resident Child	Resident Adult	Daycare	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Senior Center
	1-hr max Dispersion Factor ( $\mu\text{g}/\text{m}^3/\text{g}/\text{s}$ )											
Emergency Generator (Small)	93.0	93.0	24.3	24.3	33.5	30.1	30.1	11.3	18.4	20.6	20.6	16.2
Vehicle Idling	4204.1	4204.1	217.5	217.5	541.0	487.9	487.9	36.0	66.8	121.3	121.3	53.8
Truck Idling	4204.1	4204.1	217.5	217.5	541.0	487.9	487.9	36.0	66.8	121.3	121.3	53.8
Refueling-Loading	1625.3	1625.3	151.2	151.2	284.3	235.9	235.9	20.0	37.4	67.6	67.6	29.5
Refueling-Breathing	1625.6	1625.6	151.2	151.2	284.3	235.9	235.9	20.0	37.4	67.7	67.7	29.5
Refueling-Refueling	2279.5	2279.5	212.9	212.9	399.5	331.7	331.7	29.3	54.9	98.8	98.8	43.2
Refueling-Spillage	2801.9	2801.9	264.5	264.5	495.7	411.8	411.8	36.9	69.1	124.3	124.3	54.4



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Appendix D.

## **Biological Resources Background Information**



Table D-1. Special-Status Plant and Animal Species Known or with Potential to Occur in the Vicinity of the Project site

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<b>PLANTS</b>						
<i>Arctostaphylos mewukka</i> ssp. <i>truei</i>	True's manzanita	—	—	4.2	Chaparral, lower montane coniferous forest. Blooming period: February–July Elevation range: 1,300–4,560 feet	<b>None.</b> Suitable chaparral or coniferous forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Astragalus pulsiferae</i> var. <i>pulsiferae</i>	Pulsifer's milk-vetch	—	—	1B.2	Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodland; usually on granitic, sandy, or rocky sites. Blooming period: May–September Elevation range: 4,260–5,900 feet	<b>None.</b> Suitable scrub, coniferous forest, or woodland habitat is absent from the project site, and the project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Astragalus webberi</i>	Webber's milk-vetch	—	—	1B.2	Broadleafed upland forest, lower montane coniferous forest, and meadows and seeps. Blooming period: May–July Elevation range: 2,400–4,100 feet	<b>Not Expected.</b> Marginal habitat exists for this species in the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.
<i>Astragalus whitneyi</i> var. <i>lenophyllus</i>	woolly-leaved milk-vetch	—	—	4.3	Alpine boulder and rock field, subalpine coniferous forest. Blooming period: July–August Elevation range: 7,000–10,000 feet	<b>None.</b> Suitable boulder, rock field, or coniferous forest habitat is absent from the project site, and the project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Azolla microphylla</i>	Mexican mosquito fern	—	—	4.2	Marshes and swamps, ponds, slow water. Blooming period: August Elevation range: 30–330 feet	<b>None.</b> Suitable marsh, swamp, pond, and slow water habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Boechera constancei</i>	Constance's rockcress	—	—	1B.1	Chaparral, lower montane coniferous forest, and upper montane coniferous forest; on rocky, serpentine soils. Blooming period: May–June Elevation range: 3,200–6,640 feet	<b>None.</b> Suitable chaparral and coniferous forest habitat do not occur on the project site. Serpentine soils are absent. Three CNDDDB-recorded occurrences approximately 4 and 5 miles from the project site.
<i>Boechera microphylla</i>	Small-leaved rockcress	—	—	3	Pinyon and juniper woodland; volcanic or granitic, rocky soils. Blooming period: July Elevation range: 5,580–10,710 feet	<b>None.</b> Suitable woodland habitat is absent from the project site, and the project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Botrychium minganense</i>	Mingan moonwort	—	—	2B.2	Bogs and fens, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest. Blooming period: July–September Elevation range: 4,770–7,150 feet	<b>None.</b> The project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Brasenia schreberi</i>	watershield	—	—	2B.3	Freshwater marshes and swamps. Blooming period: June–September Elevation range: 100–7,220 feet	<b>None.</b> Suitable marsh or swamp habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Bruchia bolanderi</i>	Bolander's bruchia	—	—	4.2	Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest. Blooming period: N/A Elevation range: 5,580–9,190 feet	<b>None.</b> Marginal habitat exists in the drainage on the project site, but the project site is out the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Carex buxbaumii</i>	Buxbaum's sedge	—	—	4.2	Bogs and fens, meadows and seeps, marshes and swamps. Blooming period: March–August Elevation range: 10–10,830 feet	<b>Not Expected.</b> Marginal habitat exists in the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.
<i>Carex geyeri</i>	Geyer's sedge	—	—	4.2	Great Basin scrub, lower montane coniferous forest. Blooming period: May–August Elevation range: 3,790–7,200 feet	<b>None.</b> Suitable scrub or coniferous habitat is absent on the project site. No CNDDDB records within 5 miles of the project site.
<i>Carex lasiocarpa</i>	Woolly-fruited sedge	—	—	2B.3	Bogs and fens, marshes and swamps. Blooming period: June–July Elevation range: 5,580–6,890 feet	<b>None.</b> The project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Carex limosa</i>	Mud sedge	—	—	2B.2	Bogs and fens, lower montane coniferous forest, meadows and seeps, marshes and swamps, and upper montane coniferous forest. Blooming period: June–August Elevation range: 3,940–8,860 feet	<b>Not Expected.</b> Marginal habitat exists in the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Carex petasata</i>	Liddon's sedge	—	—	2B.3	Broadleafed upland forest, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland.  Blooming period: May–July Elevation range: 1,970–10,890 feet	<b>Not Expected.</b> Marginal habitat exists in the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.
<i>Carex scabriuscula</i>	Siskiyou sedge	—	—	4.3	Mesic, sometimes serpentinite seeps, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest.  Blooming period: May–July Elevation range: 2,330–7,690 feet	<b>Not Expected.</b> Marginal habitat exists in the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.
<i>Carex scoparia</i> var. <i>scoparia</i>	Pointed broom sedge	—	—	2A	Great Basin scrub; on mesic sites. Blooming period: May Elevation range: 425–4,000 feet	<b>Not Expected.</b> Marginal habitat exists for this species in the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.
<i>Carex sheldonii</i>	Sheldon's sedge	—	—	2B.2	Mesic sites in lower montane coniferous forest; freshwater marshes and swamps, and riparian scrub.  Blooming period: May–August Elevation range: 3,940–6,600 feet	<b>Not Expected.</b> Marginal habitat exists for this species in the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Ceanothus fresnensis</i>	Fresno ceanothus	—	—	4.3	Cismontane woodland openings, lower montane coniferous forest. Blooming period: May–July Elevation range: 2,950–6,900 feet.	<b>None.</b> Suitable habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Chenopodium simplex</i>	Large-seeded goosefoot	—	—	4.3	Lower montane coniferous forest in openings and disturbed areas. Blooming period: June–October Elevation range: 4,590–7,870 feet	<b>None.</b> Suitable open, disturbed habitat is present in the project site, but the site is out the elevation range of this species. No CNDDDB records within 5 miles of the project site.
<i>Clarkia mildrediae</i> ssp. <i>lutescens</i>	Golden-anthered clarkia	—	—	4.2	Often roadcuts, often rocky. Cismontane woodland, lower montane coniferous forest. Blooming period: June–August Elevation range: 900–5,740 feet	<b>None.</b> Suitable woodland and coniferous forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Clarkia virgata</i>	Sierra clarkia	—	—	4.3	Cismontane woodland, lower montane coniferous forest. Blooming period: May–August Elevation range: 1,310–5,300 feet	<b>None.</b> Suitable woodland and coniferous forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Claytonia palustris</i>	Marsh claytonia	—	—	4.3	Meadows and seeps (mesic), marshes and swamps, upper montane coniferous forest. Blooming period: May–October Elevation range: 3,280–2,500 feet	<b>None.</b> Suitable habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.



Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Corallorhiza trifida</i>	Northern coralroot	—	—	2B.1	Mesic sites in lower montane coniferous forest, and along the edges of meadows and seeps. Blooming period: June–July Elevation range: 4,490–5,725 feet	<b>None.</b> The project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Crataegus castlegarensis</i>	Castlegar hawthorne	—	—	3	Riparian woodland, moist rocky loam. Blooming period: May–July Elevation range: 0–4,770 feet	<b>None.</b> Suitable habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Cypripedium californicum</i>	California lady's-slipper	—	—	4.2	Seeps and streambanks, usually serpentinite. Bogs and fens, lower montane coniferous forest. Blooming period: April–September Elevation range: 100–9020 feet	<b>Not Expected.</b> Marginal suitable habitat exists in and on the margins of the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. Additionally, serpentine soil is absent. No CNDDDB records within 5 miles of the project site.
<i>Cypripedium fasciculatum</i>	Clustered lady's-slipper	—	—	4.2	Usually serpentinite seeps and streambanks. Lower montane coniferous forest, North Coast coniferous forest. Blooming period: March–August Elevation range: 330–8,000 feet	<b>Not Expected.</b> Marginal suitable habitat exists in and on the margins of the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. Additionally, serpentine soil is absent. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Cypripedium montanum</i>	Mountain lady's-slipper	—	—	4.2	Broadleafed upland forest, cismontane woodland, lower montane coniferous forest, North Coast coniferous forest.  Blooming period: March–August Elevation range: 610–7,300 feet	<b>None.</b> Suitable forest and woodland habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Darlingtonia californica</i>	California pitcherplant	—	—	4.2	Generally serpentine seeps, bogs and fens, meadows and seeps.  Blooming period: April–August Elevation range: 0–2,590 feet	<b>None.</b> Suitable habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Drosera anglica</i>	English sundew	—	—	2B.3	Bogs and fens, and mesic sites within meadows and seeps.  Blooming period: June–September Elevation range: 4,265–7,400 feet	<b>None.</b> Suitable bog, fen, meadow, and seep habitat is absent from the project site, and the project site is not within the elevation range of the species. No CNDDDB records within 5 miles of the project site.
<i>Eleocharis torticulmus</i>	California twisted spikerush	—	—	1B.3	Bogs and fens, lower montane coniferous forest, and meadows and seeps.  Blooming period: June–July Elevation range: 3,300–3,855 feet	<b>Not Expected.</b> Marginal habitat exists in and on the margins of the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Epilobium luteum</i>	Yellow willowherb	—	—	2B.3	Along streams and seeps within lower montane coniferous forest, and in meadows and seeps.  Blooming period: July–September Elevation range: 4,920–7,200 feet	<b>None.</b> Suitable habitat is absent from the project site, as the project site is outside of the species' elevation range. No CNDDDB records within 5 miles of the project site.
<i>Eremogone cliftonii</i>	Clifton's eremogone	—	—	1B.3	Chaparral, lower montane coniferous forest, and upper montane coniferous forest; in openings, usually granitic.  Blooming period: April–September Elevation range: 1,490–5,810 feet	<b>None.</b> Suitable chaparral and forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Erigeron lassenianus</i> var. <i>deficiens</i>	Plumas rayless daisy	—	—	1B.3	Lower montane coniferous forest; on gravelly, sometimes serpentine, sometimes disturbed sites.  Blooming period: June–September Elevation range: 4,460–6,500 feet	<b>None.</b> Suitable habitat is absent from the project site, as the project site is outside of the species' elevation range. Additionally, serpentine soil is absent. No CNDDDB records within 5 miles of the project site.
<i>Erigeron petrophilus</i> var. <i>sierrensis</i>	Northern Sierra daisy	—	—	4.3	Sometimes serpentinite, cismontane woodland, lower montane coniferous forest, upper montane coniferous forest.  Blooming period: June–October Elevation range: 980–6,800 feet.	<b>None.</b> Suitable woodland and forest habitat is absent from the project site, and serpentine soil is absent. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Eriogonum umbellatum</i> var. <i>ahartii</i>	Ahart's buckwheat	—	—	1B.2	Chaparral, and cismontane woodland; on serpentine soils, slopes and openings.  Blooming period: June–September Elevation range: 1,310–6,560 feet	<b>None.</b> Suitable habitat does not occur on the project site. Serpentine soil is absent. No CNDDDB records within 5 miles of the project site.
<i>Eriophorum gracile</i>	Slender cottongrass	—	—	4.3	Bogs and fens, meadows and seeps, upper montane coniferous forest.  Blooming range: May–September Elevation range: 4,200–9,520 feet.	<b>None.</b> Suitable bog, fen, meadow, seep, or forest habitat does not occur on the project site, and the project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Frangula purshiana</i> spp. <i>ultramafica</i>	Caribou coffeeberry	—	—	1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest, and meadows and seeps; on serpentine soil.  Blooming period: May–July Elevation range: 2,700–6,330 feet	<b>None.</b> Suitable habitat is absent from the project site, and the project site is out of the elevation range for this species. Serpentine soil is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Hackelia amethystina</i>	Amethyst stickseed	—	—	4.3	Openings and disturbed areas in lower montane coniferous forest, meadows and seeps, upper montane coniferous forest.  Blooming period: June–August Elevation range: 4,920–7,600 feet	<b>None.</b> The project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Ivesia webberi</i>	Webber's ivesia	FSC	—	1B.1	Great Basin scrub (on volcanic ash), lower montane coniferous forest and pinyon and juniper woodland; on sandy or gravelly sites.  Blooming period: May–July Elevation range: 3,280–6,810 feet	<b>None.</b> Suitable habitat is absent from the project site. One CNDDDB record of the species surrounds the project site (see Figure BIO-1); however, this occurrence was based on an 1886 observation. The area was searched in 1990 for this species and no plants were observed as most of the suitable habitat in the area has been disturbed/eliminated.
<i>Lewisia cantelovii</i>	Cantelow's lewisia	—	—	1B.2	Broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest; on mesic, granitic, sometimes serpentine seeps.  Blooming period: May–October Elevation range: 1,080–4,495 feet	<b>None.</b> Suitable forest, woodland, or chaparral habitat is absent the project site, and serpentine soil is absent. No CNDDDB records within 5 miles of the project site.
<i>Lewisia kelloggii</i> <i>ssp. hutchisonii</i>	Hutchinson's lewisia	—	—	3.2	Openings, ridgetops, often slate, sometimes rhyolite tuff, upper montane coniferous forest.  Blooming period: April–August Elevation range: 2,510–7,760 feet	<b>None.</b> Suitable forest ridgetop or opening habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Lupinus dalesiae</i>	Quincy lupine	—	—	4.2	Openings, often in disturbed areas. Chaparral, cismontane woodland, lower montane coniferous forest, upper montane coniferous forest.  Blooming period: May–August Elevation range: 2,800–8,200 feet	<b>Not Expected.</b> Marginal habitat exists for this species in disturbed portions of the nonnative annual grassland on the project site, but chaparral, woodland, and forest are absent. Additionally, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. There are numerous CNDDDB records of this species within 5 miles of the project site; the closest occurrence is less than 1 mile to the southwest.
<i>Lycopus uniflorus</i>	Northern bugleweed	—	—	4.3	Bogs and fens, marshes and swamps.  Blooming period: July–September Elevation range: 15–6,560 feet.	<b>None.</b> Suitable bog and fen, and marsh and swamp habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Meesia triquetra</i>	Three-ranked hump moss	—	—	4.2	Bogs and fens, meadows and seeps, subalpine coniferous forest, upper montane coniferous forest.  Blooming period: July Elevation range: 4,330–9,690 feet	<b>None.</b> Suitable bog and fen, meadow and seep, and forest habitat is absent from the project site, and the project site is not within the elevation range of this species. No CNDDDB records within 5 miles of the project site.
<i>Mielichhoferia elongata</i>	Elongate copper moss	—	—	4.3	Cismontane woodland; on metamorphic rock, usually vernal mesic.  Blooming period: N/A Elevation range: 1,640–4,265 feet	<b>None.</b> Suitable woodland habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Monardella follettii</i>	Follett's monardella	—	—	1B.2	Lower montane coniferous forest; rocky, serpentine soils. Blooming period: June–September Elevation range: 1,970–6,562 feet	<b>None.</b> Suitable forest habitat and serpentine soil are absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Oreostemma elatum</i>	Tall alpine-aster	—	—	1B.2	Bogs and fens, meadows and seeps, and upper montane coniferous forest; on mesic sites. Blooming period: June–August Elevation range: 3,300–6,890 feet	<b>None.</b> Suitable bog and fen, meadow and seep, and forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Peltigera gowardii</i>	Western waterfan lichen	—	—	4.2	On rocks in cold water creeks with little or no sediment or disturbance, riparian forest. Blooming period: N/A Elevation Range: 3,490–8,600 feet	<b>None.</b> Suitable rocky stream and riparian forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Penstemon personatus</i>	Closed-throated beardtongue	—	—	1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest; on metavolcanic soils. Blooming period: June–October Elevation range: 3,490–7,000 feet	<b>None.</b> Suitable chaparral and forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Piperia colemanii</i>	Coleman's rein orchid	—	—	4.3	Often sandy soils in chaparral, lower montane coniferous forest. Blooming period: June–August Elevation range: 3,930–7,550 feet	<b>None.</b> Suitable chaparral and forest habitat are absent from the project site. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Piperia leptopetala</i>	Narrow-petaled rein orchid	—	—	4.3	Cismontane woodland, lower montane coniferous forest, upper montane coniferous forest. Blooming period: May–July Elevation range: 1,240–7,300 feet	<b>None.</b> Suitable chaparral and forest habitat are absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Poa sierrae</i>	Sierra blue grass	—	—	1B.3	Openings in lower montane coniferous forest on shady moist slopes, often on mossy rocks, in canyons. Blooming period: April–July Elevation range: 1,190–4,920 feet	<b>None.</b> Suitable forest opening habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Potamogeton epihydrus</i>	Nuttall's ribbon-leaved pondweed	—	—	2B.2	Marshes and swamps. Blooming period: June–September Elevation range: 370–7,130 feet	<b>None.</b> Suitable marsh and swamp habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Pseudostellaria sierrae</i>	Sierra starwort	—	—	4.2	Chaparral, cismontane woodland, lower montane coniferous forest, upper montane coniferous forest. Blooming period: May–August Elevation range: 4,010–7,200 feet	<b>None.</b> Suitable chaparral and forest habitat are absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Pyrrocoma lucida</i>	Sticky pyrrocoma	—	—	1B.2	Great Basin scrub, lower montane coniferous forest, meadows and seeps; on alkaline clay soils. Blooming period: July–October Elevation range: 2,300–6,400 feet	<b>None.</b> Suitable scrub, forest, and meadow and seep habitat is absent from the project site. One CNDDDB occurrence is located approximately 3.5 miles northwest of the project site.



Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Rhamnus alnifolia</i>	Alder buckthorn	—	—	2B.2	Lower montane coniferous forest, upper montane coniferous forest, meadows and seeps, and riparian scrub.  Blooming period: May–July Elevation range: 200–6,990 feet	<b>None.</b> Suitable scrub, forest, and meadow and seep habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Rhynchospora alba</i>	White beaked-rush	—	—	2B.2	Bogs and fens, meadows and seeps, and freshwater marshes and swamps.  Blooming period: July–August Elevation range: 4,495–6,690 feet	<b>None.</b> Suitable habitat is absent from the project site, and the project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Rhynchospora capitellata</i>	Brownish beaked-rush	—	—	2B.2	Lower montane coniferous forest, upper montane coniferous forest, meadows and seeps, and marshes and swamps; on mesic sites.  Blooming period: July–August Elevation range: 145–6,562 feet	<b>None.</b> Suitable forest, meadow, seep, marsh, and swamp habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Schoenoplectus subterminalis</i>	Water bulrush	—	—	2B.3	Bogs and fens, and within marshes and swamps along montane lake margins.  Blooming period: June–September Elevation range: 2,460–7,382 feet	<b>None.</b> Suitable bog, fen, marsh, and swamp habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Sedum albomarginatum</i>	Feather River stonecrop	—	—	1B.2	Chaparral, and lower montane coniferous forest; on serpentine soil.  Blooming period: May–June Elevation range: 850–6,400 feet	<b>None.</b> Suitable chaparral and forest habitat is absent from the project site, and serpentine soil is absent. No CNDDDB records within 5 miles of the project site.
<i>Silene occidentalis</i> ssp. <i>occidentalis</i>	Western campion	—	—	4.3	Dry, open sites, sometimes rocky. Chaparral, lower montane coniferous forest, upper montane coniferous forest.  Blooming period: June–August Elevation range: 4,030–6,860 feet	<b>None.</b> Suitable chaparral or forest habitat is absent from the project site, and the project site is out of the elevation range for this species. No CNDDDB records within 5 miles of the project site.
<i>Solidago lepida</i> var. <i>salebrosa</i>	Rocky Mountains Canada goldenrod	—	—	3.2	Meadows and seeps (mesic), marshes and swamps (streambanks and lake margins).  Blooming period: July–September Elevation range: 3,540–4,560 feet	<b>Not Expected.</b> Marginal habitat occurs in and along the margins of the drainage on the project site; however, the site is currently used for grazing, which reduces the potential for the site to support special-status plant species. No CNDDDB records within 5 miles of the project site.
<i>Stachys pilosa</i>	Hairy marsh hedge-nettle	—	—	2B.3	Great Basin scrub (mesic), meadows and seeps.  Blooming period: June–August Elevation range: 3,930–5,810 feet	<b>None.</b> Suitable scrub, meadow, and seep habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Stellaria obtusa</i>	Obtuse starwort	—	—	4.3	Moist areas in woodland, shaded edges of creeks. Lower montane coniferous forest, riparian woodland, upper montane coniferous forest.  Blooming period: May–October Elevation range: 490–7,520 feet	<b>None.</b> Suitable woodland, stream edge, and forest habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<b>FISH</b>						
<i>Hypomesus transpacificus</i>	Delta smelt	FT	SE	N/A	Lower reaches of the Sacramento and Napa Rivers and Sacramento-San Joaquin delta; estuarine or brackish waters up to 18 parts per thousand (ppt); spawn in shallow brackish water upstream from the mixing zone (zone of saltwater-freshwater interface) where salinity is around 2 ppt.	<b>None.</b> No aquatic estuarine habitat is present on the project site. Project site is outside the range of this species.
<b>AMPHIBIANS</b>						
<i>Ambystoma macrodactylum sigillatum</i>	Southern long-toed salamander	—	SSC	N/A	Occurs in alpine meadows, high mountain ponds and lakes along the northern Sierra Nevada south to Garner Meadows and Spicer Reservoir, and in Trinity and Siskiyou Counties near the Trinity Alps.	<b>None.</b> No breeding habitat is present on the project site, existing roads and development are barriers to movement, and no suitable cover exists on the project site for this species. The nearest CNDDDB occurrence is approximately 5 miles to the southwest of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Rana boylei</i>	Foothill yellow-legged frog	—	SC, SSC	N/A	Found in shallow, slow, gravelly streams and rivers with sunny banks, in forests, chaparral, and woodlands.	<b>None.</b> Suitable stream, river, woodland, forest, and chaparral habitat is absent from the project site, and existing roads and development are barriers to movement. The nearest CNDBB occurrence is approximately 1.5 miles west of the project site; however, this record was from 1899.
<i>Rana draytonii</i>	California red-legged frog	FT	SSC	N/A	Dense, shrubby riparian vegetation associated with deep (2.3 feet), still, or slow-moving water.	<b>None.</b> Suitable slow stream and pond within riparian habitat is absent from the project site. The project site is outside the current known range of this species. Recent surveys for this species throughout the historic range in the Sierra Nevada foothills additionally confirm the range of this species to be further west of the project site (Barry and Fellers 2013). No CNDBB records within 5 miles of the project site.
<i>Rana sierrae</i>	Sierra Nevada yellow-legged frog	FE	ST, WL	N/A	High mountain lakes, ponds, tarns and streams; rarely found more than 3 feet from water.	<b>None.</b> Suitable lake, pond, tarn, and stream habitat is absent from the project site. No CNDBB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<b>AMPHIBIANS AND REPTILES</b>						
<i>Emys marmorata</i>	Western pond turtle	—	SSC	N/A	Occurs in aquatic habitat throughout California, west of the Sierra-Cascade crest. Associated with permanent ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams. Will nest on streambanks or uplands.	<b>None.</b> Suitable aquatic habitat is absent from the project site and immediately surrounding areas lack aquatic habitat. No CNDDDB records within 5 miles of the project site.
<b>BIRDS</b>						
<i>Accipiter gentilis</i>	Northern goshawk	—	SSC (Nesting)	N/A	Prefers mature, dense conifer forests, but will also inhabit deciduous and mixed forests from sea level to subalpine areas. This species may also be found in urban forested parks. Forage in a wider variety of forest types, including forest with open understories.	<b>Not Expected.</b> Dense forest with high canopy closure is absent from the project site and immediate surroundings. Mixed coniferous forest to the east and south of the project site may be suitable for nesting; however, the project site lacks suitable forested foraging or nesting habitat. Multiple CNDDDB-recorded occurrences are within 5 miles of the project site, in the forests to the northwest, east, southwest and west of the project site.
<i>Aquila chrysaetos</i>	Golden eagle	—	FP, WL	N/A	Inhabits rolling foothills, mountain areas, sage-juniper flats, desert. Needs open terrain for hunting. Nests on cliffs and in large trees in open areas.	<b>Not Expected.</b> Suitable nesting habitat is absent from the project site. Foraging habitat is marginal on the project site. No CNDDDB records within 5 miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Coturnicops noveboracensis</i>	Yellow rail	—	SSC	N/A	Breeds in sedge marshes and winters in marshes and hay fields. Very elusive.	<b>None.</b> Suitable breeding habitat is absent from the project site. Nearest CNDDDB occurrence is approximately 1.5 miles the west of the project site.
<i>Empidonax traillii</i>	Willow flycatcher	—	SE	N/A	Breeds in moist, shrubby areas, often with standing or running water. Winters in shrubby clearings and early successional growth.	<b>None.</b> Suitable breeding habitat is absent from the project site. No CNDDDB records within 5 miles of the project site.
<i>Haliaeetus leucocephalus</i>	Bald eagle (Nesting and wintering)	FD	SE, FP	N/A	Occur along the ocean shore, lake margins and rivers for both nesting and wintering; most nests within 1 mile of water. Roosts communally in winter.	<b>None.</b> Suitable breeding and foraging habitat is absent from the project site and nearby development would likely preclude nesting. No CNDDDB records within 5 miles of the project site.
<i>Grus canadensis tabida</i>	Greater sandhill crane (Nesting and Wintering)	—	ST, FP	N/A	Breeds in Siskiyou, Modoc, Lassen, Sierra Valley, Plumas and Sierra counties, California, and winters primarily in the Central Valley. Found in wet meadow, shallow lacustrine, and fresh emergent wetland habitats for breeding. Also uses grain fields near a shallow waterbodies as a communal roost sites and irrigated pastures as loaf sites.	<b>Not Expected.</b> Small amount of marginal loafing habitat is present on the project site. The nearest CNDDDB occurrence is approximately 0.75 mile northeast of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Pandion haliaetus</i>	Osprey	—	WL	N/A	Nests near water at the top of tall trees and manmade structures such as power and phone poles, duck blinds, channel markers, navigation aids, and wooden docks. Localized breeding throughout California.	<b>None.</b> No suitable nesting or foraging habitat is present within the project site. No CNDDDB records within 5 miles of the project site.
<i>Riparia riparia</i>	Bank swallow (nesting)	—	ST	N/A	Uses holes dug in cliffs and vertical river banks in alluvial, friable soils for cover and nesting sites; typically in low gradient, meandering waterways. Will forage over riparian areas, and occasionally over brushland, grassland, wetlands, water, and cropland.	<b>None (nesting)/Not Expected (foraging).</b> Small amount of marginal foraging habitat for this species in the project site. Although the CNDDDB has two recorded occurrences within five miles of the project site, Plumas County is outside of the normal range for this species (Plumas County 2012).
<i>Strix nebulosa</i>	Great gray owl	—	SE	N/A	Prefer dense forests interspersed with open meadows, clearings, or bogs.	<b>None.</b> No suitable nesting or foraging habitat is present within the project site. No CNDDDB records within 5 miles of the project site.
<b>MAMMALS</b>						
<i>Antrozous pallidus</i>	pallid bat	—	SSC	N/A	Common in open, dry habitats including grasslands, shrublands, woodlands, and forests with rocky areas for roosting. Roosts alone, in small and large groups in rocky outcrops and cliffs, caves, mines, buildings, and in cavities or under sloughing bark of decaying trees.	<b>Not Expected.</b> Trees near the project site are generally without cavities and sloughing bark and are not likely suitable roosting or nesting habitat. There are no buildings on the site that this species would find suitable to roost in. One CNDDDB occurrence is approximately 3.5 miles northwest of the site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Aplodontia rufa californica</i>	Sierra Nevada mountain beaver	—	SSC	N/A	Inhabits dense riparian-deciduous and open, brushy stages of most forest types. Montane riparian, deep, friable soils are required for burrowing.	<b>None.</b> No suitable nesting or foraging habitat is present within the project site. No CNDDDB records within 5 miles of the project site.
<i>Canis lupus</i>	Gray wolf	FE	SE	N/A	Habitat generalists and will exist where there is presence of adequate ungulate prey, water, availability of den sites, ease of travel. Suitable habitat generally consists of areas where human contact is relatively low (Mladenoff et. al 1999).	<b>None.</b> No suitable den sites or food source occur on the project site for this species. Additionally, the project site is located near a residential and commercial use area. No CNDDDB records within 5 miles of the project site.
<i>Chorynorhinus townsendii</i>	Townsend's big eared bat	—	SC (Threatened)/SSC	N/A	Most abundant in mesic habitats. Roosts in caves, mines, tunnels, buildings, or other human-made structures. Also reported using hollow trees as roost sites.	<b>Not Expected.</b> Trees near the project site generally without cavities and sloughing bark and are not likely suitable. There are no buildings on the site that this species would find suitable to roost in. One CNDDDB record is approximately 3 miles to the northwest of the project site.
<i>Gulo gulo</i>	California wolverine	FC	ST, FP	N/A	Found in a wide variety of mountain habitats. Needs water, caves, logs, or other cover for denning.	<b>None.</b> No suitable denning or cover habitat is present within the project site. No CNDDDB records within 5 miles of the project site.



Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Pekania pennant</i>	Fisher – West Coast DPS	—	ST, SSC	N/A	Prefer extensive conifer forests typical of the boreal forest but are also common in mixed hardwood and conifer forests. Fishers prefer forest floors that have large amounts of coarse woody debris. In western forests where fire regularly removes understory debris, fishers show a preference for riparian woodland habitat. Fishers tend to avoid areas with deep snow.	<b>None.</b> No suitable forest habitat is present within the project site. No CNDDDB records within 5 miles of the project site.
<i>Taxidea taxus</i>	American badger	—	SSC	N/A	Grasslands, savannas, and mountain meadows near timberline; principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated ground. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Need friable soils to dig large burrows for dens.	<b>Not expected.</b> Marginal suitable habitat for this species occurs on the project site. No large burrows that could support this species are present on the project site. Additionally, the project site is located near a residential and commercial use area that would be a barrier. One CNDDDB-recorded occurrence within 5-miles of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<i>Vulpes vulpes necator</i>	Sierra Nevada red fox	FC	ST	N/A	Occurs in a variety of remote, high-elevation alpine and subalpine habitats including meadows, dense, mature forest, talus, and fell fields. Habitat use varies seasonally; this species moves from alpine and subalpine habitats in summer down to mid-elevation habitats in winter. In winter use dense, mature conifer forests; in summer prefer barren habitats. Sensitive to human disturbance.	<b>Not expected.</b> Marginal suitable habitat for this species occurs on the project site. No large burrows that could support this species are present on the project site. Additionally, the project site is located near a residential and commercial use area that would be a barrier and deterrent. One CNDDB-recorded occurrence is less than one mile to the east of the of the project site.

Scientific Name	Common name	Federal listing status	State listing status	Rare Plant Rank	General Habitat	Potential to Occur at the Project Site
<p><b>* List of Abbreviations for Federal and State Species-Status:</b></p> <p>FE = Federally listed as endangered  FT = Federally listed as threatened    FD = Federally delisted  SE = State endangered  ST = State threatened    WL = Watch lists  FP = Fully protected  FC = Federal candidate for listing  SC (Threatened) = State candidate for listing as threatened  SSC = State species of special concern; "Nesting" indicates that only nesting birds are protected under this status.    1A = Plants presumed extirpated in California and either rare or extinct elsewhere  1B = Plants rare, threatened, or endangered in California and elsewhere    2A = Plants presumed extirpated in California, but more common elsewhere  2B = Plants rare, threatened, or endangered in California, but more common elsewhere    3 = Review List: Plants about which more information is needed    4 = Watch list: Plants of limited distribution  — = No listing</p> <p><b>Threat Ranks:</b></p> <p>0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)  0.2-Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat)    0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)</p>						

## Sources:

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- California Native Plant Society. 2018. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Rare Plant Program. Sacramento, CA. Accessed September 1, 2018, <http://www.rareplants.cnps.org>. (CNPS 2018)
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- U.S. Fish and Wildlife Service. 2018. U.S. Fish & Wildlife Service Species List (online edition). Accessed September 2, 2018, <http://ecos.fws.gov/ipac/>. (USFWS 2018a)

**CNDDB 9-Quad Species List** 272 records.

Element Type	Scientific Name	Common Name	Element Code	Federal Status	State Status	CDFW Status	CA Rare Plant Rank	Quad Code	Quad Name	Data Status	Taxonomic Sort
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	3912077	Blue Nose Mtn.	Mapped	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	3912078	Onion Valley	Mapped and Unprocessed	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	3912087	Spring Garden	Mapped	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	3912088	Quincy	Mapped	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	3912171	Dogwood Peak	Mapped	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	3912181	Meadow Valley	Mapped and Unprocessed	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	4012017	Taylorville	Mapped	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Ambystoma macrodactylum sigillatum	southern long-toed salamander	AAAAA01085	None	None	SSC	-	4012111	Twain	Mapped	Animals - Amphibians - Ambystomatidae - Ambystoma macrodactylum sigillatum
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	SSC	-	4012017	Taylorville	Mapped	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	SSC	-	3912181	Meadow Valley	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	SSC	-	3912171	Dogwood Peak	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	SSC	-	3912088	Quincy	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	SSC	-	3912078	Onion Valley	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	SSC	-	3912077	Blue Nose Mtn.	Mapped	Animals - Amphibians - Ranidae - Rana boylei

Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	3912078	Onion Valley	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	3912087	Spring Garden	Mapped	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	3912088	Quincy	Mapped	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	3912171	Dogwood Peak	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	3912181	Meadow Valley	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	4012017	Taylorville	Mapped	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	4012018	Crescent Mills	Unprocessed	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Amphibians	Rana sierrae	Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	WL	-	4012111	Twain	Mapped	Animals - Amphibians - Ranidae - Rana sierrae
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	4012111	Twain	Unprocessed	Animals - Birds - Accipitridae - Accipiter gentilis
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	4012018	Crescent Mills	Mapped	Animals - Birds - Accipitridae - Accipiter gentilis
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	4012017	Taylorville	Mapped	Animals - Birds - Accipitridae - Accipiter gentilis
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	3912181	Meadow Valley	Mapped and Unprocessed	Animals - Birds - Accipitridae - Accipiter gentilis
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	3912087	Spring Garden	Mapped and Unprocessed	Animals - Birds - Accipitridae - Accipiter gentilis
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	3912088	Quincy	Mapped	Animals - Birds - Accipitridae - Accipiter gentilis
Animals - Birds	Aquila chrysaetos	golden eagle	ABNKC22010	None	None	FP , WL	-	4012017	Taylorville	Unprocessed	Animals - Birds - Accipitridae - Aquila chrysaetos
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	4012018	Crescent Mills	Mapped and Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3912088	Quincy	Mapped and Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3912077	Blue Nose Mtn.	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3912181	Meadow Valley	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3912181	Meadow Valley	Mapped and Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus

Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3912077	Blue Nose Mtn.	Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3912078	Onion Valley	Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3912087	Spring Garden	Unprocessed	Animals - Birds - Accipitridae - Pandion haliaetus
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012018	Crescent Mills	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Grus canadensis tabida	greater sandhill crane	ABNMK01014	None	Threatened	FP	-	4012018	Crescent Mills	Mapped	Animals - Birds - Gruidae - Grus canadensis tabida
Animals - Birds	Grus canadensis tabida	greater sandhill crane	ABNMK01014	None	Threatened	FP	-	4012017	Taylorville	Mapped	Animals - Birds - Gruidae - Grus canadensis tabida
Animals - Birds	Grus canadensis tabida	greater sandhill crane	ABNMK01014	None	Threatened	FP	-	3912088	Quincy	Mapped	Animals - Birds - Gruidae - Grus canadensis tabida
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3912088	Quincy	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012017	Taylorville	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012018	Crescent Mills	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Coturnicops noveboracensis	yellow rail	ABNME01010	None	None	SSC	-	3912088	Quincy	Mapped	Animals - Birds - Rallidae - Coturnicops noveboracensis
Animals - Birds	Strix nebulosa	great gray owl	ABNSB12040	None	Endangered	-	-	3912087	Spring Garden	Unprocessed	Animals - Birds - Strigidae - Strix nebulosa
Animals - Birds	Empidonax traillii	willow flycatcher	ABPAE33040	None	Endangered	-	-	3912077	Blue Nose Mtn.	Mapped	Animals - Birds - Tyrannidae - Empidonax traillii
Animals - Birds	Empidonax traillii	willow flycatcher	ABPAE33040	None	Endangered	-	-	4012018	Crescent Mills	Mapped	Animals - Birds - Tyrannidae - Empidonax traillii
Animals - Insects	Bombus morrisoni	Morrison bumble bee	IIHYM24460	None	None	-	-	4012018	Crescent Mills	Mapped	Animals - Insects - Apidae - Bombus morrisoni
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	4012018	Crescent Mills	Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	4012017	Taylorville	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	4012111	Twain	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	3912087	Spring Garden	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	3912088	Quincy	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	3912181	Meadow Valley	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	3912171	Dogwood Peak	Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Atractelmis wawona	Wawona riffle beetle	IICOL58010	None	None	-	-	4012018	Crescent Mills	Mapped	Animals - Insects - Elmidae - Atractelmis wawona

Animals - Insects	Neothremma genella	golden-horned caddisfly	IITR16020	None	None	-	-	3912077	Blue Nose Mtn.	Mapped	Animals - Insects - Uenoidae - Neothremma genella
Animals - Mammals	Aplodontia rufa californica	Sierra Nevada mountain beaver	AMAF01013	None	None	SSC	-	3912171	Dogwood Peak	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa californica
Animals - Mammals	Aplodontia rufa californica	Sierra Nevada mountain beaver	AMAF01013	None	None	SSC	-	4012018	Crescent Mills	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa californica
Animals - Mammals	Aplodontia rufa californica	Sierra Nevada mountain beaver	AMAF01013	None	None	SSC	-	3912181	Meadow Valley	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa californica
Animals - Mammals	Canis lupus	gray wolf	AMAJA01030	Endangered	Endangered	-	-	4012017	Taylorville	Unprocessed	Animals - Mammals - Canidae - Canis lupus
Animals - Mammals	Canis lupus	gray wolf	AMAJA01030	Endangered	Endangered	-	-	4012018	Crescent Mills	Unprocessed	Animals - Mammals - Canidae - Canis lupus
Animals - Mammals	Canis lupus	gray wolf	AMAJA01030	Endangered	Endangered	-	-	4012111	Twain	Unprocessed	Animals - Mammals - Canidae - Canis lupus
Animals - Mammals	Canis lupus	gray wolf	AMAJA01030	Endangered	Endangered	-	-	3912171	Dogwood Peak	Unprocessed	Animals - Mammals - Canidae - Canis lupus
Animals - Mammals	Canis lupus	gray wolf	AMAJA01030	Endangered	Endangered	-	-	3912181	Meadow Valley	Unprocessed	Animals - Mammals - Canidae - Canis lupus
Animals - Mammals	Canis lupus	gray wolf	AMAJA01030	Endangered	Endangered	-	-	3912088	Quincy	Unprocessed	Animals - Mammals - Canidae - Canis lupus
Animals - Mammals	Canis lupus	gray wolf	AMAJA01030	Endangered	Endangered	-	-	3912087	Spring Garden	Unprocessed	Animals - Mammals - Canidae - Canis lupus
Animals - Mammals	Vulpes vulpes necator	Sierra Nevada red fox	AMAJA03012	Candidate	Threatened	-	-	3912087	Spring Garden	Mapped	Animals - Mammals - Canidae - Vulpes vulpes necator
Animals - Mammals	Vulpes vulpes necator	Sierra Nevada red fox	AMAJA03012	Candidate	Threatened	-	-	3912088	Quincy	Mapped	Animals - Mammals - Canidae - Vulpes vulpes necator
Animals - Mammals	Vulpes vulpes necator	Sierra Nevada red fox	AMAJA03012	Candidate	Threatened	-	-	4012018	Crescent Mills	Mapped	Animals - Mammals - Canidae - Vulpes vulpes necator
Animals - Mammals	Vulpes vulpes necator	Sierra Nevada red fox	AMAJA03012	Candidate	Threatened	-	-	4012017	Taylorville	Mapped	Animals - Mammals - Canidae - Vulpes vulpes necator
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3912181	Meadow Valley	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012017	Taylorville	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012018	Crescent Mills	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum



Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012111	Twain	Mapped	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3912087	Spring Garden	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3912077	Blue Nose Mtn.	Mapped	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3912078	Onion Valley	Mapped	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3912171	Dogwood Peak	Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3912088	Quincy	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Gulo gulo	California wolverine	AMAJF03010	Proposed Threatened	Threatened	FP	-	3912181	Meadow Valley	Mapped	Animals - Mammals - Mustelidae - Gulo gulo
Animals - Mammals	Pekania pennanti	fisher - West Coast DPS	AMAJF01021	None	Threatened	SSC	-	4012017	Taylorville	Mapped	Animals - Mammals - Mustelidae - Pekania pennanti
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3912088	Quincy	Mapped	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Antrozous pallidus	pallid bat	AMACC10010	None	None	SSC	-	3912088	Quincy	Mapped	Animals - Mammals - Vespertilionidae - Antrozous pallidus
Animals - Mammals	Antrozous pallidus	pallid bat	AMACC10010	None	None	SSC	-	3912171	Dogwood Peak	Unprocessed	Animals - Mammals - Vespertilionidae - Antrozous pallidus
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3912171	Dogwood Peak	Mapped	Animals - Mammals - Vespertilionidae - Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3912181	Meadow Valley	Mapped	Animals - Mammals - Vespertilionidae - Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3912088	Quincy	Mapped	Animals - Mammals - Vespertilionidae - Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3912078	Onion Valley	Mapped	Animals - Mammals - Vespertilionidae - Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4012018	Crescent Mills	Mapped	Animals - Mammals - Vespertilionidae - Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4012111	Twain	Mapped	Animals - Mammals - Vespertilionidae - Corynorhinus townsendii

Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	4012111	Twain	Unprocessed	Animals - Mammals - Vespertilionidae - Lasionycteris noctivagans
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	4012018	Crescent Mills	Unprocessed	Animals - Mammals - Vespertilionidae - Lasionycteris noctivagans
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	3912181	Meadow Valley	Unprocessed	Animals - Mammals - Vespertilionidae - Lasionycteris noctivagans
Animals - Mammals	Lasiurus cinereus	hoary bat	AMACC05030	None	None	-	-	3912181	Meadow Valley	Unprocessed	Animals - Mammals - Vespertilionidae - Lasiurus cinereus
Animals - Mammals	Lasiurus cinereus	hoary bat	AMACC05030	None	None	-	-	4012111	Twain	Unprocessed	Animals - Mammals - Vespertilionidae - Lasiurus cinereus
Animals - Mammals	Myotis evotis	long-eared myotis	AMACC01070	None	None	-	-	4012111	Twain	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis evotis
Animals - Mammals	Myotis lucifugus	little brown bat	AMACC01010	None	None	-	-	4012111	Twain	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis lucifugus
Animals - Mammals	Myotis lucifugus	little brown bat	AMACC01010	None	None	-	-	3912181	Meadow Valley	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis lucifugus
Animals - Mammals	Myotis thysanodes	fringed myotis	AMACC01090	None	None	-	-	3912171	Dogwood Peak	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis thysanodes
Animals - Mammals	Myotis thysanodes	fringed myotis	AMACC01090	None	None	-	-	3912088	Quincy	Mapped	Animals - Mammals - Vespertilionidae - Myotis thysanodes
Animals - Mammals	Myotis volans	long-legged myotis	AMACC01110	None	None	-	-	3912088	Quincy	Mapped	Animals - Mammals - Vespertilionidae - Myotis volans
Animals - Mammals	Myotis volans	long-legged myotis	AMACC01110	None	None	-	-	4012018	Crescent Mills	Mapped	Animals - Mammals - Vespertilionidae - Myotis volans
Animals - Mammals	Myotis yumanensis	Yuma myotis	AMACC01020	None	None	-	-	4012018	Crescent Mills	Unprocessed	Animals - Mammals - Vespertilionidae - Myotis yumanensis
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4012018	Crescent Mills	Mapped and Unprocessed	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4012111	Twain	Mapped	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	3912088	Quincy	Mapped and Unprocessed	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	3912087	Spring Garden	Unprocessed	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	3912077	Blue Nose Mtn.	Mapped and Unprocessed	Animals - Mollusks - Margaritiferidae - Margaritifera falcata

Animals - Mollusks	Anodonta oregonensis	Oregon floater	IMBIV04110	None	None	-	-	4012018	Crescent Mills	Unprocessed	Animals - Mollusks - Unionidae - Anodonta oregonensis
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3912181	Meadow Valley	Unprocessed	Animals - Reptiles - Emydidae - Emys marmorata
Community - Terrestrial	Darlingtonia Seep	Darlingtonia Seep	CTT51120CA	None	None	-	-	3912181	Meadow Valley	Mapped	Community - Terrestrial - Darlingtonia Seep
Community - Terrestrial	Darlingtonia Seep	Darlingtonia Seep	CTT51120CA	None	None	-	-	4012018	Crescent Mills	Mapped and Unprocessed	Community - Terrestrial - Darlingtonia Seep
Community - Terrestrial	Darlingtonia Seep	Darlingtonia Seep	CTT51120CA	None	None	-	-	4012111	Twain	Mapped	Community - Terrestrial - Darlingtonia Seep
Plants - Bryophytes	Bruchia bolanderi	Bolander's bruchia	NBMUS13010	None	None	-	4.2	3912181	Meadow Valley	Mapped and Unprocessed	Plants - Bryophytes - Bruchiaceae - Bruchia bolanderi
Plants - Bryophytes	Bruchia bolanderi	Bolander's bruchia	NBMUS13010	None	None	-	4.2	3912171	Dogwood Peak	Mapped and Unprocessed	Plants - Bryophytes - Bruchiaceae - Bruchia bolanderi
Plants - Bryophytes	Bruchia bolanderi	Bolander's bruchia	NBMUS13010	None	None	-	4.2	3912078	Onion Valley	Mapped	Plants - Bryophytes - Bruchiaceae - Bruchia bolanderi
Plants - Bryophytes	Meesia triquetra	three-ranked hump moss	NBMUS4L020	None	None	-	4.2	3912171	Dogwood Peak	Unprocessed	Plants - Bryophytes - Meesiaceae - Meesia triquetra
Plants - Bryophytes	Meesia triquetra	three-ranked hump moss	NBMUS4L020	None	None	-	4.2	3912181	Meadow Valley	Unprocessed	Plants - Bryophytes - Meesiaceae - Meesia triquetra
Plants - Bryophytes	Mielichhoferia elongata	elongate copper moss	NBMUS4Q022	None	None	-	4.3	4012018	Crescent Mills	Unprocessed	Plants - Bryophytes - Mielichhoferiaceae - Mielichhoferia elongata
Plants - Lichens	Peltigera gowardii	western waterfan lichen	NLVER00460	None	None	-	4.2	3912171	Dogwood Peak	Unprocessed	Plants - Lichens - Peltigeraceae - Peltigera gowardii
Plants - Vascular	Erigeron lassenianus var. deficiens	Plumas rayless daisy	PDAST3M262	None	None	-	1B.3	3912171	Dogwood Peak	Mapped	Plants - Vascular - Asteraceae - Erigeron lassenianus var. deficiens
Plants - Vascular	Erigeron lassenianus var. deficiens	Plumas rayless daisy	PDAST3M262	None	None	-	1B.3	3912181	Meadow Valley	Mapped	Plants - Vascular - Asteraceae - Erigeron lassenianus var. deficiens
Plants - Vascular	Erigeron lassenianus var. deficiens	Plumas rayless daisy	PDAST3M262	None	None	-	1B.3	3912078	Onion Valley	Mapped	Plants - Vascular - Asteraceae - Erigeron lassenianus var. deficiens
Plants - Vascular	Erigeron lassenianus var. deficiens	Plumas rayless daisy	PDAST3M262	None	None	-	1B.3	3912088	Quincy	Mapped	Plants - Vascular - Asteraceae - Erigeron lassenianus var. deficiens
Plants - Vascular	Erigeron lassenianus var. deficiens	Plumas rayless daisy	PDAST3M262	None	None	-	1B.3	4012111	Twain	Mapped	Plants - Vascular - Asteraceae - Erigeron lassenianus var. deficiens
Plants - Vascular	Erigeron petrophilus var. sierrensis	northern Sierra daisy	PDAST3M351	None	None	-	4.3	4012111	Twain	Unprocessed	Plants - Vascular - Asteraceae - Erigeron petrophilus var. sierrensis
Plants - Vascular	Erigeron petrophilus var. sierrensis	northern Sierra daisy	PDAST3M351	None	None	-	4.3	4012017	Taylorsville	Unprocessed	Plants - Vascular - Asteraceae - Erigeron petrophilus var. sierrensis

Plants - Vascular	Erigeron petrophilus var. sierrensis	northern Sierra daisy	PDAST3M351	None	None	-	4.3	3912088	Quincy	Unprocessed	Plants - Vascular - Asteraceae - Erigeron petrophilus var. sierrensis
Plants - Vascular	Erigeron petrophilus var. sierrensis	northern Sierra daisy	PDAST3M351	None	None	-	4.3	3912078	Onion Valley	Unprocessed	Plants - Vascular - Asteraceae - Erigeron petrophilus var. sierrensis
Plants - Vascular	Erigeron petrophilus var. sierrensis	northern Sierra daisy	PDAST3M351	None	None	-	4.3	3912077	Blue Nose Mtn.	Unprocessed	Plants - Vascular - Asteraceae - Erigeron petrophilus var. sierrensis
Plants - Vascular	Erigeron petrophilus var. sierrensis	northern Sierra daisy	PDAST3M351	None	None	-	4.3	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Asteraceae - Erigeron petrophilus var. sierrensis
Plants - Vascular	Erigeron petrophilus var. sierrensis	northern Sierra daisy	PDAST3M351	None	None	-	4.3	3912171	Dogwood Peak	Unprocessed	Plants - Vascular - Asteraceae - Erigeron petrophilus var. sierrensis
Plants - Vascular	Oreostemma elatum	tall alpine-aster	PDASTE020	None	None	-	1B.2	3912088	Quincy	Mapped and Unprocessed	Plants - Vascular - Asteraceae - Oreostemma elatum
Plants - Vascular	Oreostemma elatum	tall alpine-aster	PDASTE020	None	None	-	1B.2	3912181	Meadow Valley	Mapped and Unprocessed	Plants - Vascular - Asteraceae - Oreostemma elatum
Plants - Vascular	Oreostemma elatum	tall alpine-aster	PDASTE020	None	None	-	1B.2	4012017	Taylorville	Mapped	Plants - Vascular - Asteraceae - Oreostemma elatum
Plants - Vascular	Oreostemma elatum	tall alpine-aster	PDASTE020	None	None	-	1B.2	4012018	Crescent Mills	Mapped and Unprocessed	Plants - Vascular - Asteraceae - Oreostemma elatum
Plants - Vascular	Oreostemma elatum	tall alpine-aster	PDASTE020	None	None	-	1B.2	4012111	Twain	Mapped and Unprocessed	Plants - Vascular - Asteraceae - Oreostemma elatum
Plants - Vascular	Pyrrocoma lucida	sticky pyrrocoma	PDASTDT0E0	None	None	-	1B.2	4012018	Crescent Mills	Mapped	Plants - Vascular - Asteraceae - Pyrrocoma lucida
Plants - Vascular	Pyrrocoma lucida	sticky pyrrocoma	PDASTDT0E0	None	None	-	1B.2	4012017	Taylorville	Mapped	Plants - Vascular - Asteraceae - Pyrrocoma lucida
Plants - Vascular	Pyrrocoma lucida	sticky pyrrocoma	PDASTDT0E0	None	None	-	1B.2	3912088	Quincy	Mapped	Plants - Vascular - Asteraceae - Pyrrocoma lucida
Plants - Vascular	Solidago lepida var. salebrosa	Rocky Mountains Canada goldenrod	PDAST8P2D3	None	None	-	3.2	4012017	Taylorville	Mapped	Plants - Vascular - Asteraceae - Solidago lepida var. salebrosa
Plants - Vascular	Azolla microphylla	Mexican mosquito fern	PPAZO01030	None	None	-	4.2	4012017	Taylorville	Unprocessed	Plants - Vascular - Azollaceae - Azolla microphylla
Plants - Vascular	Azolla microphylla	Mexican mosquito fern	PPAZO01030	None	None	-	4.2	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Azollaceae - Azolla microphylla
Plants - Vascular	Hackelia amethystina	amethyst stickseed	PDBOR0G010	None	None	-	4.3	4012017	Taylorville	Unprocessed	Plants - Vascular - Boraginaceae - Hackelia amethystina
Plants - Vascular	Hackelia amethystina	amethyst stickseed	PDBOR0G010	None	None	-	4.3	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Boraginaceae - Hackelia amethystina

Plants - Vascular	Boechera constancei	Constance's rockcress	PDBRA06090	None	None	-	1B.1	4012018	Crescent Mills	Mapped	Plants - Vascular - Brassicaceae - Boechera constancei
Plants - Vascular	Boechera constancei	Constance's rockcress	PDBRA06090	None	None	-	1B.1	4012111	Twain	Mapped	Plants - Vascular - Brassicaceae - Boechera constancei
Plants - Vascular	Boechera constancei	Constance's rockcress	PDBRA06090	None	None	-	1B.1	3912087	Spring Garden	Mapped	Plants - Vascular - Brassicaceae - Boechera constancei
Plants - Vascular	Boechera constancei	Constance's rockcress	PDBRA06090	None	None	-	1B.1	3912078	Onion Valley	Mapped	Plants - Vascular - Brassicaceae - Boechera constancei
Plants - Vascular	Boechera constancei	Constance's rockcress	PDBRA06090	None	None	-	1B.1	3912181	Meadow Valley	Mapped	Plants - Vascular - Brassicaceae - Boechera constancei
Plants - Vascular	Boechera constancei	Constance's rockcress	PDBRA06090	None	None	-	1B.1	3912088	Quincy	Mapped	Plants - Vascular - Brassicaceae - Boechera constancei
Plants - Vascular	Boechera microphylla	small-leaved rockcress	PDBRA06162	None	None	-	3	3912078	Onion Valley	Unprocessed	Plants - Vascular - Brassicaceae - Boechera microphylla
Plants - Vascular	Brasenia schreberi	watershield	PDCAB01010	None	None	-	2B.3	3912088	Quincy	Mapped and Unprocessed	Plants - Vascular - Cabombaceae - Brasenia schreberi
Plants - Vascular	Brasenia schreberi	watershield	PDCAB01010	None	None	-	2B.3	3912181	Meadow Valley	Mapped and Unprocessed	Plants - Vascular - Cabombaceae - Brasenia schreberi
Plants - Vascular	Brasenia schreberi	watershield	PDCAB01010	None	None	-	2B.3	4012018	Crescent Mills	Mapped	Plants - Vascular - Cabombaceae - Brasenia schreberi
Plants - Vascular	Eremogone cliffonii	Clifton's eremogone	PDCAR17010	None	None	-	1B.3	3912171	Dogwood Peak	Mapped	Plants - Vascular - Caryophyllaceae - Eremogone cliffonii
Plants - Vascular	Eremogone cliffonii	Clifton's eremogone	PDCAR17010	None	None	-	1B.3	3912078	Onion Valley	Mapped	Plants - Vascular - Caryophyllaceae - Eremogone cliffonii
Plants - Vascular	Pseudostellaria sierrae	Sierra starwort	PDCAR13020	None	None	-	4.2	3912078	Onion Valley	Unprocessed	Plants - Vascular - Caryophyllaceae - Pseudostellaria sierrae
Plants - Vascular	Stellaria obtusa	obtuse starwort	PDCAR0X0U0	None	None	-	4.3	3912171	Dogwood Peak	Unprocessed	Plants - Vascular - Caryophyllaceae - Stellaria obtusa
Plants - Vascular	Stellaria obtusa	obtuse starwort	PDCAR0X0U0	None	None	-	4.3	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Caryophyllaceae - Stellaria obtusa
Plants - Vascular	Chenopodium simplex	large-seeded goosefoot	PDCHE091P0	None	None	-	4.3	3912077	Blue Nose Mtn.	Unprocessed	Plants - Vascular - Chenopodiaceae - Chenopodium simplex
Plants - Vascular	Sedum albomarginatum	Feather River stonecrop	PDCRA0A030	None	None	-	1B.2	4012111	Twain	Unprocessed	Plants - Vascular - Crassulaceae - Sedum albomarginatum
Plants - Vascular	Carex buxbaumii	Buxbaum's sedge	PMCYP032B0	None	None	-	4.2	4012111	Twain	Unprocessed	Plants - Vascular - Cyperaceae - Carex buxbaumii
Plants - Vascular	Carex buxbaumii	Buxbaum's sedge	PMCYP032B0	None	None	-	4.2	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Cyperaceae - Carex buxbaumii
Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri
Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	4012017	Taylorville	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri

Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	4012111	Twain	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri
Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	3912077	Blue Nose Mtn.	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri
Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	3912078	Onion Valley	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri
Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	3912087	Spring Garden	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri
Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri
Plants - Vascular	Carex geyeri	Geyer's sedge	PMCYP03540	None	None	-	4.2	3912088	Quincy	Unprocessed	Plants - Vascular - Cyperaceae - Carex geyeri
Plants - Vascular	Carex lasiocarpa	woolly-fruited sedge	PMCYP03720	None	None	-	2B.3	4012018	Crescent Mills	Mapped	Plants - Vascular - Cyperaceae - Carex lasiocarpa
Plants - Vascular	Carex limosa	mud sedge	PMCYP037K0	None	None	-	2B.2	3912171	Dogwood Peak	Mapped	Plants - Vascular - Cyperaceae - Carex limosa
Plants - Vascular	Carex petasata	Liddon's sedge	PMCYP03AE0	None	None	-	2B.3	4012111	Twain	Mapped	Plants - Vascular - Cyperaceae - Carex petasata
Plants - Vascular	Carex scabriuscula	Siskiyou sedge	PMCYP03C40	None	None	-	4.3	4012111	Twain	Unprocessed	Plants - Vascular - Cyperaceae - Carex scabriuscula
Plants - Vascular	Carex scabriuscula	Siskiyou sedge	PMCYP03C40	None	None	-	4.3	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Cyperaceae - Carex scabriuscula
Plants - Vascular	Carex scabriuscula	Siskiyou sedge	PMCYP03C40	None	None	-	4.3	3912078	Onion Valley	Unprocessed	Plants - Vascular - Cyperaceae - Carex scabriuscula
Plants - Vascular	Carex scoparia var. scoparia	pointed broom sedge	PMCYP03C91	None	None	-	2A	3912181	Meadow Valley	Mapped and Unprocessed	Plants - Vascular - Cyperaceae - Carex scoparia var. scoparia
Plants - Vascular	Carex scoparia var. scoparia	pointed broom sedge	PMCYP03C91	None	None	-	2A	3912088	Quincy	Mapped	Plants - Vascular - Cyperaceae - Carex scoparia var. scoparia
Plants - Vascular	Carex sheldonii	Sheldon's sedge	PMCYP03CE0	None	None	-	2B.2	4012018	Crescent Mills	Mapped	Plants - Vascular - Cyperaceae - Carex sheldonii
Plants - Vascular	Eleocharis torticulmis	California twisted spikerush	PMCYP092E0	None	None	-	1B.3	4012018	Crescent Mills	Mapped and Unprocessed	Plants - Vascular - Cyperaceae - Eleocharis torticulmis
Plants - Vascular	Eleocharis torticulmis	California twisted spikerush	PMCYP092E0	None	None	-	1B.3	4012111	Twain	Mapped	Plants - Vascular - Cyperaceae - Eleocharis torticulmis
Plants - Vascular	Eriophorum gracile	slender cottongrass	PMCYP0A080	None	None	-	4.3	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Cyperaceae - Eriophorum gracile
Plants - Vascular	Rhynchospora alba	white beaked-rush	PMCYP0N010	None	None	-	2B.2	4012018	Crescent Mills	Mapped and Unprocessed	Plants - Vascular - Cyperaceae - Rhynchospora alba
Plants - Vascular	Rhynchospora capitellata	brownish beaked-rush	PMCYP0N080	None	None	-	2B.2	4012018	Crescent Mills	Mapped and Unprocessed	Plants - Vascular - Cyperaceae - Rhynchospora capitellata
Plants - Vascular	Schoenoplectus subterminalis	water bulrush	PMCYP0Q1G0	None	None	-	2B.3	3912171	Dogwood Peak	Mapped	Plants - Vascular - Cyperaceae - Schoenoplectus subterminalis
Plants - Vascular	Arctostaphylos mewukka ssp. truei	True's manzanita	PDERI040Q2	None	None	-	4.2	3912088	Quincy	Unprocessed	Plants - Vascular - Ericaceae - Arctostaphylos mewukka ssp. truei

Plants - Vascular	Arctostaphylos mewukka ssp. truei	True's manzanita	PDERI040Q2	None	None	-	4.2	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Ericaceae - Arctostaphylos mewukka ssp. truei
Plants - Vascular	Arctostaphylos mewukka ssp. truei	True's manzanita	PDERI040Q2	None	None	-	4.2	4012111	Twain	Unprocessed	Plants - Vascular - Ericaceae - Arctostaphylos mewukka ssp. truei
Plants - Vascular	Astragalus webberi	Webber's milk-vetch	PDFAB0F9J0	None	None	-	1B.2	4012111	Twain	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Astragalus webberi
Plants - Vascular	Astragalus webberi	Webber's milk-vetch	PDFAB0F9J0	None	None	-	1B.2	4012018	Crescent Mills	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Astragalus webberi
Plants - Vascular	Astragalus webberi	Webber's milk-vetch	PDFAB0F9J0	None	None	-	1B.2	4012017	Taylorville	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Astragalus webberi
Plants - Vascular	Astragalus whitneyi var. lenophyllus	woolly-leaved milk-vetch	PDFAB0F9L6	None	None	-	4.3	3912077	Blue Nose Mtn.	Unprocessed	Plants - Vascular - Fabaceae - Astragalus whitneyi var. lenophyllus
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	3912077	Blue Nose Mtn.	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	3912078	Onion Valley	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	3912087	Spring Garden	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	3912088	Quincy	Mapped	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	3912171	Dogwood Peak	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	3912181	Meadow Valley	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	4012018	Crescent Mills	Mapped	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lupinus dalesiae	Quincy lupine	PDFAB2B1A0	None	None	-	4.2	4012111	Twain	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Lupinus dalesiae
Plants - Vascular	Lycopus uniflorus	northern bugleweed	PDLAM0X080	None	None	-	4.3	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Lamiaceae - Lycopus uniflorus
Plants - Vascular	Monardella follettii	Follett's monardella	PDLAM180W0	None	None	-	1B.2	3912181	Meadow Valley	Mapped	Plants - Vascular - Lamiaceae - Monardella follettii
Plants - Vascular	Monardella follettii	Follett's monardella	PDLAM180W0	None	None	-	1B.2	3912088	Quincy	Mapped	Plants - Vascular - Lamiaceae - Monardella follettii
Plants - Vascular	Monardella follettii	Follett's monardella	PDLAM180W0	None	None	-	1B.2	3912078	Onion Valley	Mapped	Plants - Vascular - Lamiaceae - Monardella follettii
Plants - Vascular	Monardella follettii	Follett's monardella	PDLAM180W0	None	None	-	1B.2	4012111	Twain	Mapped	Plants - Vascular - Lamiaceae - Monardella follettii
Plants - Vascular	Monardella follettii	Follett's monardella	PDLAM180W0	None	None	-	1B.2	4012018	Crescent Mills	Mapped	Plants - Vascular - Lamiaceae - Monardella follettii
Plants - Vascular	Monardella follettii	Follett's monardella	PDLAM180W0	None	None	-	1B.2	4012017	Taylorville	Mapped	Plants - Vascular - Lamiaceae - Monardella follettii
Plants - Vascular	Stachys pilosa	hairy marsh hedge-nettle	PDLAM1X1A0	None	None	-	2B.3	3912088	Quincy	Mapped	Plants - Vascular - Lamiaceae - Stachys pilosa
Plants - Vascular	Stachys pilosa	hairy marsh hedge-nettle	PDLAM1X1A0	None	None	-	2B.3	3912181	Meadow Valley	Mapped	Plants - Vascular - Lamiaceae - Stachys pilosa

Plants - Vascular	Claytonia palustris	marsh claytonia	PDPOR030S0	None	None	-	4.3	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Montiaceae - Claytonia palustris
Plants - Vascular	Claytonia palustris	marsh claytonia	PDPOR030S0	None	None	-	4.3	3912088	Quincy	Unprocessed	Plants - Vascular - Montiaceae - Claytonia palustris
Plants - Vascular	Claytonia palustris	marsh claytonia	PDPOR030S0	None	None	-	4.3	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Montiaceae - Claytonia palustris
Plants - Vascular	Claytonia palustris	marsh claytonia	PDPOR030S0	None	None	-	4.3	4012111	Twain	Unprocessed	Plants - Vascular - Montiaceae - Claytonia palustris
Plants - Vascular	Lewisia cantelovii	Cantelow's lewisia	PDPOR04020	None	None	-	1B.2	3912171	Dogwood Peak	Mapped	Plants - Vascular - Montiaceae - Lewisia cantelovii
Plants - Vascular	Lewisia cantelovii	Cantelow's lewisia	PDPOR04020	None	None	-	1B.2	3912078	Onion Valley	Mapped	Plants - Vascular - Montiaceae - Lewisia cantelovii
Plants - Vascular	Lewisia kelloggii ssp. hutchisonii	Hutchison's lewisia	PDPOR04071	None	None	-	3.2	3912078	Onion Valley	Unprocessed	Plants - Vascular - Montiaceae - Lewisia kelloggii ssp. hutchisonii
Plants - Vascular	Lewisia kelloggii ssp. hutchisonii	Hutchison's lewisia	PDPOR04071	None	None	-	3.2	3912077	Blue Nose Mtn.	Unprocessed	Plants - Vascular - Montiaceae - Lewisia kelloggii ssp. hutchisonii
Plants - Vascular	Lewisia kelloggii ssp. hutchisonii	Hutchison's lewisia	PDPOR04071	None	None	-	3.2	3912171	Dogwood Peak	Unprocessed	Plants - Vascular - Montiaceae - Lewisia kelloggii ssp. hutchisonii
Plants - Vascular	Clarkia mildrediae ssp. lutescens	golden-anthered clarkia	PDONA050Q1	None	None	-	4.2	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Onagraceae - Clarkia mildrediae ssp. lutescens
Plants - Vascular	Clarkia mildrediae ssp. lutescens	golden-anthered clarkia	PDONA050Q1	None	None	-	4.2	3912171	Dogwood Peak	Unprocessed	Plants - Vascular - Onagraceae - Clarkia mildrediae ssp. lutescens
Plants - Vascular	Clarkia mildrediae ssp. lutescens	golden-anthered clarkia	PDONA050Q1	None	None	-	4.2	3912077	Blue Nose Mtn.	Unprocessed	Plants - Vascular - Onagraceae - Clarkia mildrediae ssp. lutescens
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3912087	Spring Garden	Unprocessed	Plants - Vascular - Onagraceae - Clarkia virgata
Plants - Vascular	Epilobium luteum	yellow willowherb	PDONA060H0	None	None	-	2B.3	3912077	Blue Nose Mtn.	Mapped and Unprocessed	Plants - Vascular - Onagraceae - Epilobium luteum
Plants - Vascular	Botrychium minganense	Mingan moonwort	PPOPH010R0	None	None	-	2B.2	3912078	Onion Valley	Mapped	Plants - Vascular - Ophioglossaceae - Botrychium minganense
Plants - Vascular	Corallorhiza trifida	northern coralroot	PMORC0M050	None	None	-	2B.1	3912181	Meadow Valley	Mapped	Plants - Vascular - Orchidaceae - Corallorhiza trifida
Plants - Vascular	Cypripedium californicum	California lady's-slipper	PMORC0Q040	None	None	-	4.2	3912088	Quincy	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium californicum
Plants - Vascular	Cypripedium californicum	California lady's-slipper	PMORC0Q040	None	None	-	4.2	3912078	Onion Valley	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium californicum
Plants - Vascular	Cypripedium californicum	California lady's-slipper	PMORC0Q040	None	None	-	4.2	4012111	Twain	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium californicum
Plants - Vascular	Cypripedium fasciculatum	clustered lady's-slipper	PMORC0Q060	None	None	-	4.2	4012111	Twain	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium fasciculatum



Plants - Vascular	Cypripedium fasciculatum	clustered lady's-slipper	PMORC0Q060	None	None	-	4.2	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium fasciculatum
Plants - Vascular	Cypripedium fasciculatum	clustered lady's-slipper	PMORC0Q060	None	None	-	4.2	3912078	Onion Valley	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium fasciculatum
Plants - Vascular	Cypripedium fasciculatum	clustered lady's-slipper	PMORC0Q060	None	None	-	4.2	3912088	Quincy	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium fasciculatum
Plants - Vascular	Cypripedium fasciculatum	clustered lady's-slipper	PMORC0Q060	None	None	-	4.2	3912171	Dogwood Peak	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium fasciculatum
Plants - Vascular	Cypripedium fasciculatum	clustered lady's-slipper	PMORC0Q060	None	None	-	4.2	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium fasciculatum
Plants - Vascular	Cypripedium montanum	mountain lady's-slipper	PMORC0Q080	None	None	-	4.2	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium montanum
Plants - Vascular	Cypripedium montanum	mountain lady's-slipper	PMORC0Q080	None	None	-	4.2	3912088	Quincy	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium montanum
Plants - Vascular	Cypripedium montanum	mountain lady's-slipper	PMORC0Q080	None	None	-	4.2	3912087	Spring Garden	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium montanum
Plants - Vascular	Cypripedium montanum	mountain lady's-slipper	PMORC0Q080	None	None	-	4.2	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium montanum
Plants - Vascular	Cypripedium montanum	mountain lady's-slipper	PMORC0Q080	None	None	-	4.2	4012017	Taylorville	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium montanum
Plants - Vascular	Piperia colemanii	Coleman's rein orchid	PMORC1X080	None	None	-	4.3	3912087	Spring Garden	Unprocessed	Plants - Vascular - Orchidaceae - Piperia colemanii
Plants - Vascular	Piperia leptopetala	narrow-petaled rein orchid	PMORC1X100	None	None	-	4.3	3912088	Quincy	Unprocessed	Plants - Vascular - Orchidaceae - Piperia leptopetala
Plants - Vascular	Penstemon personatus	closed-throated beardtongue	PDSCR1L4Y0	None	None	-	1B.2	3912171	Dogwood Peak	Mapped and Unprocessed	Plants - Vascular - Plantaginaceae - Penstemon personatus
Plants - Vascular	Penstemon personatus	closed-throated beardtongue	PDSCR1L4Y0	None	None	-	1B.2	3912087	Spring Garden	Mapped and Unprocessed	Plants - Vascular - Plantaginaceae - Penstemon personatus
Plants - Vascular	Penstemon personatus	closed-throated beardtongue	PDSCR1L4Y0	None	None	-	1B.2	3912181	Meadow Valley	Mapped and Unprocessed	Plants - Vascular - Plantaginaceae - Penstemon personatus
Plants - Vascular	Penstemon personatus	closed-throated beardtongue	PDSCR1L4Y0	None	None	-	1B.2	4012018	Crescent Mills	Mapped and Unprocessed	Plants - Vascular - Plantaginaceae - Penstemon personatus
Plants - Vascular	Penstemon personatus	closed-throated beardtongue	PDSCR1L4Y0	None	None	-	1B.2	4012111	Twain	Mapped and Unprocessed	Plants - Vascular - Plantaginaceae - Penstemon personatus
Plants - Vascular	Poa sierrae	Sierra blue grass	PMPOA4Z310	None	None	-	1B.3	3912171	Dogwood Peak	Mapped	Plants - Vascular - Poaceae - Poa sierrae
Plants - Vascular	Eriogonum umbellatum var. ahartii	Ahart's buckwheat	PDPGN086UY	None	None	-	1B.2	3912181	Meadow Valley	Mapped	Plants - Vascular - Polygonaceae - Eriogonum umbellatum var. ahartii

Plants - Vascular	Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed	PMPOT03080	None	None	-	2B.2	4012018	Crescent Mills	Mapped	Plants - Vascular - Potamogetonaceae - Potamogeton epihydrus
Plants - Vascular	Ceanothus fresnensis	Fresno ceanothus	PDRHA040E0	None	None	-	4.3	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Rhamnaceae - Ceanothus fresnensis
Plants - Vascular	Ceanothus fresnensis	Fresno ceanothus	PDRHA040E0	None	None	-	4.3	3912088	Quincy	Unprocessed	Plants - Vascular - Rhamnaceae - Ceanothus fresnensis
Plants - Vascular	Frangula purshiana ssp. ultramafica	Caribou coffeeberry	PDRHA0H061	None	None	-	1B.2	3912088	Quincy	Mapped	Plants - Vascular - Rhamnaceae - Frangula purshiana ssp. ultramafica
Plants - Vascular	Frangula purshiana ssp. ultramafica	Caribou coffeeberry	PDRHA0H061	None	None	-	1B.2	3912181	Meadow Valley	Mapped and Unprocessed	Plants - Vascular - Rhamnaceae - Frangula purshiana ssp. ultramafica
Plants - Vascular	Frangula purshiana ssp. ultramafica	Caribou coffeeberry	PDRHA0H061	None	None	-	1B.2	3912087	Spring Garden	Mapped	Plants - Vascular - Rhamnaceae - Frangula purshiana ssp. ultramafica
Plants - Vascular	Frangula purshiana ssp. ultramafica	Caribou coffeeberry	PDRHA0H061	None	None	-	1B.2	3912078	Onion Valley	Mapped	Plants - Vascular - Rhamnaceae - Frangula purshiana ssp. ultramafica
Plants - Vascular	Frangula purshiana ssp. ultramafica	Caribou coffeeberry	PDRHA0H061	None	None	-	1B.2	4012111	Twain	Mapped and Unprocessed	Plants - Vascular - Rhamnaceae - Frangula purshiana ssp. ultramafica
Plants - Vascular	Rhamnus alnifolia	alder buckthorn	PDRHA0C010	None	None	-	2B.2	4012017	Taylorville	Mapped and Unprocessed	Plants - Vascular - Rhamnaceae - Rhamnus alnifolia
Plants - Vascular	Rhamnus alnifolia	alder buckthorn	PDRHA0C010	None	None	-	2B.2	3912087	Spring Garden	Mapped and Unprocessed	Plants - Vascular - Rhamnaceae - Rhamnus alnifolia
Plants - Vascular	Crataegus castlegarensis	Calstlegar hawthorne	PDROS0H9E0	None	None	-	3	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Rosaceae - Crataegus castlegarensis
Plants - Vascular	Ivesia webberi	Webber's ivesia	PDROS0X0Q0	Threatened	None	-	1B.1	4012018	Crescent Mills	Mapped	Plants - Vascular - Rosaceae - Ivesia webberi
Plants - Vascular	Ivesia webberi	Webber's ivesia	PDROS0X0Q0	Threatened	None	-	1B.1	4012017	Taylorville	Mapped	Plants - Vascular - Rosaceae - Ivesia webberi
Plants - Vascular	Ivesia webberi	Webber's ivesia	PDROS0X0Q0	Threatened	None	-	1B.1	3912087	Spring Garden	Mapped	Plants - Vascular - Rosaceae - Ivesia webberi
Plants - Vascular	Ivesia webberi	Webber's ivesia	PDROS0X0Q0	Threatened	None	-	1B.1	3912181	Meadow Valley	Mapped	Plants - Vascular - Rosaceae - Ivesia webberi
Plants - Vascular	Ivesia webberi	Webber's ivesia	PDROS0X0Q0	Threatened	None	-	1B.1	3912088	Quincy	Mapped	Plants - Vascular - Rosaceae - Ivesia webberi
Plants - Vascular	Darlingtonia californica	California pitcherplant	PDSAR01010	None	None	-	4.2	3912088	Quincy	Unprocessed	Plants - Vascular - Sarraceniaceae - Darlingtonia californica
Plants - Vascular	Darlingtonia californica	California pitcherplant	PDSAR01010	None	None	-	4.2	3912181	Meadow Valley	Unprocessed	Plants - Vascular - Sarraceniaceae - Darlingtonia californica
Plants - Vascular	Darlingtonia californica	California pitcherplant	PDSAR01010	None	None	-	4.2	4012018	Crescent Mills	Unprocessed	Plants - Vascular - Sarraceniaceae - Darlingtonia californica
Plants - Vascular	Darlingtonia californica	California pitcherplant	PDSAR01010	None	None	-	4.2	4012111	Twain	Unprocessed	Plants - Vascular - Sarraceniaceae - Darlingtonia californica



## Plant List

### Inventory of Rare and Endangered Plants

60 matches found. *Click on scientific name for details*

#### Search Criteria

Found in Quads 4012111, 4012018, 4012017, 3912181, 3912088, 3912087, 3912171 3912078 and 3912077;

[Modify Search Criteria](#)
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Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Arctostaphylos mewukka ssp. truei</a>	True's manzanita	Ericaceae	perennial evergreen shrub	Feb-Jul	4.2	S3	G4?T3
<a href="#">Astragalus pulsiferae var. pulsiferae</a>	Pulsifer's milk-vetch	Fabaceae	perennial herb	May-Aug (Sep)	1B.2	S2	G4T2
<a href="#">Astragalus webberi</a>	Webber's milk-vetch	Fabaceae	perennial herb	May-Jul	1B.2	S1	G1
<a href="#">Astragalus whitneyi var. lenophyllus</a>	woolly-leaved milk-vetch	Fabaceae	perennial herb	Jul-Aug	4.3	S4	G5T4
<a href="#">Azolla microphylla</a>	Mexican mosquito fern	Azollaceae	annual / perennial herb	Aug	4.2	S4	G5
<a href="#">Boechera constancei</a>	Constance's rockcress	Brassicaceae	perennial herb	May-Jul	1B.1	S2	G2
<a href="#">Boechera microphylla</a>	small-leaved rockcress	Brassicaceae	perennial herb	Jul	3	S3	G4Q
<a href="#">Botrychium minganense</a>	Mingan moonwort	Ophioglossaceae	perennial rhizomatous herb	Jul-Sep	2B.2	S3	G4G5
<a href="#">Brasenia schreberi</a>	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	2B.3	S3	G5
<a href="#">Bruchia bolanderi</a>	Bolander's bruchia	Bruchianaceae	moss		4.2	S3	G3G4
<a href="#">Carex buxbaumii</a>	Buxbaum's sedge	Cyperaceae	perennial rhizomatous herb	Mar-Aug	4.2	S3	G5
<a href="#">Carex geyeri</a>	Geyer's sedge	Cyperaceae	perennial rhizomatous herb	May-Aug	4.2	S4	G5
<a href="#">Carex lasiocarpa</a>	woolly-fruited sedge	Cyperaceae	perennial rhizomatous herb	Jun-Jul	2B.3	S2	G5
<a href="#">Carex limosa</a>	mud sedge	Cyperaceae		Jun-Aug	2B.2	S3	G5

			perennial rhizomatous herb				
<u>Carex petasata</u>	Liddon's sedge	Cyperaceae	perennial herb	May-Jul	2B.3	S3	G5
<u>Carex scabriuscula</u>	Siskiyou sedge	Cyperaceae	perennial rhizomatous herb	May-Jul	4.3	S4	G4G5
<u>Carex scoparia</u> <u>var. scoparia</u>	pointed broom sedge	Cyperaceae	perennial herb	May	2A	SX	G5T5
<u>Carex sheldonii</u>	Sheldon's sedge	Cyperaceae	perennial rhizomatous herb	May-Aug	2B.2	S2	G4
<u>Ceanothus</u> <u>fresnensis</u>	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	4.3	S4	G4
<u>Chenopodium</u> <u>simplex</u>	large-seeded goosefoot	Chenopodiaceae	annual herb	Jun-Oct	4.3	S4	G5
<u>Clarkia mildrediae</u> <u>ssp. lutescens</u>	golden- anthered clarkia	Onagraceae	annual herb	Jun-Aug	4.2	S3	G3T3
<u>Clarkia virgata</u>	Sierra clarkia	Onagraceae	annual herb	May-Aug	4.3	S3	G3
<u>Claytonia palustris</u>	marsh claytonia	Montiaceae	perennial herb	May-Oct	4.3	S4	G4
<u>Corallorhiza trifida</u>	northern coralroot	Orchidaceae	perennial rhizomatous herb (achlorophyllous)	Jun-Jul	2B.1	S1	G5
<u>Crataegus</u> <u>castlegarensis</u>	Castlegar hawthorne	Rosaceae	perennial deciduous shrub	May-Jun (Jul)	3	S1S3	G5
<u>Cypripedium</u> <u>californicum</u>	California lady's-slipper	Orchidaceae	perennial rhizomatous herb	Apr-Aug (Sep)	4.2	S4	G4
<u>Cypripedium</u> <u>fasciculatum</u>	clustered lady's- slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	4.2	S4	G4
<u>Cypripedium</u> <u>montanum</u>	mountain lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	4.2	S4	G4
<u>Darlingtonia</u> <u>californica</u>	California pitcherplant	Sarraceniaceae	perennial rhizomatous herb (carnivorous)	Apr-Aug	4.2	S4	G4
<u>Drosera anglica</u>	English sundew	Droseraceae	perennial herb (carnivorous)	Jun-Sep	2B.3	S2	G5
<u>Eleocharis</u> <u>torticulmis</u>	California twisted spikerush	Cyperaceae	perennial rhizomatous herb	Jun-Jul	1B.3	S1	G1
<u>Epilobium luteum</u>	yellow willowherb	Onagraceae	perennial stoloniferous herb	Jul-Sep	2B.3	S1	G5
<u>Eremogone cliftonii</u>	Clifton's eremogone	Caryophyllaceae	perennial herb	Apr-Sep	1B.3	S2S3	G2G3
<u>Erigeron</u> <u>lassenianus var.</u> <u>deficiens</u>	Plumas rayless daisy	Asteraceae	perennial herb	Jun-Sep	1B.3	S2S3	G3G4T2T3
<u>Erigeron</u> <u>petrophilus var.</u> <u>sierrensis</u>	northern Sierra daisy	Asteraceae	perennial rhizomatous herb	Jun-Oct	4.3	S4	G4T4
	Ahart's buckwheat	Polygonaceae	perennial herb	Jun-Sep	1B.2	S3	G5T3

Eriogonum  
umbellatum var.  
ahartii

<u>Eriophorum gracile</u>	slender cottongrass	Cyperaceae	perennial rhizomatous herb (emergent)	May-Sep	4.3	S4	G5
<u>Frangula purshiana ssp. ultramafica</u>	Caribou coffeeberry	Rhamnaceae	perennial deciduous shrub	May-Jul	1B.2	S2S3	G4T2T3
<u>Hackelia amethystina</u>	amethyst stickseed	Boraginaceae	perennial herb	Jun-Jul (Aug)	4.3	S4	G4
<u>Ivesia webberi</u>	Webber's ivesia	Rosaceae	perennial herb	May-Jul	1B.1	S1	G1
<u>Lewisia cantelovii</u>	Cantelow's lewisia	Montiaceae	perennial herb	May-Oct	1B.2	S3	G3
<u>Lewisia kelloggii ssp. hutchisonii</u>	Hutchison's lewisia	Montiaceae	perennial herb	(Apr)May-Aug	3.2	S3	G3G4T3Q
<u>Lupinus dalesiae</u>	Quincy lupine	Fabaceae	perennial herb	May-Aug	4.2	S3	G3
<u>Meesia triquetra</u>	three-ranked hump moss	Meesiaceae	moss	Jul	4.2	S4	G5
<u>Mielichhoferia elongata</u>	elongate copper moss	Mielichhoferiaceae	moss		4.3	S4	G5
<u>Monardella follettii</u>	Follett's monardella	Lamiaceae	perennial shrub	Jun-Sep	1B.2	S2	G2
<u>Oreostemma elatum</u>	tall alpine-aster	Asteraceae	perennial herb	Jun-Aug	1B.2	S2	G2
<u>Penstemon personatus</u>	closed-throated beardtongue	Plantaginaceae	perennial herb	Jun-Sep (Oct)	1B.2	S2	G2
<u>Potamogeton epihydrus</u>	Nuttall's ribbon-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	(Jun)Jul-Sep	2B.2	S2S3	G5
<u>Pseudostellaria sierrae</u>	Sierra starwort	Caryophyllaceae	perennial rhizomatous herb	May-Aug	4.2	S3	G3G4
<u>Pyrrocoma lucida</u>	sticky pyrrocoma	Asteraceae	perennial herb	Jul-Oct	1B.2	S3	G3
<u>Rhamnus alnifolia</u>	alder buckthorn	Rhamnaceae	perennial deciduous shrub	May-Jul	2B.2	S3	G5
<u>Rhynchospora alba</u>	white beaked-rush	Cyperaceae	perennial rhizomatous herb	Jun-Aug	2B.2	S2	G5
<u>Rhynchospora capitellata</u>	brownish beaked-rush	Cyperaceae	perennial herb	Jul-Aug	2B.2	S1	G5
<u>Schoenoplectus subterminalis</u>	water bulrush	Cyperaceae	perennial rhizomatous herb (aquatic)	Jun-Aug (Sep)	2B.3	S3	G4G5
<u>Sedum albomarginatum</u>	Feather River stonecrop	Crassulaceae	perennial herb	May-Jun	1B.2	S2	G2
<u>Silene occidentalis ssp. occidentalis</u>	Western campion	Caryophyllaceae	perennial herb	Jun-Aug	4.3	S3	G4T3
		Asteraceae		Jul-Sep	3.2	S1	G5T5

<a href="#"><u><i>Solidago lepida</i> var. <i>salebrosa</i></u></a>	Rocky Mountains Canada goldenrod		perennial rhizomatous herb				
<a href="#"><u><i>Stachys pilosa</i></u></a>	hairy marsh hedge-nettle	Lamiaceae	perennial rhizomatous herb	Jun-Aug	2B.3	S3	G5
<a href="#"><u><i>Stellaria obtusa</i></u></a>	obtuse starwort	Caryophyllaceae	perennial rhizomatous herb	May-Sep (Oct)	4.3	S4	G5

**Suggested Citation**

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 01 September 2018].

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**IPaC** Information for Planning and Consultation **U.S. Fish & Wildlife Service**

## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

### Location

Plumas County, California



### Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

## Listed species

<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:



## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/9529">https://ecos.fws.gov/ecp/species/9529</a>	Endangered

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>

- Measures for avoiding and minimizing impacts to birds  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds  
<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

#### Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

#### California Spotted Owl *Strix occidentalis occidentalis*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/7266>

Breeds Mar 10 to Jun 15

**Cassin's Finch** *Carpodacus cassinii*

Breeds May 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9462>

**Golden Eagle** *Aquila chrysaetos*

Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

**Lewis's Woodpecker** *Melanerpes lewis*

Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

**Olive-sided Flycatcher** *Contopus cooperi*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

**Rufous Hummingbird** *Selasphorus rufus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

**Williamson's Sapsucker** *Sphyrapicus thyroideus*

Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/8832>

**Willow Flycatcher** *Empidonax traillii*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/3482>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

#### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

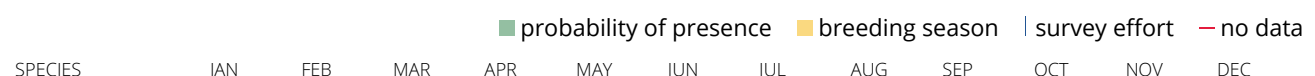
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

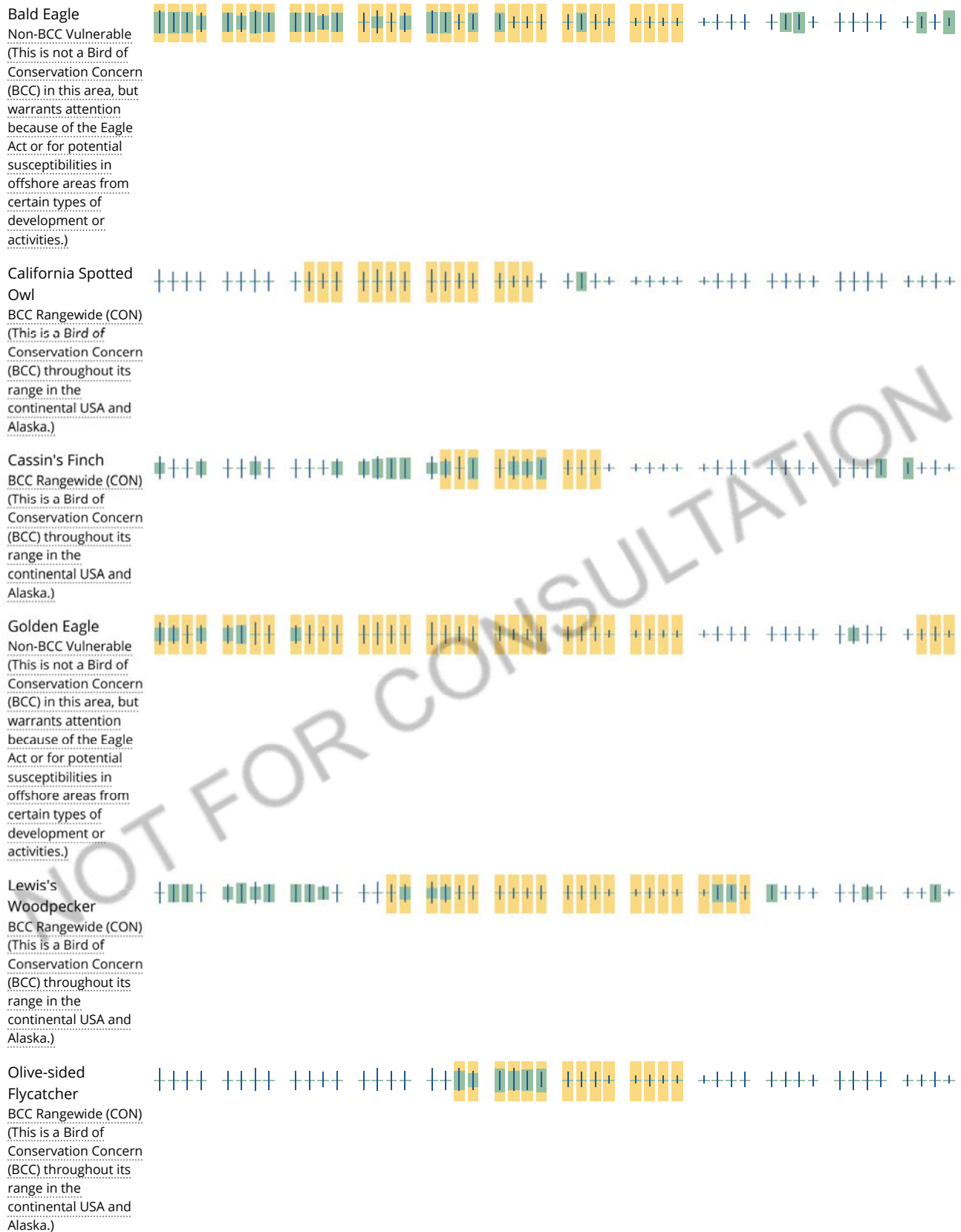
#### No Data (—)

A week is marked as having no data if there were no survey events for that week.

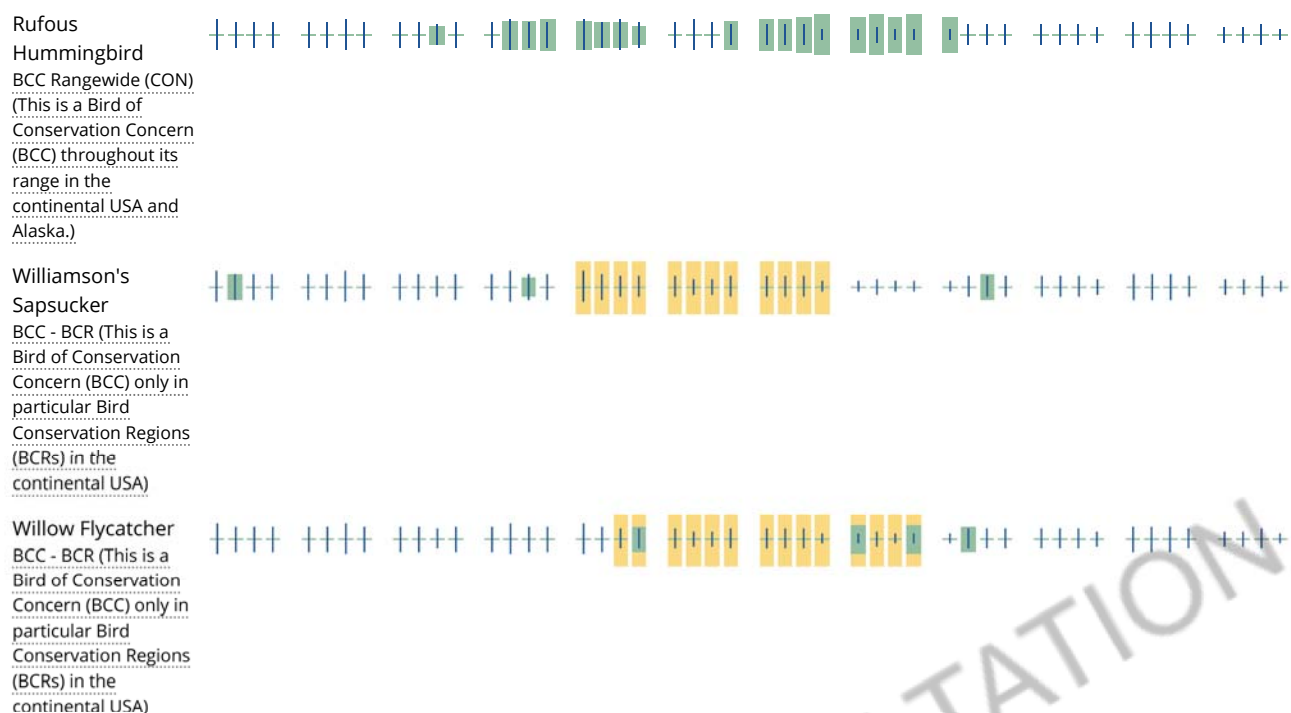
#### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.









**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey

effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

## Facilities

### Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some



deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



U.S. Fish and Wildlife Service

# National Wetlands Inventory

## Quincy CHP



August 27, 2018

### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



U.S. Fish &amp; Wildlife Service

**ECOS Environmental Conservation Online System**

Conserving the Nature of America


[ECOS](#) / [Species Reports](#) / [Conservation Plans](#) / [Habitat Conservation Plans](#)

## Habitat Conservation Plans

[Data Definitions](#)

- Total Number of Habitat Conservation Plans Approved: 165
- Total Number of Amendments Approved: 10
- Total Number of Permits Approved: 225

### Region 8

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">93-129 (Bear Brand Ranch) Low-Effect HCP (Laguna Niguel, Orange Cnty, CA)</a>	TE-154024-0	City of Laguna Niguel, Orange County CA	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i><a href="#">Polioptila californica californica</a></i>)</li> <li>Wherever found T</li> </ul>		06/25/2007	50 acres (California)	Data not available	10 years, 0 months
<a href="#">AgCon Oro Grande North Mine Pit Exapnsion</a>	TE19125A-0	Unincorporated community of oro Grande, San Bernardino County, CA (APN 0470-052-02)	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i><a href="#">Gopherus agassizii</a></i>)</li> <li>Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>Squirrel, Mohave ground - (<i><a href="#">Spermophilus mohavensis</a></i>)</li> <li>Wherever found RT</li> </ul>	10/01/2010	120 acres (California)	Data not available	40 years, 0 months
<a href="#">Alere Property Group (Rialto, San Bernardino Cnty, CA)</a>	TE150546-0	Southwest of Jurupa Ave. and Riverside Ave., City of Rialto, San Bernardino County, California	I	<ul style="list-style-type: none"> <li>Fly, Delhi Sands flower-loving (<i><a href="#">Rhaphiomidas terminatus abdominalis</a></i>)</li> <li>Wherever found E</li> </ul>		10/29/2007	18 acres (California)	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Angelus Block</u>	TE015985-0 , TE015986-0 , TE015987-0	San Bernardino County, CA	I	<ul style="list-style-type: none"> <li>Fly, Delhi Sands flower-loving (<i>Rhaphiomidas terminatus abdominalis</i>) Wherever found E</li> </ul>		08/27/1999	96 acres (California)	Data not available	30 years, 0 months
<u>Antelope Road HCP</u>	TE066470-0 , TE066470-1	City of Murrieta, Riverside County	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> </ul>		12/31/2002	111.1 acres (California) Encompassed by Western Riverside MSHCP	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Assessment District 161</a>	TE030506-0 , TE030507-0 , TE030500-0 , TE030490-0 , TE030504-0 , TE030499-0 , TE030502-0 , TE030495-0 , TE030497-0 , TE030505-0 , TE030503-0 , TE030501-0	Near Murrieta, western Riverside County, CA	I	<ul style="list-style-type: none"> <li>• Butterfly, Quino checkerspot (<i>Euphydryas editha quino</i> (=E. e. wrightii)) Wherever found E</li> <li>• Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>• Gnatcatcher, coastal California (<i>Poliophtila californica californica</i>) Wherever found T</li> <li>• Orcutt grass, California (<i>Orcuttia californica</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>• Grapplinghook, Palmer's - (<i>Harpagonella palmeri palmeri</i>) Wherever found SC</li> <li>• No common name - (<i>Chorizanthe polygonoides longispina</i>) Wherever found SC</li> <li>• Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> <li>• Sparrow, Bell's sage - (<i>Amphispiza belli belli</i>) Wherever found SC</li> <li>• Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>) Wherever found SC</li> <li>• Spineflower, Parry's - (<i>Chorizanthe parryi parryi</i>) Wherever found SC</li> <li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> </ul>	12/04/2000	4070 acres (California) Encompassed by Western Riverside MSHCP. Of the 2,495 acres adversely affected by the plan, 1,220 acres would be harmed through habitat loss that would injure or kill listed species.	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>AT&amp;T - Point Arena Mountain Beaver Low Effect</u></a>	TE063833-0	City of Manchester, Mendocino County	I	<ul style="list-style-type: none"> <li>Mountain beaver, Point Arena (<i>Apodontia rufa nigra</i>) Wherever found E</li> </ul>		10/28/2002	11.2 acres (California)	Data not available	10 years, 0 months
<a href="#"><u>AT&amp;T Portable Generator Storage Facility</u></a>	TE45871A-0	The storage facility is located in a currently undisturbed portion of an existing telecommunication facility at 26120 County Road 6 in Dunnigan, CA 95937.	I	<ul style="list-style-type: none"> <li>Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> </ul>		08/23/2011	45 acres (California)	Data not available	5 years, 0 months
<a href="#"><u>Basin A, Willow Pass Grade</u></a>	833486	Multiple Counties	I	<ul style="list-style-type: none"> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> </ul>		10/06/1997	5 acres (California)	Data not available	20 years, 0 months
<a href="#"><u>Bean Creek Estates</u></a>	TE179290-0	City of Scotts Valley, Santa Cruz County	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i>Polyphylla barbata</i>) Wherever found E</li> <li>Spineflower, Ben Lomond (<i>Chorizanthe pungens var. hartwegiana</i>) Wherever found E</li> <li>Wallflower, Ben Lomond (<i>Erysimum teretifolium</i>) Wherever found E</li> </ul>		03/19/2009	18.1 acres (California)	Data not available	6 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Bellota Landslide Repair and Shorecliffs Mobile Home Park (San Clemente, Orange Cnty. CA)</u></a>	TE163118-0	City of San Clemente, Orange County, CA.	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i><a href="#"><u>Poliophtila californica californica</u></a></i>) Wherever found T</li> </ul>		10/17/2007	21.43 acres (California)	Data not available	10 years, 0 months
<a href="#"><u>Blake Lane HCP</u></a>	TE202039-0	Scotts Valley, Santa Cruz County, CA	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i><a href="#"><u>Polyphylla barbata</u></a></i>) Wherever found E</li> </ul>		12/22/2008	0.42 acres (California)	Data not available	3 years, 0 months
<a href="#"><u>Bonny Doon Quarries</u></a>	TE844722-0	Bonny Doon, Santa Cruz County CA	I	<ul style="list-style-type: none"> <li>Frog, California red-legged (<i><a href="#"><u>Rana draytonii</u></a></i>) Wherever found T</li> </ul>		08/05/1999	4.9 acres (California) Covers temporary disturbance to ponds	Data not available	10 years, 0 months
<a href="#"><u>Busch Residence</u></a>	TE202041-0	Scotts Valley, Santa Cruz County	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i><a href="#"><u>Polyphylla barbata</u></a></i>) Wherever found E</li> </ul>		12/22/2008	0.999 acres (California)	Data not available	5 years, 0 months
<a href="#"><u>Cal. Dept. of Corrections Delano Prison</u></a>	744882	Delano, CA Kern County	I	<ul style="list-style-type: none"> <li>Fox, San Joaquin kit (<i><a href="#"><u>Vulpes macrotis mutica</u></a></i>) wherever found E</li> <li>Kangaroo rat, Tipton (<i><a href="#"><u>Dipodomys nitratooides nitratooides</u></a></i>) Wherever found E</li> <li>Lizard, blunt-nosed leopard (<i><a href="#"><u>Gambelia silus</u></a></i>) Wherever found E</li> </ul>		01/18/1990	635 acres (California)	Data not available	50 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Cal. Dept. of Corrections Statewide Electrified Fence Project</a>	TE 058060-0	26 sites throughout California	I	<ul style="list-style-type: none"> <li>Cuckoo, yellow-billed (<i>Coccyzus americanus</i>) Western U.S. DPS T</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>Gnatcatcher, coastal California (<i>Poliophtila californica californica</i>) Wherever found T</li> <li>Kangaroo rat, Tipton (<i>Dipodomys nitratooides nitratooides</i>) Wherever found E</li> <li>Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> <li>Plover, western snowy (<i>Charadrius nivosus nivosus</i>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>chat, Yellow-breasted - (<i>icteria virens</i>) Wherever found SC</li> <li>Curlew, long-billed - (<i>Numenius americanus</i>) Wherever found RT</li> <li>Eagle, bald - (<i>Haliaeetus leucocephalus</i>) lower 48 States DM</li> <li>eagle, Golden - (<i>Aquila chrysaetos</i>) Wherever found SC</li> <li>Falcon, Peregrine - (<i>Falco peregrinus</i>) Wherever found SC</li> <li>Falcon, Prairie - (<i>Falco mexicanus</i>) Wherever found SC</li> <li>Goose, Aleutian Canada - (<i>Branta canadensis leucopareia</i>) Wherever found DM</li> <li>Goshawk, northern - (<i>Accipiter gentilis</i>) Wherever found RT</li> <li>harrier, Northern - (<i>circus cyaneus</i>) Wherever found SC</li> <li>hawk, Cooper's - (<i>Accipiter cooperii</i>) Wherever found SC</li> <li>Hawk, ferruginous - (<i>Buteo regalis</i>) Wherever found RT</li> </ul>	06/12/2002	2937 acres (California)	Data not available	50 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>Hawk, Sharp shinned - (<i>Accipiter striatus</i>) Wherever found SC</li> <li>Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> <li>Jackrabbit, San Diego black-tailed - (<i>Lepus californicus bennettii</i>) Wherever found SC</li> <li>Kangaroo rat, short-nosed - (<i>Dipodomys nitratoides brevinasus</i>) Wherever found SC</li> <li>Kite, White-tailed - (<i>Elanus leucurus</i>) Wherever found SC</li> <li>Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>martin, Purple - (<i>progne subis</i>) Wherever found SC</li> <li>Merlin - (<i>falco columbarius</i>) Wherever found SC</li> <li>Mouse, Northwestern San Diego pocket - (<i>Perognathus fallax fallax</i>) Wherever found SC</li> <li>Mouse, San Joaquin pocket - (<i>Perognathus</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<i>inornatus</i> ) Wherever found SC • Mouse, southern grasshopper - ( <i>Onychomys torridus ramona</i> ) Wherever found SC • Mouse, Tulare grasshopper - ( <i>Onychomys torridus tularensis</i> ) Wherever found SC • Night-Heron, Black-crowned - ( <i>Nycticorax nycticorax</i> ) Wherever found SC • <u>NO COMMON NAME - (<i>Pandion haliaetus</i>)</u> • Owl, Long-eared - ( <i>Asio otus</i> ) • Owl, western burrowing - ( <i>Athene cunicularia ssp. hypugaea</i> ) Wherever found SC • Pelican, Brown - ( <i>Pelecanus occidentalis</i> ) • Rattlesnake, northern red diamond - ( <i>Crotalus ruber ruber</i> ) Wherever found SC • Shrike, Loggerhead - ( <i>Lanius ludovicianus</i> ) Wherever found SC				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Sparrow, Bell's sage - (<i>Amphispiza belli belli</i>) Wherever found SC</li> <li>• Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>) Wherever found SC</li> <li>• Squirrel, Mohave ground - (<i>Spermophilus mohavensis</i>) Wherever found RT</li> <li>• Squirrel, Nelson's antelope ground - (<i>Ammospermophilus nelsoni</i>) Wherever found SC</li> <li>• warbler, Yellow - (<i>dendroica petechia ssp. brewsteri</i>) Wherever found SC</li> <li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> <li>• Woodrat, San Diego desert - (<i>Neotoma lepida intermedia</i>) Wherever found SC</li> </ul>				
<a href="#"><u>Calnev Cajon and Lytle Creek Pipeline Maintenance Project (San Bernardino County, CA)</u></a>	TE183776	Cajon and Lytle creek washes, San Bernardino County, CA	I			07/07/2008	15 linear miles (California)	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Carter-224 Hidden Glen Drive</u></a>	TE179302-0	Scotts Valley, Santa Cruz County	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i><u>Polyphylla barbata</u></i>) Wherever found E</li> </ul>		07/29/2008	0.52 acres (California)	Data not available	5 years, 0 months
<a href="#"><u>Champagne Shores</u></a>	768386	Kern Co., CA	I	<ul style="list-style-type: none"> <li>Kangaroo rat, Tipton (<i><u>Dipodomys nitratooides nitratooides</u></i>) Wherever found E</li> </ul>		06/01/1994	82 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Chevron Pipeline</u>	807634	Kern Co., CA	I	<ul style="list-style-type: none"> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Jewelflower, California (<i>Caulanthus californicus</i>) Wherever found E</li> <li>• Kangaroo rat, giant (<i>Dipodomys ingens</i>) Wherever found E</li> <li>• Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> <li>• Mallow, Kern (<i>Eremalche kernensis</i>) Wherever found E</li> <li>• Woolly-threads, San Joaquin (<i>Monolopia (=Lembertia) congdonii</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Fiddleneck, green - (<i>Amsinckia vernicosa</i>) Wherever found RT</li> <li>• Heartscale - (<i>Atriplex cordulata</i>) Wherever found SC</li> <li>• Kangaroo rat, short-nosed - (<i>Dipodomys nitratoides brevinasus</i>) Wherever found SC</li> <li>• Mouse, San Joaquin pocket - (<i>Perognathus inornatus</i>) Wherever found SC</li> <li>• Mouse, Tulare grasshopper - (<i>Onychomys torridus tularensis</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Squirrel, Nelson's antelope ground - (<i>Ammospermophilus nelsoni</i>) Wherever found SC</li> <li>• Thrasher, San Joaquin LeConte's - (<i>Toxostoma lecontei macmillanorum</i>) Wherever found SC</li> <li>• Whipsnake, San Joaquin -</li> </ul>	01/08/1996	25.5 acres (California)	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					( <i>Masticophis flagellum ruddocki</i> ) Wherever found SC • Woolly-star, Hoover's - ( <i>Eriastrum hooveri</i> ) DM				
<a href="#">City of Highland Roadways Project</a>	TE049462-0	Highland, San Bernardino County	I	• Kangaroo rat, San Bernardino Merriam's ( <i>Dipodomys merriami parvus</i> ) Wherever found E		10/29/2001	10.2 acres (California) Falls within the planning area of the not yet approved San Bernardino Valleywide MSHCP	Data not available	5 years, 0 months
<a href="#">City of Waterford</a>	801047	Waterford, CA Merced County	I	• Beetle, valley elderberry longhorn ( <i>Desmocerus californicus dimorphus</i> ) Wherever found T		06/09/1995	5 acres (California) 15-16 elderberry shrubs with 149 stems greater than 1" diameter	Data not available	10 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Clark County Multiple Species HCP (7 permittees)</a>	TE034927-0	Clark County, Nevada and NV Dept. of Transportation ROWs in portions of Clark, Nye, Lincoln, Mineral, and Esmeralda counties, Nevada	I	<ul style="list-style-type: none"> <li>• Butterfly, Mount Charleston blue (<i>Icaricia (Plebejus) shasta charlestonensis</i>) Wherever found E</li> <li>• Cuckoo, yellow-billed (<i>Coccyzus americanus</i>) Western U.S. DPS T</li> <li>• Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>• Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>• Admiral, Nevada - (<i>Limenitis weidemeyerii nevadae</i>) Wherever found SC</li> <li>• aster, Red Rock Canyon - (<i>Ionactis caelestis</i>) Wherever found SC</li> <li>• Beardtongue, [unnamed] - (<i>Penstemon leiophyllus</i>) Wherever found RT</li> <li>• Bladder-pod, [unnamed] - (<i>Lesquerella hitchcockii</i>) Wherever found RT</li> <li>• Buckwheat, forked - (<i>Eriogonum bifurcatum</i>) Wherever found SC</li> <li>• Buckwheat, [unnamed] - (<i>Eriogonum viscidulum</i>) Wherever found SC</li> <li>• Butterfly, Dark blue - (<i>Euphilotes enoptes purpurea</i>)</li> <li>• Butterfly, Spring Mountains acastus checkerspot - (<i>Chlosyne acastus robusta</i>) Wherever found RT</li> <li>• butterfly, Spring Mountains comma</li> </ul>	01/09/2001	5000000 acres (Nevada) Approximately 5 million acres (including private, state, and federal lands). Planning area overlaps with that of the Clark County Desert Tortoise long-term HCP (which is superceded by the Multiple Species HCP).	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p>skipper - (<i>hesperia comma</i> ssp. <i>mojavensis</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>Butterfly, Spring Mountains icarioides blue - (<i>Icaricia icarioides austinorum</i>)</li> <li>Checkerspot, Morand's - (<i>Euphydryas anicia morandi</i>) Wherever found SC</li> <li>Chipmunk, Palmer's - (<i>Tamias palmeri</i>) Wherever found SC</li> <li>Cholla, Blue Diamond - (<i>Opuntia X multigeniculata</i>) <u>Wherever found RT</u></li> <li>Desert-poppy, [unnamed] - (<i>Arctomecon californica</i>) Wherever found SC</li> <li>Desert-poppy, white bear - (<i>Arctomecon merriamii</i>) Wherever found SC</li> <li>Egg-vetch, Clokey's - (<i>Astragalus oophorus clokeyanus</i>) <u>Wherever found RT</u></li> <li>Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> </ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• flycatcher, Vermillion - (<i>pyrocephalus rubinus</i>) Wherever found SC</li> <li>• Forsellesia, smooth pungent - (<i>Glossopetalon pungens glabra</i>) Wherever found SC</li> <li>• <u>Frog, relict leopard - (<i>Lithobates onca</i>)</u> Wherever found RT</li> <li>• Gecko, San Diego banded - (<i>Coleonyx variegatus abbotti</i>) Wherever found SC</li> <li>• <u>greasebush, Clokey - (<i>glossopetalon clokeyi</i>)</u> Wherever found SC</li> <li>• Greasebush, Pungent dwarf - (<i>Glossopetalon pungens var. pungens</i>)</li> <li>• iguana, Desert - (<i>dipsosaurus dorsalis</i>) Wherever found SC</li> <li>• <u>Kittentails, [unnamed] - (<i>Synthyris ranunculina</i>)</u> Wherever found RT</li> <li>• Lizard, Great basin collared - (<i>Crotaphytus insularis bicintores</i>)</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• lizard, Large-spotted leopard - (<i>gambelia wislizenii</i> ssp. <i>wislizenii</i>) Wherever found SC</li> <li>• Mariposa lily, alkali - (<i>Calochortus striatus</i>) Wherever found SC</li> <li>• Milk-vetch, Spring Mountain - (<i>Astragalus remotus</i>) Wherever found SC</li> <li>• Milk-vetch, [unnamed] - (<i>Astragalus aequalis</i>) Wherever found SC</li> <li>• moss, Dicranoweisia - (<i>dicranoweisia crispula</i>) Wherever found SC</li> <li>• moss, Menzies' anacolia - (<i>anacolia menziesii</i>) Wherever found SC</li> <li>• moss, Whipple's claopodium - (<i>claopodium whippleanum</i>) Wherever found SC</li> <li>• Myotis, long-eared - (<i>Myotis evotis</i>) Wherever found SC</li> <li>• Myotis, long-legged - (<i>Myotis volans</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• No common name - (<i>Ivesia cryptocaulis</i>) Wherever found SC</li> <li>• No common name - (<i>Ivesia jaegeri</i>) Wherever found SC</li> <li>• No common name - (<i>Penstemon thompsoniae</i> <i>jaegeri</i>) Wherever found RT</li> <li>• NO COMMON NAME - (<i>Syntrichia princeps</i>)</li> <li>• No common name - (<i>Arenaria kingii rosea</i>) Wherever found SC</li> <li>• No common name - (<i>Astragalus geyeri triquetrus</i>) Wherever found SC</li> <li>• No common name - (<i>Draba paucifructa</i>) Wherever found SC</li> <li>• No common name - (<i>Erigeron ovinus</i>) Wherever found SC</li> <li>• No common name - (<i>Salvia dorrii clokeyi</i>) Wherever found SC</li> <li>• No common name - (<i>Angelica scabrida</i>) Wherever found SC</li> <li>• No common name - (<i>Antennaria soliceps</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• NO COMMON NAME - (<i>Crotalus cerastes</i>)</li> <li>• No common name - (<i>Townsendia jonesii tumulosa</i>) Wherever found SC</li> <li>• No common name - (<i>Pedicularis semibarbata charlestonensis</i>) Wherever found SC</li> <li>• No common name - (<i>Draba jaegeri</i>) Wherever found SC</li> <li>• No common name - (<i>Silene clokeyi</i>) Wherever found SC</li> <li>• Paintbrush, Clokey - (<i>Castilleja martinii</i> var. <i>clokeyi</i>)</li> <li>• Penstemon, white-margined - (<i>Penstemon albomarginatus</i>) Wherever found SC</li> <li>• Phacelia, Parish's - (<i>Phacelia parishii</i>) Wherever found SC</li> <li>• phainopepla - (<i>phainopepla nitens</i>) Wherever found SC</li> <li>• rattlesnake, Mojave green - (<i>crotalus scutulatus</i> ssp. <i>scutulatus</i>) Wherever found SC</li> <li>• Rattlesnake, Speckled - (<i>Crotalus mitchellii</i>)</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Ringstem, Sticky - (<i>Anulocaulis leisolenus</i>)</li> <li>• <u>Silverspot, Carole's - (<i>Speyeria zerene carolae</i>)</u> Wherever found SC</li> <li>• skink, Western red-tailed - (<i>eumeces gilberti</i> ssp. <i>rubricaudatus</i>) Wherever found SC</li> <li>• <u>snake, California king - (<i>lampropeltis getula</i> ssp. <i>californiae</i>)</u> Wherever found SC</li> <li>• snake, Glossy - (<i>arizona elegans</i>) Wherever found SC</li> <li>• snake, Sonoran lyre - (<i>trimorphodon biscutatus</i> ssp. <i>lambda</i>) Wherever found SC</li> <li>• Snake, Western leaf-nosed - (<i>Phyllorhynchus decurtatus</i>)</li> <li>• snake, Western long-nosed - (<i>rhinocheilus lecontei</i> ssp. <i>lecontei</i>) Wherever found SC</li> <li>• Springsnail, Southeast Nevada - (<i>Pyrgulopsis turbatrix</i>)</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Springsnail, Spring Mountains - (<i>Pyrgulopsis deaconi</i>)</li> <li>• tanager, Summer - (<i>piranga rubra</i>) Wherever found SC</li> <li>• Tansy, [unnamed] - (<i>Sphaeromeria compacta</i>) Wherever found SC</li> <li>• <u>Thistle, Clokey's - (<i>Cirsium clokeyi</i>)</u> Wherever found RT</li> <li>• <u>Violet, limestone - (<i>Viola purpurea charlestonensis</i>)</u> Wherever found RT</li> <li>• <u>Vireo, Arizona Bell's - (<i>Vireo bellii arizonae</i>)</u> Wherever found RT</li> </ul>				
<u>Coachella Valley Fringe-toed Lizard</u>	698685	Cathedral City, Coachella, Desert Hot Springs, Rancho Mirage, Riverside County	I	<ul style="list-style-type: none"> <li>• Lizard, Coachella Valley fringe-toed (<i>Uma inornata</i>) Wherever found T</li> </ul>		04/25/1986	199663 acres (California) 20,000 are preserve protects 7,838 acres of occupiable habitat for the Coachella Valley fringe-toed lizard.	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Coachella Valley Multi-Species HCP</a>	TE-104604-0	8 cities within Coachella Valley, central Riverside County	I	<ul style="list-style-type: none"> <li>• Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>• Lizard, Coachella Valley fringe-toed (<i>Uma inornata</i>) Wherever found T</li> <li>• Milk-vetch, Coachella Valley (<i>Astragalus lentiginosus</i> var. <i>cochellae</i>) Wherever found E</li> <li>• Milk-vetch, triple-ribbed (<i>Astragalus tricarinatus</i>) Wherever found E</li> <li>• Pupfish, desert (<i>Cyprinodon macularius</i>) Wherever found E</li> <li>• Rail, Yuma clapper (<i>Rallus longirostris yumanensis</i>) Wherever found E</li> <li>• Sheep, Peninsular bighorn (<i>Ovis canadensis nelsoni</i>) Peninsular CA pop. E</li> <li>• Toad, arroyo (=arroyo southwestern) (<i>Anaxyrus californicus</i>) Wherever found E</li> <li>• Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and</li> </ul>	<ul style="list-style-type: none"> <li>• Aster, Mecca - (<i>Xylorhiza cognata</i>) Wherever found SC</li> <li>• Bat, Southern Yellow - (<i>Lasiurus ega</i>) Wherever found SC</li> <li>• chat, Yellow-breasted - (<i>icteria virens</i>) Wherever found SC</li> <li>• Cricket, Coachella giant sand treader - (<i>Macrobaenetes valgum</i>) Wherever found SC</li> <li>• Gilia, Little San Bernardino Mountains - (<i>Gilia maculata</i>) Wherever found SC</li> <li>• Jerusalem cricket, Coachella Valley - (<i>Stenopelmatus cahuillaensis</i>) Wherever found SC</li> <li>• Lizard, flat-tailed horned - (<i>Phrynosoma mcallii</i>) Wherever found RT</li> <li>• Mouse, Palm Springs little pocket - (<i>Perognathus longimembris bangsi</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene</i></li> </ul>	10/01/2008	1206578 acres (California) The Coachella Valley Multi-Species HCP planning area will include the planning area for the approved Coachella Fringe-toed Lizard HCP.	Data not available	75 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				east of Colorado R., and Mexico T • Vireo, least Bell's ( <i>Vireo bellii pusillus</i> ) Wherever found E	<i>cunicularia</i> ssp. <i>hypugaea</i> ) Wherever found SC • rail, California black - ( <i>laterallus jamaicensis</i> ssp. <i>coturniculus</i> ) Wherever found SC • Sage, Orocopia - ( <i>Salvia greatai</i> ) Wherever found SC • Squirrel, Palm Springs round-tailed ground (=Coachella Valley) - ( <i>Spermophilus tereticaudus chlorus</i> ) Wherever found RT • tanager, Summer - ( <i>piranga rubra</i> ) Wherever found SC • thrasher, Crissal - ( <i>toxostoma crissale</i> ) Wherever found SC • thrasher, Le Conte's - ( <i>toxostoma lecontei</i> ) Wherever found SC • vireo, Gray - ( <i>Vireo vicinior</i> ) Wherever found SC • Warbler, Yellow - ( <i>Dendroica petechia</i> )				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Coalinga Cogeneration</a>	754027	Coalinga, CA Fresno County	I	<ul style="list-style-type: none"> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> </ul>		03/21/1991	50.12 acres (California)	Data not available	20 years, 0 months
<a href="#">Collado Drive</a>	TE179280-0	Scotts Valley, Santa Cruz County	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i>Polyphylla barbata</i>) Wherever found E</li> </ul>		07/29/2008	1.093 acres (California)	Data not available	5 years, 0 months
<a href="#">Copper Mountain College HCP</a>	TE 143444-0	Joshua Tree, San Bernardino County	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		07/31/2007	266.53 acres (California)	Data not available	16 years, 0 months
<a href="#">Cornerstone Homes, Railroad Canyon/Lake Elsinore Tract 20704</a>	TE026003-0	City of Lake Elsinore, Riverside County, CA	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> </ul>		06/08/2000	9.2 acres (California) Encompassed by Western Riverside MSHCP.	Data not available	10 years, 0 months
<a href="#">Corrections Corporation of America</a>	842781	California City, CA	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>Owl, western burrowing - (<i>Athene cunicularia</i> ssp. <i>hypugaea</i>) Wherever found SC</li> <li>Squirrel, Mohave ground - (<i>Spermophilus mohavensis</i>) Wherever found RT</li> </ul>	05/17/1998	425 acres (California)	Data not available	20 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Coyote Hills East (UnoCal)</u></a>	768184	Orange Co., CA	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i>Poliophtila californica californica</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>) Wherever found RT</li> </ul>	10/22/1993	391 acres (California)	Data not available	25 years, 0 months
<a href="#"><u>Coyote Springs Investment Multi-Species Habitat Conservation Plan</u></a>	TE 186844-0	Lincoln County, Nevada	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>Gila monster, banded - (<i>Heloderma suspectum cinctum</i>) Wherever found SC</li> <li>Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> </ul>	10/24/2008	31221 acres (Nevada)	Data not available	40 years, 0 months
<a href="#"><u>Crown Enterprises Low-Effect HCP (Rialto, San Bernardino Cnty, CA)</u></a>	TE160591-0	West side of Riverside Avenue, south of Santa Ana Ave, City of Rialto, San Bernardino County, CA	I	<ul style="list-style-type: none"> <li>Fly, Delhi Sands flower-loving (<i>Rhaphiomidas terminatus abdominalis</i>) Wherever found E</li> </ul>		07/20/2007	3.4 acres (California)	Data not available	3 years, 0 months
<a href="#"><u>Cushenbury Sand &amp; Gravel (Channel and Basin Reclamation)</u></a>	795218	San Bernardino Co., CA	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		01/23/1996	285 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Deer Canyon Park Low-Effect HCP (Anaheim, Orange Cnty, CA)</u></a>	TE035929-0	Deer Canyon Park Preserve, City of Anaheim, County of Orange, California	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i><a href="#"><u>Poliioptila californica californica</u></a></i>) Wherever found T</li> </ul>		09/17/2001	130 acres (California) Encompassed within the planning area of the approved Orange County Central/Coastal NCCP/HCP.	Data not available	30 years, 0 months
<a href="#"><u>Donald Von Raesfeld Power Plant LE (formerly Pico Power Plant)</u></a>	TE30422B-0	Santa Clara County	I	<ul style="list-style-type: none"> <li>Butterfly, bay checkerspot (<i><a href="#"><u>Euphydryas editha bayensis</u></a></i>) Wherever found T</li> <li>Ceanothus, coyote (<i><a href="#"><u>Ceanothus ferrissae</u></a></i>) Wherever found E</li> <li>Dudleya, Santa Clara Valley (<i><a href="#"><u>Dudleya setchellii</u></a></i>) Wherever found E</li> <li>Jewelflower, Metcalf Canyon (<i><a href="#"><u>Streptanthus albidus ssp. albidus</u></a></i>) Wherever found E</li> <li>Paintbrush, Tiburon (<i><a href="#"><u>Castilleja affinis ssp. neglecta</u></a></i>) Wherever found E</li> </ul>		09/25/2014	9926 acres (California) The 2.86-acre power plant site itself is not in an area with habitat. As a result of its emissions, however, a fractional increase in nitrogen deposition could affect up to 9926 acres of serpentine habitat in Santa Clara County resulting in the net loss of approximately 40 acres.	Data not available	40 years, 0 months Anticipated life of the power plant.

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Dos Pueblos Golf Links</a>	TE045997-0 , TE046002-0	Santa Barbara County	I	<ul style="list-style-type: none"> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Goby, tidewater (<i>Eucyclogobius newberryi</i>) Wherever found E</li> </ul>		01/16/2002	208 acres (California)	Data not available	25 years, 0 months
<a href="#">East Bay Municipal Utility District</a>	TE183192-0	Alameda County Contra Costa County	I	<ul style="list-style-type: none"> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Manzanita, pallid (<i>Arctostaphylos pallida</i>) Wherever found T</li> <li>Steelhead (<i>Oncorhynchus</i> (=Salmo) mykiss) California Central Valley DPS T</li> <li>Tarplant, Santa Cruz (<i>Holocarpha macradenia</i>) Wherever found T</li> <li>Whipsnake (=striped racer), Alameda (<i>Masticophis lateralis euryxanthus</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>Turtle, western pond - (<i>Actinemys marmorata</i>) Wherever found UR</li> </ul>	06/25/2008	28000 acres (California)	Data not available	0 years, 0 months TBD

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">East Contra Costa County HCP/NCCP</a>	TE160958-0	Contra Costa County, California	I	<ul style="list-style-type: none"> <li>Fairy shrimp, longhorn (<i>Branchinecta longiantenna</i>) Wherever found E</li> <li>Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> <li>Snake, giant garter (<i>Thamnophis gigas</i>) Wherever found T</li> <li>Tadpole shrimp, vernal pool (<i>Lepidurus packardii</i>) Wherever found E</li> <li>Whipsnake (=striped racer), Alameda (<i>Masticophis lateralis euryxanthus</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>Bat, Townsend's western big-eared - (<i>Corynorhinus townsendii townsendii</i>)</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Brittlescale - (<i>Atriplex depressa</i>) Wherever found SU</li> <li>Dwarf-flax, Brewer's - (<i>Hesperolinon breweri</i>) Wherever found SC</li> <li>Frog, foothill yellow-legged - (<i>Rana boylei</i>) Wherever found UR</li> <li>Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> <li>larkspur, Recurved - (<i>calochortus pulchellus</i>) Wherever found SC</li> <li>Larkspur, recurved - (<i>Delphinium recurvatum</i>) Wherever found SC</li> <li>Lizard, silvery legless - (<i>Anniella pulchra pulchra</i>) Wherever found SC</li> <li>madia, Showy - (<i>madia radiata</i>) Wherever found SC</li> <li>Manzanita, Mt. Diablo -</li> </ul>	07/25/2007	175435 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><u>(<i>Arctostaphylos auriculata</i>)</u>  Wherever found RT</p> <ul style="list-style-type: none"> <li>• Navarretia, adobe - (<i>Navarretia nigelliformia</i> ssp. <i>nigelliformia</i>)</li> <li>• Owl, western burrowing - (<i>Athene cunicularia</i> ssp. <i>hypugaea</i>)  Wherever found SC</li> <li>• Rock-rose, Diablo - (<i>Helianthella castanea</i>)  Wherever found SC</li> <li>• Shrimp, Midvalley Fairy - <u>(<i>Branchinecta mesovallensis</i>)</u>  Wherever found RT</li> <li>• Spearscale, valley - (<i>Atriplex joaquiniana</i>)  Wherever found SC</li> <li>• Tarplant, big - (<i>Blepharizonia plumosa</i> ssp. <i>plumosa</i>)</li> <li>• Turtle, western pond - (<i>Actinemys marmorata</i>)  Wherever found UR</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>East Valley Centre</u> <u>(Highland, San Bernardino Cnty, CA)</u> <u>[formerly National Equity Engineering]</u>	TE134227-0 , TE134227-1	Southeast intersection of State Route 30 and 5th Street, City of Highland, San Bernardino County, California	I	<ul style="list-style-type: none"> <li>Kangaroo rat, San Bernardino Merriam's (<i>Dipodomys merriami parvus</i>) Wherever found E</li> </ul>		09/05/2006	15.6 acres (California)	Data not available	3 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>El Sobrante Landfill</u>	TE040421-0	El Sobrante Landfill, Riverside County	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<u><i>Poliophtila californica californica</i></u>) Wherever found T</li> <li>Kangaroo rat, Stephens' (<u><i>Dipodomys stephensi</i></u> (<i>incl. D. cactus</i>)) Wherever found E</li> <li>Shrike, San Clemente loggerhead (<u><i>Lanius ludovicianus mearnsi</i></u>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Gecko, San Diego banded - (<i>Coleonyx variegatus abbotti</i>) Wherever found SC</li> <li>Jackrabbit, San Diego black-tailed - (<i>Lepus californicus bennettii</i>) Wherever found SC</li> <li>Lark, California horned - (<u><i>Eremophila alpestris actia</i></u>) Wherever found RT</li> <li>Liveforever, many-stemmed - (<i>Dudleya multicaulis</i>) Wherever found SC</li> <li>Lizard, long-nosed leopard - (<i>Gambelia wislizenii</i>)</li> <li>Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>Mountain lion, California - (<i>Felis concolor californica</i>) Wherever found RT</li> <li>Mouse, Northwestern San Diego pocket - (<i>Perognathus fallax fallax</i>) Wherever found SC</li> </ul>	07/24/2001	1333 acres (California) Encompassed by Western Riverside MSHCP.	Data not available	80 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"><li>• No common name - (<i>Chorizanthepolygonoideslongispina</i>) Wherever found SC</li><li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li><li>• Rattlesnake, northern red diamond - (<i>Crotalus ruber ruber</i>) Wherever found SC</li><li>• Spadefoot, western - (<i>Spea hammondii</i>) Wherever found UR</li><li>• Sparrow, Bell's sage - (<i>Amphispiza belli belli</i>) Wherever found SC</li><li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>) Wherever found SC</u></li><li>• Whiptail, coastal western - (<i>Cnemidophorus tigrismultiscutatus</i>) Wherever found SC</li><li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li><li>• Woodrat, San Diego desert - (<i>Neotoma</i></li></ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<i>lepida intermedia</i> ) Wherever found SC • <u>Wren, San Diego cactus -</u> <u>(Campylorhynchus brunneicapillus couesi)</u> Wherever found RT				
<u>EnviroCycle, Inc.</u>	771172	Bakersfield, CA	I	<ul style="list-style-type: none"> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Kangaroo rat, giant (<i>Dipodomys ingens</i>) Wherever found E</li> <li>• Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> </ul>		02/26/1993	20 acres (California)	Data not available	50 years, 0 months
<u>Evergreen Nursery</u>	TE023022-0	Oceanside, CA	I	<ul style="list-style-type: none"> <li>• Gnatcatcher, coastal California (<i>Poliioptila californica californica</i>) Wherever found T</li> </ul>		02/09/2001	80.15 acres (California)	Data not available	15 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Fieldstone/La Costa &amp; City of Carlsbad</a>	PRT-795759 , TE818041-0	Carlsbad, CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Gnatcatcher, coastal California (<i>Poliophtila californica californica</i>) Wherever found T</li> <li>Manzanita, Del Mar (<i>Arctostaphylos glandulosa ssp. crassifolia</i>) Wherever found E</li> <li>Shrike, San Clemente loggerhead (<i>Lanius ludovicianus mearnsi</i>) Wherever found E</li> <li>Thornmint, San Diego (<i>Acanthomintha ilicifolia</i>) Wherever found T</li> <li>Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Barrel cactus, coast - (<i>Ferocactus viridescens</i>) Wherever found SC</li> <li>Bat, Pacific Townsend's big-eared - (<i>Plecotus townsendii townsendii</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Boa, coastal rosy - (<i>Charina trivirgata roseofusca</i>) Wherever found SC</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>Butterfly, Hermes copper - (<i>Lycaena hermes</i>) Wherever found C</li> <li>Ceanothus, wart-stemmed - (<i>Ceanothus verrucosus</i>) Wherever found SC</li> <li>Dichondra, western - (<i>Dichondra occidentalis</i>) Wherever found RT</li> <li>Dudleya, short-leaved - (<i>Dudleya blochmaniae blochmaniae</i>) Wherever found SC</li> </ul>	06/07/1995	1955 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Fern, Canyon lip -</u> <u>(<i>Cheilanthes arizonica californicum</i>)</u> Wherever found RT</li> <li>• Gecko, San Diego banded - (<i>Coleonyx variegatus abbotti</i>) Wherever found SC</li> <li>• Goldenstar, San Diego - (<i>Muilla clevelandii</i>) Wherever found SC</li> <li>• Grapplinghook, Palmer's - (<i>Harpagonella palmeri palmeri</i>) Wherever found SC</li> <li>• <u>Hazardia, Orcutt's -</u> <u>(<i>Hazardia orcuttii</i>)</u> Wherever found RT</li> <li>• Jackrabbit, San Diego black-tailed - (<i>Lepus californicus bennettii</i>) Wherever found SC</li> <li>• <u>Lark, California</u> <u>horned -</u> <u>(<i>Eremophila alpestris actia</i>)</u> Wherever found RT</li> <li>• <u>Liveforever, sticky-leaved -</u> <u>(<i>Dudleya viscida</i>)</u> Wherever found RT</li> <li>• Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Lizard, silvery legless - (<i>Anniella pulchra pulchra</i>) Wherever found SC</li> <li>• Marsh elder, San Diego - (<i>Iva hayesiana</i>) Wherever found SC</li> <li>• Mastiff-bat, greater western - (<i>Eumops perotis californicus</i>) Wherever found SC</li> <li>• Mouse, Dulzura California pocket - (<i>Chaetodipus californicus femoralis</i>)</li> <li>• Mouse, northwestern San Diego pocket - (<i>Chaetodipus fallax fallax</i>)</li> <li>• Mouse, pallid San Diego pocket - (<i>Chaetodipus californicus pallidus</i>)</li> <li>• Mouse, southern grasshopper - (<i>Onychomys torridus ramona</i>) Wherever found SC</li> <li>• Oak, Nuttall's scrub - (<i>Quercus dumosa</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Rattlesnake, northern red diamond - (<i>Crotalus ruber ruber</i>) Wherever found SC</li> <li>• Rush, southwestern spiny - (<i>Juncus acutus</i> ssp. <i>leopoldii</i>)</li> <li>• <u>Sand aster, Del Mar - (<i>Corethrogyne filaginifolia linifolia</i>)</u> Wherever found RT</li> <li>• <u>Skink, Coronado - (<i>Eumeces skiltonianus interparietalis</i>)</u> Wherever found SC</li> <li>• <u>Skipper, dun - (<i>Euphyes vestris harbisoni</i>)</u> Wherever found RT</li> <li>• Snake, coast patch-nosed - (<i>Salvadora hexalepis virgultea</i>) Wherever found SC</li> <li>• Snake, San Diego ringneck - (<i>Diadophis punctatus similis</i>) Wherever found SC</li> <li>• Snake, two-striped garter - (<i>Thamnophis hammondi</i>) Wherever found SC</li> <li>• Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Sparrow, Bell's sage - (<i>Amphispiza belli belli</i>) Wherever found SC</li> <li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>) Wherever found SC</u></li> <li>• Summer-holly - (<i>Comarostaphylis diversifolia diversifolia</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Whiptail, coastal western - (<i>Cnemidophorus tigris multiscutatus</i>) Wherever found SC</li> <li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> <li>• Woodrat, San Diego desert - (<i>Neotoma lepida intermedia</i>) Wherever found SC</li> <li>• <u>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>) Wherever found RT</u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Fisher Family</a>	TE170629-0	Point Arena, Mendocino County, California	I	<ul style="list-style-type: none"> <li>Butterfly, Behren's silverspot (<i><u>Speyeria zerene behrensi</u></i>) Wherever found E</li> <li>Mountain beaver, Point Arena (<i><u>Apodontia rufa nigra</u></i>) Wherever found E</li> </ul>		12/03/2007	24 acres (California)	Data not available	50 years, 0 months
<a href="#">Folsom Professional Center</a>	TE072797-0	City of Folsom, Sacramento County	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i><u>Desmocerus californicus dimorphus</u></i>) Wherever found T</li> </ul>		06/25/2003	5.59 acres (California) Impacts to 24 stems. Mitigation 30 elderberry plants plus 36 associated native plants with 0.24 acres.	Data not available	3 years, 0 months
<a href="#">Fruit Growers Supply Company</a>		Siskiyou, Shasta, and Trinity Counties	I	<ul style="list-style-type: none"> <li>Owl, northern spotted (<i><u>Strix occidentalis caurina</u></i>) Wherever found T</li> <li>Phlox, Yreka (<i><u>Phlox hirsuta</u></i>) Wherever found E</li> <li>Salmon, coho (<i><u>Oncorhynchus</u></i> (=Salmo) <i>kisutch</i>) Southern Oregon - Northern California Coast ESU T</li> </ul>		11/27/2012	155000 acres (California)	Data not available	50 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Gosnell Residential</a>	TE063835-0	City of Los Osos County of San Luis Obispo	I	<ul style="list-style-type: none"> <li>Manzanita, Morro (<i>Arctostaphylos morroensis</i>) Wherever found T</li> <li>Snail, Morro shoulderband (=Banded dune) (<i>Helminthoglypta walkeriana</i>) Wherever found E</li> </ul>		12/23/2002	1 acres (California)	Data not available	25 years, 0 months
<a href="#">Granite Construction, Phase 1</a>	778268	Coalinga, CA Fresno County	I	<ul style="list-style-type: none"> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> </ul>		12/29/1993	54 acres (California)	Data not available	20 years, 0 months
<a href="#">Green Diamond Resource Company California Timberlands &amp; Northern Spotted Owl (formerly Simpson Timber Company)</a>	767798	Humboldt, Del Norte, Trinity Cos., CA	I		<ul style="list-style-type: none"> <li>Salamander, southern torrent - (<i>Rhyacotriton variegatus</i>) Wherever found RT</li> </ul>	09/17/1992	400000 acres (California)	Data not available	30 years, 0 months
<a href="#">Hanson Aggregates Felton Plant</a>	TE013227-0	Santa Cruz Co., CA	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i>Polyphylla barbata</i>) Wherever found E</li> <li>Grasshopper, Zayante band-winged (<i>Trimerotropis infantilis</i>) Wherever found E</li> </ul>		09/03/1999	35 acres (California)	Data not available	15 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">High Desert Power Project</a>	TE021703-0	Victorville, San Bernardino County	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>Squirrel, Mohave ground - (<i>Spermophilus mohavensis</i>) Wherever found RT</li> </ul>	10/26/2000	32 linear miles (California) for pipeline. In addition, a 700 mega-watt power plant will be constructed on disturbed land w/in former George Air Force Base.	Data not available	50 years, 0 months
<a href="#">Hillcrest Travel Plaza</a>	TE120484-0	Fresno County	I	<ul style="list-style-type: none"> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> </ul>		03/03/2006	10 acres (California)	Data not available	10 years, 0 months
<a href="#">Hoa Cam Tieu (Calero II) Low-effect Habitat Conservation Plan</a>	TE75774A-0		I	<ul style="list-style-type: none"> <li>Butterfly, bay checkerspot (<i>Euphydryas editha bayensis</i>) Wherever found T</li> <li>Dudleya, Santa Clara Valley (<i>Dudleya setchellii</i>) Wherever found E</li> </ul>		06/22/2012	9.6 acres (California)	Data not available	3 years, 0 months
<a href="#">Hord Residential Project</a>	TE014808-0	Los Osos, San Luis Obispo County	I	<ul style="list-style-type: none"> <li>Snail, Morro shoulderband (=Banded dune) (<i>Helminthoglypta walkeriana</i>) Wherever found E</li> </ul>		09/30/1999	4.49 acres (California)	Data not available	10 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Hossain Ahmadi (Calero I) Low-effect Habitat Conservation Plan</a>	TE198646-0	22599 Country View Lane San Jose, CA 95120	I	<ul style="list-style-type: none"> <li>• Butterfly, bay checkerspot (<i>Euphydryas editha bayensis</i>) Wherever found T</li> <li>• Dudleya, Santa Clara Valley (<i>Dudleya setchellii</i>) Wherever found E</li> <li>• Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> </ul>		12/17/2010	9.2 acres (California)	Data not available	3 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Humboldt Redwood Company (formerly Pacific Lumber, Headwaters)</u>	TE828950-0	Scotia, CA	I	<ul style="list-style-type: none"> <li>• Murrelet, marbled (<i>Brachyramphus marmoratus</i>) U.S.A. (CA, OR, WA) T</li> <li>• Owl, northern spotted (<i>Strix occidentalis caurina</i>) Wherever found T</li> <li>• Plover, western snowy (<i>Charadrius nivosus nivosus</i>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> </ul>	<ul style="list-style-type: none"> <li>• Eagle, bald - (<i>Haliaeetus leucocephalus</i>) lower 48 States DM</li> <li>• Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>• Fisher - (<i>Pekania pennanti</i>) West coast DPS RT</li> <li>• Frog, foothill yellow-legged - (<i>Rana boylei</i>) Wherever found UR</li> <li>• Frog, northern red-legged - (<i>Rana aurora aurora</i>) Wherever found SC</li> <li>• Frog, tailed - (<i>Ascaphus truei</i>) Wherever found SC</li> <li>• Salamander, southern torrent - (<i>Rhyacotriton variegatus</i>) Wherever found RT</li> <li>• Turtle, northwestern pond - (<i>Actinemys marmorata marmorata</i>) Wherever found SC</li> <li>• Vole, California red tree - (<i>Phenacomys longicaudus</i>)</li> </ul>	03/01/1999	211700 acres (California)	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Hyundai Motor America Test Track</u></a>	TE080999-0 , TE082034-0	California City, Kern County	I	• Tortoise, desert ( <i>Gopherus agassizii</i> ) Wherever found, except AZ south and east of Colorado R., and Mexico T		01/21/2004	4526 acres (California)	Data not available	30 years, 0 months
<a href="#"><u>John Laing Homes, Cantara Completion</u></a>	835424	Colton, CA	I	• Fly, Delhi Sands flower-loving ( <i>Rhaphiomidas terminatus abdominalis</i> ) Wherever found E		10/29/1997	40 acres (California)	Data not available	8 years, 0 months
<a href="#"><u>Jonas Salk Elementary School</u></a>	TE86352A-0		I	• Fairy shrimp, San Diego ( <i>Branchinecta sandiegonensis</i> ) Wherever found E		12/22/2012	13 acres (California)	Data not available	10 years, 0 months
<a href="#"><u>Joshua Tree Campground</u></a>	TE839174-4	Approximately 5 miles northeast of the unincorporated Community of Joshua Tree, in San Bernardino County	I	• Tortoise, desert ( <i>Gopherus agassizii</i> ) Wherever found, except AZ south and east of Colorado R., and Mexico T		11/08/2006	314.6 acres (California)	Data not available	30 years, 0 months
<a href="#"><u>Jurupa Avenue Widening Low-Effect HCP (Fontana, San Bernardino Cnty, CA)</u></a>	TE160995-0	Along Jurupa Avenue, east of Sierra Avenue, City of Fontana, San Bernardino County, California	I	• Fly, Delhi Sands flower-loving ( <i>Rhaphiomidas terminatus abdominalis</i> ) Wherever found E		09/13/2007	4.7 acres (California)	Data not available	3 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Kern County Waste Facilities</u>	830963	Bakersfield, CA	I	<ul style="list-style-type: none"> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Kangaroo rat, giant (<i>Dipodomys ingens</i>) Wherever found E</li> <li>• Kangaroo rat, Tipton (<i>Dipodomys nitratoides nitratoides</i>) Wherever found E</li> <li>• Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> <li>• Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>• Squirrel, Nelson's antelope ground - (<i>Ammospermophilus nelsoni</i>) Wherever found SC</li> <li>• Woolly-star, Hoover's - (<i>Eriastrum hooveri</i>) DM</li> </ul>	10/24/1997	1500 acres (California)	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Kern Water Bank</u>	828086 , 835054	portions of Kern, Tulare, and Kings Counties, CA	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<u><i>Desmocerus californicus dimorphus</i></u>) Wherever found T</li> <li>• Cactus, Bakersfield (<u><i>Opuntia treleasei</i></u>) Wherever found E</li> <li>• Condor, California (<u><i>Gymnogyps californianus</i></u>) U.S.A. only, except where listed as an experimental population E</li> <li>• Fairy shrimp, Conservancy (<u><i>Branchinecta conservatio</i></u>) Wherever found E</li> <li>• Fairy shrimp, longhorn (<u><i>Branchinecta longiantenna</i></u>) Wherever found E</li> <li>• Fairy shrimp, vernal pool (<u><i>Branchinecta lynchi</i></u>) Wherever found T</li> <li>• Flycatcher, southwestern willow (<u><i>Empidonax traillii extimus</i></u>) Wherever found E</li> <li>• Fox, San Joaquin kit (<u><i>Vulpes macrotis mutica</i></u>) wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Badger, American - (<i><u>Taxidea taxus</u></i>)</li> <li>• Bat, Pacific Townsend's big-eared - (<i><u>Plecotus townsendii</u></i>) Wherever found SC</li> <li>• Birds-beak, hispid - (<i><u>Cordylanthus mollis hispidus</u></i>) Wherever found SC</li> <li>• Blackbird, tricolored - (<i><u>Agelaius tricolor</u></i>) Wherever found UR</li> <li>• Crane, greater sandhill - (<i><u>Grus canadensis tubida</u></i>)</li> <li>• Eagle, bald - (<i><u>Haliaeetus leucocephalus</u></i>) lower 48 States DM</li> <li>• Falcon, American peregrine - (<i><u>Falco peregrinus anatum</u></i>) Wherever found DM</li> <li>• Goose, Aleutian Canada - (<i><u>Branta canadensis leucopareia</u></i>) Wherever found DM</li> <li>• Hawk, ferruginous - (<i><u>Buteo regalis</u></i>) Wherever found RT</li> <li>• Hawk, Swainson's - (<i><u>Buteo swainsoni</u></i>) Wherever found RT</li> </ul>	10/02/1997	19900 acres (California)	Data not available	75 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Jewelflower, California (<i>Caulanthus californicus</i>) Wherever found E</li> <li>Kangaroo rat, giant (<i>Dipodomys ingens</i>) Wherever found E</li> <li>Kangaroo rat, Tipton (<i>Dipodomys nitratoideus nitratoideus</i>) Wherever found E</li> <li>Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> <li>Mallow, Kern (<i>Eremalche kernensis</i>) Wherever found E</li> <li>Plover, western snowy (<i>Charadrius nivosus nivosus</i>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> <li>Shrew, Buena Vista Lake ornate (<i>Sorex ornatus relictus</i>) Wherever found E</li> <li>Shrike, San Clemente loggerhead (<i>Lanius ludovicianus mearnsi</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Heartscale - (<i>Atriplex cordulata</i>) Wherever found SC</li> <li>Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li>Larkspur, recurved - (<i>Delphinium recurvatum</i>) Wherever found SC</li> <li>Layia, Comanche - (<i>Layia leucopappa</i>) Wherever found SC</li> <li>Mariposa lily, alkali - (<i>Calochortus striatus</i>) Wherever found SC</li> <li>Mastiff-bat, greater western - (<i>Eumops perotis californicus</i>) Wherever found SC</li> <li>Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>Plover, mountain - (<i>Charadrius montanus</i>) Wherever found RT</li> <li>Salamander, California tiger - (<i>Ambystoma californiense</i>) Wherever found RT</li> <li>Saltbrush, lesser - (<i>Atriplex miniscula</i>)</li> <li>Saltbush, Bakersfield -</li> </ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>Snake, giant garter (<i>Thamnophis gigas</i>) Wherever found T</li> <li>Tadpole shrimp, vernal pool (<i>Lepidurus packardii</i>) Wherever found E</li> <li>Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> <li>Woolly-threads, San Joaquin (<i>Monolopia</i> (=Lembertia) <i>congdonii</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>(<i>Atriplex tularensis</i>) Wherever found SC</li> <li>Saltbush, Lost Hills - (<i>Atriplex vallicola</i>) Wherever found SC</li> <li>Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> <li>Squirrel, Nelson's antelope ground - (<i>Ammospermophilus nelsoni</i>) Wherever found SC</li> <li>Tarplant, Kern - (<i>Hemizonia pallidus</i>)</li> <li>Thistle, slough - (<i>Cirsium crassicaule</i>) Wherever found SC</li> <li>Thrasher, San Joaquin LeConte's - (<i>Toxostoma lecontei macmillanorum</i>) Wherever found SC</li> <li>Turtle, western pond - (<i>Actinemys marmorata</i>) Wherever found UR</li> <li>Woolly-star, Hoover's - (<i>Eriastrum hooveri</i>) DM</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Lake Mathews</a>	805839	Riverside Co., CA	I	<ul style="list-style-type: none"> <li>Butterfly, Quino checkerspot (<i>Euphydryas editha quino</i> (=E. e. <i>wrightii</i>)) Wherever found E</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Gnatcatcher, coastal California (<i>Poliophtila californica californica</i>) Wherever found T</li> <li>Kangaroo rat, Stephens' (<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)) Wherever found E</li> <li>Milk-vetch, Braunton's (<i>Astragalus brauntonii</i>) Wherever found E</li> <li>Onion, Munz's (<i>Allium munzii</i>) Wherever found E</li> <li>Shrike, San Clemente loggerhead (<i>Lanius ludovicianus mearnsi</i>) Wherever found E</li> <li>Spineflower, slender-horned (<i>Dodecahema leptoceras</i>) Wherever found E</li> <li>Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Bat, big free-tailed - (<i>Nyctinomops macrotis</i>) Wherever found SC</li> <li>Bee, Ruth's cuckoo - (<i>Holocapaspites ruthae</i>)</li> <li>Bindweed, clay - (<i>Convolvulus simulans</i>)</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Boa, coastal rosy - (<i>Charina trivirgata roseofusca</i>) Wherever found SC</li> <li>Eagle, bald - (<i>Haliaeetus leucocephalus</i>) lower 48 States DM</li> <li>Gecko, San Diego banded - (<i>Coleonyx variegatus abbotti</i>) Wherever found SC</li> <li>Grapplinghook, Palmer's - (<i>Harpagonella palmeri palmeri</i>) Wherever found SC</li> <li>Hawk, ferruginous - (<i>Buteo regalis</i>) Wherever found RT</li> <li>Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> </ul>	12/05/1995	5993.5 acres (California) Encompassed by Western Riverside MSHCP.	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Heron, great blue - (<i>Ardea herodias</i>)</li> <li>• Jackrabbit, San Diego black-tailed - (<i>Lepus californicus bennettii</i>) Wherever found SC</li> <li>• <u>Lark, California</u> horned - (<i>Eremophila alpestris actia</i>) <u>Wherever found RT</u></li> <li>• Liveforever, many-stemmed - (<i>Dudleya multicaulis</i>) Wherever found SC</li> <li>• Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>• Microseris, small-flowered - (<i>Microseris douglasii</i> ssp. <i>platycarpha</i>)</li> <li>• <u>Mountain lion, California - (<i>Felis concolor californica</i>)</u> <u>Wherever found RT</u></li> <li>• Mouse, northwestern San Diego pocket - (<i>Chaetodipus fallax fallax</i>)</li> <li>• Mousetail, little - (<i>Myosurus minimus apus</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Myotis, Yuma - (<i>Myotis yumanensis</i>) Wherever found SC</li> <li>• No common name - (<i>Chorizanthe polygonoides longispina</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Phacelia, Merced - (<i>Phacelia ciliata opaca</i>) Wherever found SC</li> <li>• Rattlesnake, northern red diamond - (<i>Crotalus ruber ruber</i>) Wherever found SC</li> <li>• Snake, San Bernardino ringneck - (<i>Diadophis punctatus modestus</i>) Wherever found SC</li> <li>• Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> <li>• Sparrow, Bell's sage - (<i>Amphispiza belli belli</i>) Wherever found SC</li> <li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps</i>)</u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<u>canescens)</u> <u>Wherever found SC</u> • Spineflower, Parry's - ( <i>Chorizanthe parryi</i> <i>parryi</i> ) Wherever found SC • Tarplant, smooth - ( <i>Hemizonia</i> <i>pungens laevis</i> ) Wherever found SC • Tarplant, southern - ( <i>Hemizonia parryi</i> <i>australis</i> ) Wherever found SC • Whiptail, coastal western - ( <i>Cnemidophorus</i> <i>tigris multiscutatus</i> ) Wherever found SC • Whiptail, orange- throated - ( <i>Cnemidophorus</i> <i>hyperythrus</i> ) Wherever found SC • Woodrat, San Diego desert - ( <i>Neotoma</i> <i>lepida intermedia</i> ) Wherever found SC • <u>Wren, San Diego</u> <u>cactus -</u> <u>(<i>Campylorhynchus</i></u> <u><i>brunneicapillus</i></u> <u><i>couesi</i>) Wherever</u> <u>found RT</u>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Lamont Public Utility District</u></a>	TE106826-0	Kern County	I	<ul style="list-style-type: none"> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Kangaroo rat, Tipton (<i>Dipodomys nitratooides nitratooides</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> </ul>	07/06/2005	160 acres (California)	Data not available	50 years, 0 months
<a href="#"><u>Las Tres Marias</u></a>	TE87829A-0	120 Highway 12, Valley Springs, CA 95252, Calaveras County - APNs: 048-017-098, 048-017-103, and 048-017-112.	I	<ul style="list-style-type: none"> <li>• Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> </ul>		12/07/2012	108.56 acres (California)	Data not available	10 years, 0 months
<a href="#"><u>Lathrop Wells HCP - Low Effect</u></a>	TE060997-0	Lathrop Wells, Nye County, Nevada	I	<ul style="list-style-type: none"> <li>• Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		08/16/2002	823 acres (Nevada)	Data not available	10 years, 0 months
<a href="#"><u>Lompoc Geotechnical Boring Project Phase 1</u></a>	TE25619A-0	Located about 8-miles NNW of Point Conception, near the west end of the Santa Ynez Mountains, and 7 miles south of Lompoc, Santa Barbara County, California	I	<ul style="list-style-type: none"> <li>• Butterfly, El Segundo blue (<i>Euphilotes battoides allyni</i>) Wherever found E</li> <li>• Tarplant, Gaviota (<i>Deinandra increscens ssp. villosa</i>) Wherever found E</li> </ul>		04/27/2011	3.03 acres (California)	Data not available	1 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Lone Pine Lane (Sisk)</a>	TE202042-0	Scotts Valley (Santa Cruz County), CA	I	<ul style="list-style-type: none"> <li>• Beetle, Mount Hermon June (<i>Polyphyla barbata</i>) Wherever found E</li> </ul>		12/22/2008	1.24 acres (California)	Data not available	5 years, 0 months
<a href="#">Los Esteros LE</a>		Santa Clara County	I	<ul style="list-style-type: none"> <li>• Butterfly, bay checkerspot (<i>Euphydryas editha bayensis</i>) Wherever found T</li> <li>• Ceanothus, coyote (<i>Ceanothus ferrisae</i>) Wherever found E</li> <li>• Dudleya, Santa Clara Valley (<i>Dudleya setchellii</i>) Wherever found E</li> <li>• Jewelflower, Metcalf Canyon (<i>Streptanthus albidus ssp. albidus</i>) Wherever found E</li> <li>• Paintbrush, Tiburon (<i>Castilleja affinis ssp. neglecta</i>) Wherever found E</li> </ul>		03/11/2011	9926 acres (California) The 21-acre power plant itself is not in an area with habitat. As a result of its emissions, however, the increase in nitrogen deposition could indirectly affect the covered species within 9,926 acres of serpentine habitat in Santa Clara County.	Data not available	50 years, 0 months Estimated project life of power plant
<a href="#">Lytle Creek Turnout Low-Effect HCP (formerly West Valley Water District, San Bernardino Cnty, CA)</a>	TE157909-0	Near the intersection of Linden and Riverside avenues in the City of Rialto, San Bernardino, County, California	I	<ul style="list-style-type: none"> <li>• Kangaroo rat, San Bernardino Merriam's (<i>Dipodomys merriami parvus</i>) Wherever found E</li> </ul>		08/20/2009	2.16 acres (California)	Data not available	2 years, 0 months Extended 1 year

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Mansfield Low Effect HCP</u></a>	TE236181-0	Mansfield Residence, 9 Locke Way (APN 021-052-21) in the City of Scotts Valley, Santa Cruz County, CA	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i>Polyphylla barbata</i>) Wherever found E</li> </ul>		06/18/2010	0.3 acres (California)	Data not available	5 years, 0 months
<a href="#"><u>Marina Peninsula Trail and Rehabilitation Project Site (Morro Bay State Park Boardwalk)</u></a>	TE03190A-0	Morro Bay State Park, San Luis Obispo County	I	<ul style="list-style-type: none"> <li>Snail, Morro shoulderband (=Banded dune) (<i>Helminthoglypta walkeriana</i>) Wherever found E</li> </ul>		08/30/2010	10 acres (California)	Data not available	5 years, 0 months
<a href="#"><u>Maxwell Irrigation District</u></a>	842926	Maxwell, CA Multiple Counties	I	<ul style="list-style-type: none"> <li>Snake, giant garter (<i>Thamnophis gigas</i>) Wherever found T</li> </ul>		07/24/1998	2.75 acres (California)	Data not available	2 years, 0 months
<a href="#"><u>Mayer Property</u></a>	TE-054227-0	Santa Cruz County	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i>Polyphylla barbata</i>) Wherever found E</li> <li>Spineflower, Ben Lomond (<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>) Wherever found E</li> </ul>		06/04/2002	0.35 acres (California) project size is 15,439 square feet	Data not available	6 years, 0 months
<a href="#"><u>Meadowlark Estates, SunCal Company</u></a>	839428	San Marcos, CA	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> </ul>		02/13/1998	214 acres (California)	Data not available	2 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Metcalf-Evendale/Monta-Vista (PG&amp;E)</u>	TE003250-0	Santa Clara County, California	I	<ul style="list-style-type: none"> <li>Butterfly, bay checkerspot (<i>Euphydryas editha bayensis</i>) Wherever found T</li> </ul>		11/24/1998	4.19 acres (California)	Data not available	3 years, 0 months
<u>Metropolitan Bakersfield</u>	786634	Bakersfield, CA Kern County	I	<ul style="list-style-type: none"> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>Kangaroo rat, giant (<i>Dipodomys ingens</i>) Wherever found E</li> <li>Kangaroo rat, Tipton (<i>Dipodomys nitratoides nitratoides</i>) Wherever found E</li> <li>Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> </ul>		08/24/1994	262000 acres (California) approximately 408 square miles (City and County jurisdictions)	Data not available	20 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">MHCP, City of Carlsbad Habitat Management Plan</a>	TE-022606-0	City of Carlsbad, San Diego County, CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum</i> var. <i>parishii</i>) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> <li>Manzanita, Del Mar (<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Barrel cactus, coast - (<i>Ferocactus viridescens</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>Butterfly, Hermes copper - (<i>Lycaena hermes</i>) Wherever found C</li> <li>Ceanothus, wart-stemmed - (<i>Ceanothus verrucosus</i>) Wherever found SC</li> <li>Curlew, long-billed - (<i>Numenius americanus</i>) Wherever found RT</li> <li>Deer, southern mule - (<i>Odocoileus hemionus fuliginata</i>)</li> <li>Dudleya, short-leaved - (<i>Dudleya blochmaniae</i>) Wherever found SC</li> <li>Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>Goldenstar, San Diego - (<i>Muilla clevelandii</i>) Wherever found SC</li> </ul>	11/12/2004	24570 acres (California)	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>• Navarretia, spreading (<i>Navarretia fossalis</i>) Wherever found T</li> <li>• Orcutt grass, California (<i>Orcuttia californica</i>) Wherever found E</li> <li>• Plover, western snowy (<i>Charadrius nivosus nivosus</i>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> <li>• Rail, light-footed clapper (<i>Rallus longirostris levipes</i>) Wherever found E</li> <li>• Spineflower, Orcutt's (<i>Chorizanthe orcuttiana</i>) Wherever found E</li> <li>• Tern, California least (<i>Sterna antillarum browni</i>) Wherever found E</li> <li>• Thornmint, San Diego (<i>Acanthomintha ilicifolia</i>) Wherever found T</li> <li>• Toad, arroyo (=arroyo southwestern) (<i>Anaxyrus californicus</i>) Wherever found E</li> <li>• Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Hazardia, Orcutt's - (<i>Hazardia orcuttii</i>) Wherever found RT</u></li> <li>• Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li>• Jackrabbit, San Diego black-tailed - (<i>Lepus californicus bennettii</i>) Wherever found SC</li> <li>• <u>Liveforever, sticky-leaved - (<i>Dudleya viscida</i>) Wherever found RT</u></li> <li>• Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>• Marsh elder, San Diego - (<i>Iva hayesiana</i>) Wherever found SC</li> <li>• <u>Mountain lion, California - (<i>Felis concolor californica</i>) Wherever found RT</u></li> <li>• Mousetail, little - (<i>Myosurus minimus apus</i>) Wherever found SC</li> <li>• Oak, Nuttall's scrub - (<i>Quercus dumosa</i>) Wherever found SC</li> <li>• osprey - (<i>Pandion haliaetus</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<i>cunicularia</i> ssp. <i>hypugaea</i> ) Wherever found SC • Pelican, brown - ( <i>Pelecanus</i> <i>occidentalis</i> ) except U.S. Atlantic coast, FL, AL DM • Pine, Torrey, Del Mar - ( <i>Pinus</i> <i>torreyana torreyana</i> ) Wherever found SC • <u>Sand aster, Del Mar</u> - ( <i>Corethrogyne</i> <i>filaginifolia linifolia</i> ) Wherever found RT • <u>Skipper, dun -</u> ( <i>Euphyes vestris</i> <i>harbisoni</i> ) Wherever found RT • Skipper, wandering - ( <i>Panoquina</i> <i>errans</i> ) Wherever found SC • Sparrow, Belding's savannah - ( <i>Passerculus</i> <i>sandwichensis</i> <i>beldingi</i> ) Wherever found SC • Sparrow, Bell's sage - ( <i>Amphispiza belli</i> <i>belli</i> ) Wherever found SC • Sparrow, large- billed savannah - ( <i>Passerculus</i> <i>sandwichensis</i> <i>rostratus</i> ) Wherever found SC				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>)</u> Wherever found SC</li> <li>• Summer-holly - (<i>Comarostaphylis diversifolia diversifolia</i>) Wherever found SC</li> <li>• Tern, elegant - (<i>Sterna elegans</i>) Wherever found SC</li> <li>• Tetracoccus, Parry's - (<i>Tetracoccus dioicus</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> <li>• <u>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>)</u> Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Mission View Estates</a>	TE060752	City of Oceanside, San Diego County	I	<ul style="list-style-type: none"> <li>• Brodiaea, thread-leaved (<i><u>Brodiaea filifolia</u></i>) Wherever found T</li> <li>• Gnatcatcher, coastal California (<i><u>Polioptila californica californica</u></i>) Wherever found T</li> </ul>		08/08/2002	46.9 acres (California) Total area includes off-site mitigation. Falls within the planning area of the not yet approved Oceanside Subarea Plan of the Multiple Habitat Conservation Plan.	Data not available	10 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>MSCP, City of Chula Vista Subarea Plan</u>	TE075235-0	City of Chula Vista, San Diego County.	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Barberry, Nevin's (<i>Berberis nevinii</i>) Wherever found E</li> <li>Bird's-beak, salt marsh (<i>Cordylanthus maritimus ssp. maritimus</i>) Wherever found E</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Butterfly, Quino checkerspot (<i>Euphydryas editha quino</i> (=E. e. wrightii)) Wherever found E</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum var. parishii</i>) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Flycatcher, southwestern willow</li> </ul>	<ul style="list-style-type: none"> <li>Agave, Shaw's - (<i>Agave shawii</i>) Wherever found SC</li> <li>Aphanisma - (<i>Aphanisma blitoides</i>) Wherever found SC</li> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Barrel cactus, coast - (<i>Ferocactus viridescens</i>) Wherever found SC</li> <li>Beargrass, Dehesa - (<i>Nolina interrata</i>) Wherever found RT</li> <li>Bird's-beak, Orcutt's - (<i>Cordylanthus orcuttianus</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>Butterweed, Gander - (<i>Packera ganderi</i>) Wherever found SC</li> <li>Ceanothus, Lakeside - (<i>Ceanothus cyaneus</i>) Wherever found SC</li> <li>Ceanothus, wart-stemmed - (<i>Ceanothus verrucosus</i>) Wherever found SC</li> </ul>	01/12/2005	57849 acres (California) The City of Chula Vista planning area includes an annexation area from the County Subarea Plan, and partially overlaps the planning area for the approved County of San Diego Subarea Plan of the MSCP.	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p>(<i>Empidonax traillii extimus</i>) Wherever found E</p> <ul style="list-style-type: none"> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> <li>Manzanita, Del Mar (<i>Arctostaphylos glandulosa ssp. crassifolia</i>) Wherever found E</li> <li>Mesa-mint, Otay (<i>Pogogyne nudiuscula</i>) Wherever found E</li> <li>Mesa-mint, San Diego (<i>Pogogyne abramsii</i>) Wherever found E</li> <li>Milk-vetch, coastal dunes (<i>Astragalus tener var. titi</i>) Wherever found E</li> <li>Monardella, willowy (<i>Monardella viminea</i>) Wherever found E</li> <li>Navarretia, spreading (<i>Navarretia fossalis</i>) Wherever found T</li> <li>Orcutt grass, California (<i>Orcuttia californica</i>) Wherever found E</li> <li>Plover, western snowy (<i>Charadrius nivosus nivosus</i>) Pacific Coast</li> </ul>	<ul style="list-style-type: none"> <li>Cholla, snake - (<i>Opuntia parryi serpentina</i>) Wherever found SC</li> <li>Curlew, long-billed - (<i>Numenius americanus</i>) Wherever found RT</li> <li>Cypress, Tecate - (<i>Cupressus forbesii</i>) Wherever found SC</li> <li>Deer, southern mule - (<i>Odocoileus hemionus fuliginata</i>)</li> <li>Dudleya, short-leaved - (<i>Dudleya blochmaniae brevifolia</i>) Wherever found RT</li> <li>Dudleya, variegated - (<i>Dudleya variegata</i>) Wherever found SC</li> <li>Eagle, bald - (<i>Haliaeetus leucocephalus</i>) lower 48 States DM</li> <li>Egret, reddish - (<i>Egretta rufescens</i>) Wherever found SC</li> <li>Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>Goldenbush, Palmer's - (<i>Ericameria palmeri ssp. palmeri</i>) Wherever found SU</li> </ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p>population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</p> <ul style="list-style-type: none"> <li>Rail, light-footed clapper (<u><i>Rallus longirostris levipes</i></u>) Wherever found E</li> <li>Tarplant, Otay (<u><i>Deinandra (=Hemizonia) conjugens</i></u>) Wherever found T</li> <li>Tern, California least (<u><i>Sterna antillarum browni</i></u>) Wherever found E</li> <li>Thornmint, San Diego (<u><i>Acanthomintha ilicifolia</i></u>) Wherever found T</li> <li>Toad, arroyo (=arroyo southwestern) (<u><i>Anaxyrus californicus</i></u>) Wherever found E</li> <li>Vireo, least Bell's (<u><i>Vireo bellii pusillus</i></u>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Goldenstar, San Diego - (<u><i>Muilla clevelandii</i></u>) Wherever found SC</li> <li><u>Hairstreak, Thorne's - (<i>Mitoura thornei</i>)</u> Wherever found RT</li> <li><u>Hawk, ferruginous - (<i>Buteo regalis</i>)</u> Wherever found RT</li> <li><u>Hawk, Swainson's - (<i>Buteo swainsoni</i>)</u> Wherever found RT</li> <li>Hosackia, prostrate - (<i>Lotus nuttallianus</i>) Wherever found SC</li> <li>Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li><u>Jewelflower, slender-pod - (<i>Caulanthus heterophyllus</i>)</u> Wherever found RT</li> <li><u>Liveforever, sticky-leaved - (<i>Dudleya viscida</i>)</u> Wherever found RT</li> <li>Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>Manzanita, Otay - (<i>Arctostaphylos otayensis</i>) Wherever found SC</li> <li>Mariposa lily, Dunn's -</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p>(<i>Calochortus dunnii</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• <u>Mountain lion</u>, <u>California - (<i>Felis concolor californica</i>)</u> Wherever found RT</li> <li>• Nightshade, narrow-leaved - (<i>Solanum tenuilobatum</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Pelican, brown - (<i>Pelecanus occidentalis</i>) except U.S. Atlantic coast, FL, AL DM</li> <li>• Pine, Torrey, Del Mar - (<i>Pinus torreyana torreyana</i>) Wherever found SC</li> <li>• Pitcher-sage, Gander's - (<i>Lepechinia ganderi</i>) Wherever found SC</li> <li>• Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) Wherever found SC</li> <li>• <u>Plover, mountain - (<i>Charadrius montanus</i>)</u> Wherever found RT</li> <li>• <u>Reedgrass, dense - (<i>Calamagrostis koelerioides</i>)</u> Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Rock-mint, felt leaf - (<i>Monardella hypoleuca lanata</i>)</u> <u>Wherever found RT</u></li> <li>• Rose, small-leaved - (<i>Rosa minutifolia</i>) Wherever found SC</li> <li>• <u>Sand aster, Del Mar - (<i>Corethrogyne filaginifolia linifolia</i>)</u> <u>Wherever found RT</u></li> <li>• Savory, San Miguel - (<i>Satureja chandleri</i>)</li> <li>• Skipper, wandering - (<i>Panoquina errans</i>) Wherever found SC</li> <li>• Sparrow, Belding's savannah - (<i>Passerculus sandwichensis beldingi</i>) Wherever found SC</li> <li>• Sparrow, large-billed savannah - (<i>Passerculus sandwichensis rostratus</i>) Wherever found SC</li> <li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>)</u> <u>Wherever found SC</u></li> <li>• Tern, elegant - (<i>Sterna elegans</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Tetracoccus, Parry's - (<i>Tetracoccus dioicus</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Wallflower, coast - (<i>Erysimum ammophilum</i>) Wherever found SC</li> <li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> <li>• Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>) Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">MSCP, City of La Mesa Subarea Plan</a>	TE830420-0	La Mesa, CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Barberry, Nevin's (<i>Berberis nevinii</i>) Wherever found E</li> <li>Bird's-beak, salt marsh (<i>Cordylanthus maritimus ssp. maritimus</i>) Wherever found E</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum var. parishii</i>) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Frog, California red-legged (<i>Rana</i></li> </ul>	<ul style="list-style-type: none"> <li>Agave, Shaw's - (<i>Agave shawii</i>) Wherever found SC</li> <li>Aphanisma - (<i>Aphanisma blitoides</i>) Wherever found SC</li> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Barrel cactus, coast - (<i>Ferocactus viridescens</i>) Wherever found SC</li> <li>Beargrass, Dehesa - (<i>Nolina interrata</i>) Wherever found RT</li> <li>Bird's-beak, Orcutt's - (<i>Cordylanthus orcuttianus</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>Butterweed, Gander - (<i>Packera ganderi</i>) Wherever found SC</li> <li>Ceanothus, Lakeside - (<i>Ceanothus cyaneus</i>) Wherever found SC</li> <li>Ceanothus, wart-stemmed - (<i>Ceanothus verrucosus</i>) Wherever found SC</li> </ul>	01/31/2000	6200 acres (California) Comprises 6,200 acres of the total 582,243-acre MSCP planning area (including military lands).	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p><u>draytonii</u>) Wherever found T</p> <ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<u>Poliioptila californica californica</u>) Wherever found T</li> <li>Manzanita, Del Mar (<u>Arctostaphylos glandulosa ssp. crassifolia</u>) Wherever found E</li> <li>Mesa-mint, Otay (<u>Pogogyne nudiuscula</u>) Wherever found E</li> <li>Mesa-mint, San Diego (<u>Pogogyne abramsii</u>) Wherever found E</li> <li>Milk-vetch, coastal dunes (<u>Astragalus tener var. titi</u>) Wherever found E</li> <li>Monardella, willowy (<u>Monardella viminea</u>) Wherever found E</li> <li>Navarretia, spreading (<u>Navarretia fossalis</u>) Wherever found T</li> <li>Orcutt grass, California (<u>Orcuttia californica</u>) Wherever found E</li> <li>Plover, western snowy (<u>Charadrius nivosus nivosus</u>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> </ul>	<ul style="list-style-type: none"> <li>Cholla, snake - (<u>Opuntia parryi serpentina</u>) Wherever found SC</li> <li>Curlew, long-billed - (<u>Numenius americanus</u>) Wherever found RT</li> <li>Cypress, Tecate - (<u>Cupressus forbesii</u>) Wherever found SC</li> <li>Deer, southern mule - (<u>Odocoileus hemionus fuliginata</u>)</li> <li>Dudleya, short-leaved - (<u>Dudleya blochmaniae brevifolia</u>) Wherever found RT</li> <li>Dudleya, variegated - (<u>Dudleya variegata</u>) Wherever found SC</li> <li>Eagle, bald - (<u>Haliaeetus leucocephalus</u>) lower 48 States DM</li> <li>Egret, reddish - (<u>Egretta rufescens</u>) Wherever found SC</li> <li>Falcon, American peregrine - (<u>Falco peregrinus anatum</u>) Wherever found DM</li> <li>Goldenbush, Palmer's - (<u>Ericameria palmeri ssp. palmeri</u>) Wherever found SU</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>• Rail, light-footed clapper (<u><i>Rallus longirostris levipes</i></u>) Wherever found E</li> <li>• Tarplant, Otay (<u><i>Deinandra (=Hemizonia) conjugens</i></u>) Wherever found T</li> <li>• Tern, California least (<u><i>Sterna antillarum browni</i></u>) Wherever found E</li> <li>• Thornmint, San Diego (<u><i>Acanthomintha ilicifolia</i></u>) Wherever found T</li> <li>• Toad, arroyo (=arroyo southwestern) (<u><i>Anaxyrus californicus</i></u>) Wherever found E</li> <li>• Vireo, least Bell's (<u><i>Vireo bellii pusillus</i></u>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Goldenstar, San Diego - (<u><i>Muilla clevelandii</i></u>) Wherever found SC</li> <li>• Hairstreak, Thorne's - (<u><i>Mitoura thornei</i></u>) Wherever found RT</li> <li>• Hawk, ferruginous - (<u><i>Buteo regalis</i></u>) Wherever found RT</li> <li>• Hawk, Swainson's - (<u><i>Buteo swainsoni</i></u>) Wherever found RT</li> <li>• Hosackia, prostrate - (<u><i>Lotus nuttallianus</i></u>) Wherever found SC</li> <li>• Ibis, white-faced - (<u><i>Plegadis chihi</i></u>) Wherever found SC</li> <li>• Jewelflower, slender-pod - (<u><i>Caulanthus heterophyllus</i></u>) Wherever found RT</li> <li>• Liveforever, sticky-leaved - (<u><i>Dudleya viscida</i></u>) Wherever found RT</li> <li>• Lizard, San Diego horned - (<u><i>Phrynosoma coronatum blainvillii</i></u>) Wherever found SC</li> <li>• Manzanita, Otay - (<u><i>Arctostaphylos otayensis</i></u>) Wherever found SC</li> <li>• Mariposa lily, Dunn's -</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p>(<i>Calochortus dunnii</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• <u>Mountain lion</u>, <u>California - (<i>Felis concolor californica</i>)</u> Wherever found RT</li> <li>• Nightshade, narrow-leaved - (<i>Solanum tenuilobatum</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Pelican, brown - (<i>Pelecanus occidentalis</i>) except U.S. Atlantic coast, FL, AL DM</li> <li>• Pine, Torrey, Del Mar - (<i>Pinus torreyana torreyana</i>) Wherever found SC</li> <li>• Pitcher-sage, Gander's - (<i>Lepechinia ganderi</i>) Wherever found SC</li> <li>• Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) Wherever found SC</li> <li>• <u>Plover, mountain - (<i>Charadrius montanus</i>)</u> Wherever found RT</li> <li>• <u>Reedgrass, dense - (<i>Calamagrostis koelerioides</i>)</u> Wherever found RT</li> </ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Rock-mint, felt leaf - (<i>Monardella hypoleuca lanata</i>)</u> <u>Wherever found RT</u></li> <li>• Rose, small-leaved - (<i>Rosa minutifolia</i>) Wherever found SC</li> <li>• <u>Sand aster, Del Mar - (<i>Corethrogyne filaginifolia linifolia</i>)</u> <u>Wherever found RT</u></li> <li>• Savory, San Miguel - (<i>Satureja chandleri</i>)</li> <li>• Skipper, wandering - (<i>Panoquina errans</i>) Wherever found SC</li> <li>• Sparrow, Belding's savannah - (<i>Passerculus sandwichensis beldingi</i>) Wherever found SC</li> <li>• Sparrow, large-billed savannah - (<i>Passerculus sandwichensis rostratus</i>) Wherever found SC</li> <li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>)</u> <u>Wherever found SC</u></li> <li>• Tern, elegant - (<i>Sterna elegans</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Tetracoccus, Parry's - (<i>Tetracoccus dioicus</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Wallflower, coast - (<i>Erysimum ammophilum</i>) Wherever found SC</li> <li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> <li>• Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>) Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>MSCP, City of Poway Subarea Plan</u>	803743	Poway, CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Barberry, Nevin's (<i>Berberis nevinii</i>) Wherever found E</li> <li>Bird's-beak, salt marsh (<i>Cordylanthus maritimus ssp. maritimus</i>) Wherever found E</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum var. parishii</i>) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Frog, California red-legged (<i>Rana</i></li> </ul>	<ul style="list-style-type: none"> <li>Agave, Shaw's - (<i>Agave shawii</i>) Wherever found SC</li> <li>Aphanisma - (<i>Aphanisma blitoides</i>) Wherever found SC</li> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Barrel cactus, coast - (<i>Ferocactus viridescens</i>) Wherever found SC</li> <li>Beargrass, Dehesa - (<i>Nolina interrata</i>) Wherever found RT</li> <li>Bird's-beak, Orcutt's - (<i>Cordylanthus orcuttianus</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>Butterweed, Gander - (<i>Packera ganderi</i>) Wherever found SC</li> <li>Ceanothus, Lakeside - (<i>Ceanothus cyaneus</i>) Wherever found SC</li> <li>Ceanothus, wart-stemmed - (<i>Ceanothus verrucosus</i>) Wherever found SC</li> </ul>	07/19/1996	25040 acres (California) The Poway planning area comprises 25,040 acres of the total 582,243-acre MSCP planning area (including military lands).	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p><u>draytonii</u>) Wherever found T</p> <ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<u>Poliioptila californica californica</u>) Wherever found T</li> <li>Manzanita, Del Mar (<u>Arctostaphylos glandulosa ssp. crassifolia</u>) Wherever found E</li> <li>Mesa-mint, Otay (<u>Pogogyne nudiuscula</u>) Wherever found E</li> <li>Mesa-mint, San Diego (<u>Pogogyne abramsii</u>) Wherever found E</li> <li>Milk-vetch, coastal dunes (<u>Astragalus tener var. titi</u>) Wherever found E</li> <li>Monardella, willowy (<u>Monardella viminea</u>) Wherever found E</li> <li>Navarretia, spreading (<u>Navarretia fossalis</u>) Wherever found T</li> <li>Orcutt grass, California (<u>Orcuttia californica</u>) Wherever found E</li> <li>Plover, western snowy (<u>Charadrius nivosus nivosus</u>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> </ul>	<ul style="list-style-type: none"> <li>Cholla, snake - (<u>Opuntia parryi serpentina</u>) Wherever found SC</li> <li>Curlew, long-billed - (<u>Numenius americanus</u>) Wherever found RT</li> <li>Cypress, Tecate - (<u>Cupressus forbesii</u>) Wherever found SC</li> <li>Deer, southern mule - (<u>Odocoileus hemionus fuliginata</u>)</li> <li>Dudleya, short-leaved - (<u>Dudleya blochmaniae brevifolia</u>) Wherever found RT</li> <li>Dudleya, variegated - (<u>Dudleya variegata</u>) Wherever found SC</li> <li>Eagle, bald - (<u>Haliaeetus leucocephalus</u>) lower 48 States DM</li> <li>Egret, reddish - (<u>Egretta rufescens</u>) Wherever found SC</li> <li>Falcon, American peregrine - (<u>Falco peregrinus anatum</u>) Wherever found DM</li> <li>Goldenbush, Palmer's - (<u>Ericameria palmeri ssp. palmeri</u>) Wherever found SU</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>• Rail, light-footed clapper (<u><i>Rallus longirostris levipes</i></u>) Wherever found E</li> <li>• Tarplant, Otay (<u><i>Deinandra (=Hemizonia) conjugens</i></u>) Wherever found T</li> <li>• Tern, California least (<u><i>Sterna antillarum browni</i></u>) Wherever found E</li> <li>• Thornmint, San Diego (<u><i>Acanthomintha ilicifolia</i></u>) Wherever found T</li> <li>• Toad, arroyo (=arroyo southwestern) (<u><i>Anaxyrus californicus</i></u>) Wherever found E</li> <li>• Vireo, least Bell's (<u><i>Vireo bellii pusillus</i></u>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Goldenstar, San Diego - (<u><i>Muilla clevelandii</i></u>) Wherever found SC</li> <li>• Hairstreak, Thorne's - (<u><i>Mitoura thornei</i></u>) Wherever found RT</li> <li>• Hawk, ferruginous - (<u><i>Buteo regalis</i></u>) Wherever found RT</li> <li>• Hawk, Swainson's - (<u><i>Buteo swainsoni</i></u>) Wherever found RT</li> <li>• Hosackia, prostrate - (<u><i>Lotus nuttallianus</i></u>) Wherever found SC</li> <li>• Ibis, white-faced - (<u><i>Plegadis chihi</i></u>) Wherever found SC</li> <li>• Jewelflower, slender-pod - (<u><i>Caulanthus heterophyllus</i></u>) Wherever found RT</li> <li>• Liveforever, sticky-leaved - (<u><i>Dudleya viscida</i></u>) Wherever found RT</li> <li>• Lizard, San Diego horned - (<u><i>Phrynosoma coronatum blainvillii</i></u>) Wherever found SC</li> <li>• Manzanita, Otay - (<u><i>Arctostaphylos otayensis</i></u>) Wherever found SC</li> <li>• Mariposa lily, Dunn's -</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p>(<i>Calochortus dunnii</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• <u>Mountain lion</u>, <u>California - (<i>Felis concolor californica</i>)</u> Wherever found RT</li> <li>• Nightshade, narrow-leaved - (<i>Solanum tenuilobatum</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Pelican, brown - (<i>Pelecanus occidentalis</i>) except U.S. Atlantic coast, FL, AL DM</li> <li>• Pine, Torrey, Del Mar - (<i>Pinus torreyana torreyana</i>) Wherever found SC</li> <li>• Pitcher-sage, Gander's - (<i>Lepechinia ganderi</i>) Wherever found SC</li> <li>• Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) Wherever found SC</li> <li>• <u>Plover, mountain - (<i>Charadrius montanus</i>)</u> Wherever found RT</li> <li>• <u>Reedgrass, dense - (<i>Calamagrostis koelerioides</i>)</u> Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Rock-mint, felt leaf - (<i>Monardella hypoleuca lanata</i>)</u> <u>Wherever found RT</u></li> <li>• Rose, small-leaved - (<i>Rosa minutifolia</i>) Wherever found SC</li> <li>• <u>Sand aster, Del Mar - (<i>Corethrogyne filaginifolia linifolia</i>)</u> <u>Wherever found RT</u></li> <li>• Savory, San Miguel - (<i>Satureja chandleri</i>)</li> <li>• Skipper, wandering - (<i>Panoquina errans</i>) Wherever found SC</li> <li>• Sparrow, Belding's savannah - (<i>Passerculus sandwichensis beldingi</i>) Wherever found SC</li> <li>• Sparrow, large-billed savannah - (<i>Passerculus sandwichensis rostratus</i>) Wherever found SC</li> <li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>)</u> <u>Wherever found SC</u></li> <li>• Tern, elegant - (<i>Sterna elegans</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"><li>• Tetracoccus, Parry's - (<i>Tetracoccus dioicus</i>) Wherever found SC</li><li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li><li>• Wallflower, coast - (<i>Erysimum ammophilum</i>) Wherever found SC</li><li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li><li>• Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>) Wherever found RT</li></ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>MSCP, City of San Diego Subarea Plan</u>	830421	San Diego Co., CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Barberry, Nevin's (<i>Berberis nevinii</i>) Wherever found E</li> <li>Bird's-beak, salt marsh (<i>Cordylanthus maritimus ssp. maritimus</i>) Wherever found E</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> <li>Manzanita, Del Mar (<i>Arctostaphylos glandulosa ssp. crassifolia</i>) Wherever found E</li> <li>Milk-vetch, coastal dunes (<i>Astragalus tener var. titi</i>) Wherever found E</li> <li>Monardella, willowy (<i>Monardella viminea</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Agave, Shaw's - (<i>Agave shawii</i>) Wherever found SC</li> <li>Aphanisma - (<i>Aphanisma blitoides</i>) Wherever found SC</li> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Beargrass, Dehesa - (<i>Nolina interrata</i>) Wherever found RT</li> <li>Bird's-beak, Orcutt's - (<i>Cordylanthus orcuttianus</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Bluebird, Western - (<i>Sialia mexicana</i>)</li> <li>Butterweed, Gander - (<i>Packera ganderi</i>) Wherever found SC</li> <li>Ceanothus, Lakeside - (<i>Ceanothus cyaneus</i>) Wherever found SC</li> <li>Curlew, long-billed - (<i>Numenius americanus</i>) Wherever found RT</li> <li>Cypress, Tecate - (<i>Cupressus forbesii</i>) Wherever found SC</li> <li>Deer, southern mule - (<i>Odocoileus hemionus fuliginata</i>)</li> </ul>	07/18/1997	206124 acres (California) The City of San Diego Subarea Plan comprises 206,124 acres out of the 582,243-acre regional MSCP planning area (including military lands).	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>Plover, western snowy (<i>Charadrius nivosus nivosus</i>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> <li>Rail, light-footed clapper (<i>Rallus longirostris levipes</i>) Wherever found E</li> <li>Tarplant, Otay (<i>Deinandra (=Hemizonia) conjugens</i>) Wherever found T</li> <li>Tern, California least (<i>Sterna antillarum browni</i>) Wherever found E</li> <li>Thornmint, San Diego (<i>Acanthomintha ilicifolia</i>) Wherever found T</li> <li>Toad, arroyo (=arroyo southwestern) (<i>Anaxyrus californicus</i>) Wherever found E</li> <li>Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Dudleya, short-leaved - (<i>Dudleya blochmaniae brevifolia</i>) Wherever found RT</li> <li>Dudleya, variegated - (<i>Dudleya variegata</i>) Wherever found SC</li> <li>Eagle, Bald - (<i>Haliaeetus leucocephalus</i>)</li> <li>Eagle, Golden - (<i>Aquila chrysaetos</i>)</li> <li>Egret, reddish - (<i>Egretta rufescens</i>) Wherever found SC</li> <li>Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>Frog, Red-legged - (<i>Rana aurora</i>)</li> <li>Goldenbush, Palmer's - (<i>Ericameria palmeri ssp. palmeri</i>) Wherever found SU</li> <li>Goldenstar, San Diego - (<i>Muilla clevelandii</i>) Wherever found SC</li> <li>Goose, Aleutian Canada - (<i>Branta canadensis leucopareia</i>) Wherever found DM</li> <li>Hairstreak, Thorne's - (<i>Mitoura thornei</i>) Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• harrier, Northern - (<i>circus cyaneus</i>) Wherever found SC</li> <li>• <u>hawk, Cooper's - (<i>Accipiter cooperii</i>)</u> Wherever found SC</li> <li>• <u>Hawk, ferruginous - (<i>Buteo regalis</i>)</u> Wherever found RT</li> <li>• <u>Hawk, Swainson's - (<i>Buteo swainsoni</i>)</u> Wherever found RT</li> <li>• Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li>• <u>Jewelflower, slender-pod - (<i>Caulanthus heterophyllus</i>)</u> Wherever found RT</li> <li>• <u>Liveforever, sticky-leaved - (<i>Dudleya viscida</i>)</u> Wherever found RT</li> <li>• Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>• Manzanita, Otay - (<i>Arctostaphylos otayensis</i>) Wherever found SC</li> <li>• Mariposa lily, Dunn's - (<i>Calochortus dunnii</i>) Wherever found SC</li> <li>• <u>Mountain lion, California - (<i>Felis</i></u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><u>concolor californica</u> Wherever found RT</p> <ul style="list-style-type: none"> <li>Nightshade, narrow-leaved - (<i>Solanum tenuilobatum</i>) Wherever found SC</li> <li>Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>Pine, Torrey, Del Mar - (<i>Pinus torreyana torreyana</i>) Wherever found SC</li> <li>Pitcher-sage, Gander's - (<i>Lepechinia ganderi</i>) Wherever found SC</li> <li>Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) Wherever found SC</li> <li><u>Plover, mountain - (<i>Charadrius montanus</i>)</u> Wherever found RT</li> <li><u>Reedgrass, dense - (<i>Calamagrostis koelerioides</i>)</u> Wherever found RT</li> <li>Rose, small-leaved - (<i>Rosa minutifolia</i>) Wherever found SC</li> <li><u>Sand aster, Del Mar - (<i>Corethrogyne filaginifolia linifolia</i>)</u> Wherever found RT</li> <li><u>Savory, San Miguel - (<i>Clinopodium</i></u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><u>chandleri</u>) Wherever found RT</p> <ul style="list-style-type: none"> <li>• Skipper, wandering - (<i>Panoquina errans</i>) Wherever found SC</li> <li>• Sparrow, Belding's savannah - (<i>Passerculus sandwichensis beldingi</i>) Wherever found SC</li> <li>• Sparrow, large-billed savannah - (<i>Passerculus sandwichensis rostratus</i>) Wherever found SC</li> <li>• Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>) Wherever found SC</li> <li>• Tern, elegant - (<i>Sterna elegans</i>) Wherever found SC</li> <li>• Tetracoccus, Parry's - (<i>Tetracoccus dioicus</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Wallflower, coast - (<i>Erysimum ammodendrum</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"><li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li><li>• <u>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>)</u> <u>Wherever found RT</u></li></ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">MSCP, County of San Diego Subarea Plan</a>	840414 , TE037338-0 , TE083688-0	San Diego Co., CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Barberry, Nevin's (<i>Berberis nevinii</i>) Wherever found E</li> <li>Bird's-beak, salt marsh (<i>Cordylanthus maritimus ssp. maritimus</i>) Wherever found E</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum var. parishii</i>) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Frog, California red-legged (<i>Rana</i></li> </ul>	<ul style="list-style-type: none"> <li>Agave, Shaw's - (<i>Agave shawii</i>) Wherever found SC</li> <li>Aphanisma - (<i>Aphanisma blitoides</i>) Wherever found SC</li> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Barrel cactus, coast - (<i>Ferocactus viridescens</i>) Wherever found SC</li> <li>Beargrass, Dehesa - (<i>Nolina interrata</i>) Wherever found RT</li> <li>Bird's-beak, Orcutt's - (<i>Cordylanthus orcuttianus</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>Butterweed, Gander - (<i>Packera ganderi</i>) Wherever found SC</li> <li>Ceanothus, Lakeside - (<i>Ceanothus cyaneus</i>) Wherever found SC</li> <li>Ceanothus, wart-stemmed - (<i>Ceanothus verrucosus</i>) Wherever found SC</li> </ul>	03/17/1998	252132 acres (California) County of San Diego Subarea Plan comprises 252,132 acres of the 582,243-acre regional MSCP planning area (including military lands). Since permit issuance to the County, some unincorporated County lands have been annexed into the cities of Chula Vista and La Mesa.	Data not available	50 years, 0 months N/A

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p><u>draytonii</u>) Wherever found T</p> <ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<u>Poliioptila californica californica</u>) Wherever found T</li> <li>Manzanita, Del Mar (<u>Arctostaphylos glandulosa ssp. crassifolia</u>) Wherever found E</li> <li>Mesa-mint, Otay (<u>Pogogyne nudiuscula</u>) Wherever found E</li> <li>Mesa-mint, San Diego (<u>Pogogyne abramsii</u>) Wherever found E</li> <li>Milk-vetch, coastal dunes (<u>Astragalus tener var. titi</u>) Wherever found E</li> <li>Monardella, willowy (<u>Monardella viminea</u>) Wherever found E</li> <li>Navarretia, spreading (<u>Navarretia fossalis</u>) Wherever found T</li> <li>Orcutt grass, California (<u>Orcuttia californica</u>) Wherever found E</li> <li>Plover, western snowy (<u>Charadrius nivosus nivosus</u>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> </ul>	<ul style="list-style-type: none"> <li>Cholla, snake - (<u>Opuntia parryi serpentina</u>) Wherever found SC</li> <li>Curlew, long-billed - (<u>Numenius americanus</u>) Wherever found RT</li> <li>Cypress, Tecate - (<u>Cupressus forbesii</u>) Wherever found SC</li> <li>Deer, southern mule - (<u>Odocoileus hemionus fuliginata</u>)</li> <li>Dudleya, short-leaved - (<u>Dudleya blochmaniae brevifolia</u>) Wherever found RT</li> <li>Dudleya, variegated - (<u>Dudleya variegata</u>) Wherever found SC</li> <li>Eagle, bald - (<u>Haliaeetus leucocephalus</u>) lower 48 States DM</li> <li>Egret, reddish - (<u>Egretta rufescens</u>) Wherever found SC</li> <li>Falcon, American peregrine - (<u>Falco peregrinus anatum</u>) Wherever found DM</li> <li>Goldenbush, Palmer's - (<u>Ericameria palmeri ssp. palmeri</u>) Wherever found SU</li> </ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>Rail, light-footed clapper (<u><i>Rallus longirostris levipes</i></u>) Wherever found E</li> <li>Tarplant, Otay (<u><i>Deinandra (=Hemizonia) conjugens</i></u>) Wherever found T</li> <li>Tern, California least (<u><i>Sterna antillarum browni</i></u>) Wherever found E</li> <li>Thornmint, San Diego (<u><i>Acanthomintha ilicifolia</i></u>) Wherever found T</li> <li>Toad, arroyo (=arroyo southwestern) (<u><i>Anaxyrus californicus</i></u>) Wherever found E</li> <li>Vireo, least Bell's (<u><i>Vireo bellii pusillus</i></u>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Goldenstar, San Diego - (<u><i>Muilla clevelandii</i></u>) Wherever found SC</li> <li>Hairstreak, Thorne's - (<u><i>Mitoura thornei</i></u>) Wherever found RT</li> <li>Hawk, ferruginous - (<u><i>Buteo regalis</i></u>) Wherever found RT</li> <li>Hawk, Swainson's - (<u><i>Buteo swainsoni</i></u>) Wherever found RT</li> <li>Hosackia, prostrate - (<u><i>Lotus nuttallianus</i></u>) Wherever found SC</li> <li>Ibis, white-faced - (<u><i>Plegadis chihi</i></u>) Wherever found SC</li> <li>Jewelflower, slender-pod - (<u><i>Caulanthus heterophyllus</i></u>) Wherever found RT</li> <li>Liveforever, sticky-leaved - (<u><i>Dudleya viscida</i></u>) Wherever found RT</li> <li>Lizard, San Diego horned - (<u><i>Phrynosoma coronatum blainvillii</i></u>) Wherever found SC</li> <li>Manzanita, Otay - (<u><i>Arctostaphylos otayensis</i></u>) Wherever found SC</li> <li>Mariposa lily, Dunn's -</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p>(<i>Calochortus dunnii</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• <u>Mountain lion</u>, <u>California - (<i>Felis concolor californica</i>)</u> Wherever found RT</li> <li>• Nightshade, narrow-leaved - (<i>Solanum tenuilobatum</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Pelican, brown - (<i>Pelecanus occidentalis</i>) except U.S. Atlantic coast, FL, AL DM</li> <li>• Pine, Torrey, Del Mar - (<i>Pinus torreyana torreyana</i>) Wherever found SC</li> <li>• Pitcher-sage, Gander's - (<i>Lepechinia ganderi</i>) Wherever found SC</li> <li>• Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) Wherever found SC</li> <li>• <u>Plover, mountain - (<i>Charadrius montanus</i>)</u> Wherever found RT</li> <li>• <u>Reedgrass, dense - (<i>Calamagrostis koelerioides</i>)</u> Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Rock-mint, felt leaf - (<i>Monardella hypoleuca lanata</i>)</u> <u>Wherever found RT</u></li> <li>• Rose, small-leaved - (<i>Rosa minutifolia</i>) Wherever found SC</li> <li>• <u>Sand aster, Del Mar - (<i>Corethrogyne filaginifolia linifolia</i>)</u> <u>Wherever found RT</u></li> <li>• Savory, San Miguel - (<i>Satureja chandleri</i>)</li> <li>• Skipper, wandering - (<i>Panoquina errans</i>) Wherever found SC</li> <li>• Sparrow, Belding's savannah - (<i>Passerculus sandwichensis beldingi</i>) Wherever found SC</li> <li>• Sparrow, large-billed savannah - (<i>Passerculus sandwichensis rostratus</i>) Wherever found SC</li> <li>• <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>)</u> <u>Wherever found SC</u></li> <li>• Tern, elegant - (<i>Sterna elegans</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Tetracoccus, Parry's - (<i>Tetracoccus dioicus</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Wallflower, coast - (<i>Erysimum ammophilum</i>) Wherever found SC</li> <li>• Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> <li>• Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>) Wherever found RT</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Natomas Basin, Metro Air Park</a>	TE036473-0	Sacramento County	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> <li>• Shrike, San Clemente loggerhead (<i>Lanius ludovicianus mearnsi</i>) Wherever found E</li> <li>• Snake, giant garter (<i>Thamnophis gigas</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>• Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>• Crane, greater sandhill - (<i>Grus canadensis tubida</i>)</li> <li>• Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>• Goose, Aleutian Canada - (<i>Branta canadensis leucopareia</i>) Wherever found DM</li> <li>• Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> <li>• Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Tule-pea, Delta - (<i>Lathyrus jepsonii jepsonii</i>) Wherever found SC</li> <li>• Turtle, northwestern pond - (<i>Actinemys marmorata marmorata</i>) Wherever found SC</li> </ul>	02/21/2002	2015 acres (California) Encompassed by Natomas Basin Revised HCP & Litigation Resolution	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Natomas Basin Revised HCP and Litigation Resolution - City of Sacramento, Sutter County, and Natomas Basin Conservancy</a>	TE073663-0 , TE073665-0 , TE073667-0	Sacramento County and Sutter County	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> <li>• Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>• Grass, Colusa (<i>Neostapfia colusana</i>) Wherever found T</li> <li>• Orcutt grass, Sacramento (<i>Orcuttia viscida</i>) Wherever found E</li> <li>• Orcutt grass, slender (<i>Orcuttia tenuis</i>) Wherever found T</li> <li>• Shrike, San Clemente loggerhead (<i>Lanius ludovicianus mearnsi</i>) Wherever found E</li> <li>• Snake, giant garter (<i>Thamnophis gigas</i>) Wherever found T</li> <li>• Tadpole shrimp, vernal pool (<i>Lepidurus packardii</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>• Goose, Aleutian Canada - (<i>Branta canadensis leucopareia</i>) Wherever found DM</li> <li>• Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> <li>• Hedge-hyssop, Boggs Lake - (<i>Gratiola heterosepala</i>) Wherever found RT</li> <li>• Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li>• Legenere - (<i>Legenere limosa</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Sagittaria, valley - (<i>Sagittaria sanfordii</i>) Wherever found SC</li> <li>• Salamander, California tiger - (<i>Ambystoma californiense</i>) Wherever found RT</li> <li>• Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> </ul>	06/27/2003	53342 acres (California)	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Tule-pea, Delta - (<i>Lathyrus jepsonii jepsonii</i>) Wherever found SC</li> <li>• Turtle, northwestern pond - (<i>Actinemys marmorata marmorata</i>) Wherever found SC</li> </ul>				
<a href="#"><u>Newhall Farm Seasonal Crossings</u></a>	TE018244-0	Rancho Camulos, Los Angeles County	I	<ul style="list-style-type: none"> <li>• Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>• Stickleback, unarmored threespine (<i>Gasterosteus aculeatus williamsoni</i>) Wherever found E</li> <li>• Sucker, Santa Ana (<i>Catostomus santaanae</i>) 3 CA river basins T</li> </ul>	<ul style="list-style-type: none"> <li>• Chub, arroyo - (<i>Gila orcuttii</i>) Wherever found SC</li> <li>• Snake, two-striped garter - (<i>Thamnophis hammondi</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> </ul>	09/17/2004	14 acres (California)	Data not available	50 years, 0 months
<a href="#"><u>Newport Estates</u></a>	TE079353-0	Sun City, Riverside County.	I	<ul style="list-style-type: none"> <li>• Gnatcatcher, coastal California (<i>Poliophtila californica californica</i>) Wherever found T</li> <li>• Kangaroo rat, Stephens' (<i>Dipodomys stephensi (incl. D. cascus)</i>) Wherever found E</li> </ul>		12/23/2003	278 acres (California) Encompassed by Western Riverside MSHCP.	Data not available	15 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>North Peak Development Project</u>	TE012768-0	Riverside Co., CA	I	<ul style="list-style-type: none"> <li>• Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> <li>• Kangaroo rat, Stephens' (<i>Dipodomys stephensi</i> (incl. <i>D. cactus</i>)) Wherever found E</li> <li>• Onion, Munz's (<i>Allium munzii</i>) Wherever found E</li> <li>• Shrike, San Clemente loggerhead (<i>Lanius ludovicianus mearnsi</i>) Wherever found E</li> <li>• Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Badger, American - (<i>Taxidea taxus</i>)</li> <li>• Bat, pale Townsend's big-eared - (<i>Plecotus townsendii pallescens</i>) Wherever found SC</li> <li>• Bat, pocketed free-tailed - (<i>Nyctinomops femorosacca</i>)</li> <li>• Bee, Ruth's cuckoo - (<i>Holocapaspites ruthae</i>)</li> <li>• Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>• Boa, coastal rosy - (<i>Charina trivirgata roseofusca</i>) Wherever found SC</li> <li>• Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>• Gecko, San Diego banded - (<i>Coleonyx variegatus abbotti</i>) Wherever found SC</li> <li>• Grapplinghook, Palmer's - (<i>Harpagonella palmeri palmeri</i>) Wherever found SC</li> <li>• Hawk, ferruginous - (<i>Buteo regalis</i>) Wherever found RT</li> </ul>	06/07/1999	997 acres (California) Encompassed by Western Riverside MSHCP.	Data not available	30 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Jackrabbit, San Diego black-tailed - (<i>Lepus californicus bennettii</i>) Wherever found SC</li> <li>• <u>Lark, California horned - (<i>Eremophila alpestris actia</i>) Wherever found RT</u></li> <li>• Liveforever, many-stemmed - (<i>Dudleya multicaulis</i>) Wherever found SC</li> <li>• Lizard, granite night - (<i>Xantusia henshawi henshawi</i>)</li> <li>• Lizard, long-nosed leopard - (<i>Gambelia wizenii</i>)</li> <li>• Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>• Lizard, silvery legless - (<i>Anniella pulchra pulchra</i>) Wherever found SC</li> <li>• Mariposa lily, foothill - (<i>Calochortus weedii intermedius</i>) Wherever found SC</li> <li>• Mariposa lily, Plummer's - (<i>Calochortus plummerae</i>) Wherever found SC</li> <li>• Mastiff-bat, greater western - (<i>Eumops</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><i>perotis californicus</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• <u>Mountain lion.</u> <u>California - (<i>Felis concolor californica</i>)</u> <u>Wherever found RT</u></li> <li>• Mouse, Los Angeles little pocket - (<i>Perognathus longimembris brevinasus</i>) Wherever found SC</li> <li>• Mouse, northwestern San Diego pocket - (<i>Chaetodipus fallax fallax</i>)</li> <li>• Mouse, southern grasshopper - (<i>Onychomys torridus ramona</i>) Wherever found SC</li> <li>• No common name - (<i>Chorizanthe polygonoides longispina</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Rattlesnake, northern red diamond - (<i>Crotalus ruber ruber</i>) Wherever found SC</li> <li>• Snake, coast patch-nosed - (<i>Salvadora</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<i>hexalepis virgultea</i> Wherever found SC • Snake, ringneck - <i>(Diadophus punctatus)</i> • Snake, two-striped garter - <i>(Thamnophis hammondi)</i> Wherever found SC • Spadefoot, western - <i>(Spea hammondi)</i> Wherever found UR • Sparrow, Bell's sage - <i>(Amphispiza belli belli)</i> Wherever found SC • Sparrow, Southern California rufous-crowned - <i>(Aimophila ruficeps canescens)</i> <u>Wherever found SC</u> • Spineflower, Parry's - <i>(Chorizanthe parryi parryi)</i> Wherever found SC • Turtle, southwestern pond - <i>(Actinemys marmorata pallida)</i> Wherever found SC • Whiptail, coastal western - <i>(Cnemidophorus tigris multiscutatus)</i> Wherever found SC • Whiptail, orange-throated - <i>(Cnemidophorus</i>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<i>hyperythrus</i> Wherever found SC • Woodrat, San Diego desert - ( <i>Neotoma lepida intermedia</i> ) Wherever found SC • <u>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>)</u> Wherever found RT				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Nuevo-Torch</u>	TE019489-0	Bakersfield, CA Kern County	I	<ul style="list-style-type: none"> <li>• Cactus, Bakersfield (<i>Opuntia treleasei</i>) Wherever found E</li> <li>• Condor, California (<i>Gymnogyps californianus</i>) U.S.A. only, except where listed as an experimental population E</li> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Jewelflower, California (<i>Caulanthus californicus</i>) Wherever found E</li> <li>• Kangaroo rat, giant (<i>Dipodomys ingens</i>) Wherever found E</li> <li>• Kangaroo rat, Tipton (<i>Dipodomys nitratoide nitratoide</i>) Wherever found E</li> <li>• Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> <li>• Mallow, Kern (<i>Eremalche kernensis</i>) Wherever found E</li> <li>• Woolly-threads, San Joaquin (<i>Monolopia (=Lembertia) congdonii</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Kangaroo rat, short-nosed - (<i>Dipodomys nitratoide brevinasus</i>) Wherever found SC</li> <li>• Larkspur, recurved - (<i>Delphinium recurvatum</i>) Wherever found SC</li> <li>• Lizard, California horned - (<i>Phrynosoma coronatum frontale</i>) Wherever found SC</li> <li>• Mouse, San Joaquin pocket - (<i>Perognathus inornatus</i>) Wherever found SC</li> <li>• Mouse, Tulare grasshopper - (<i>Onychomys torridus tularensis</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Plover, mountain - (<i>Charadrius montanus</i>) Wherever found RT</li> <li>• Squirrel, Nelson's antelope ground - (<i>Ammospermophilus nelsoni</i>) Wherever found SC</li> </ul>	11/18/1999	21800 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Thrasher, San Joaquin LeConte's - (<i>Toxostoma lecontei macmillanorum</i>) Wherever found SC</li> <li>• Whipsnake, San Joaquin - (<i>Masticophis flagellum ruddocki</i>) Wherever found SC</li> <li>• Woolly-star, Hoover's - (<i>Eriastrum hooveri</i>) DM</li> </ul>				
<a href="#"><u>Nye County Landfill</u></a>	776604	Town of Pahrump in Nye County, Nevada	I	<ul style="list-style-type: none"> <li>• Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		02/10/1995	80 acres (Nevada)	Data not available	30 years, 0 months
<a href="#"><u>Oakmont Industrial Group (Ontario, San Bernardino Cnty, CA)</u></a>	TE150381-0	Southwest intersection of Greystone Drive and Stanford Ave., City of Ontario, San Bernardino County, California	I	<ul style="list-style-type: none"> <li>• Fly, Delhi Sands flower-loving (<i>Rhaphiomidas terminatus abdominalis</i>) Wherever found E</li> </ul>		03/22/2007	19 acres (California)	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Ocean Trails (Palos Verdes Land Holdings Co./Zuckerman Building Co.)</a>	799348	Rancho Palos Verdes, CA	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>Aphanisma - (<i>Aphanisma blitoides</i>) Wherever found SC</li> <li>Lily, Catalina mariposa - (<i>Calochortus catalina</i>)</li> <li>Liveforever, green - (<i>Dudleya virens</i>) Wherever found SC</li> <li>Saltbush, south coast - (<i>Atriplex pacifica</i>) Wherever found SC</li> <li>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>) Wherever found RT</li> </ul>	02/04/1997	405.4 acres (California)	Data not available	10 years, 0 months
<a href="#">Offices at Parkshore, Low-Effect HCP (Folsom, CA)</a>	TE136043-0	On lands located south of Folsom Lake, west of the Intersection of Folsom Blvd and Parkshore Drive, on Parcels 071-0530-17 and 071-0530-1 within the City of Folsom, Sacramento County, CA	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		03/08/2007	6.48 acres (California)	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Orange County Central/Coastal NCCP/HCP</a>	TE005092-0 , 810575 , 810579 , TE036082-0 , TE092937-0 , 810581 (transferred) , 810567 , 810580 , TE005791-0 , 810572 , TE810581-1 , TE019204-0 , 810191 , 810569 , 810582 , TE068429-0 , TE006661-0 , 810574 , 810583 , TE005089-0	Orange Co., CA	I	<ul style="list-style-type: none"> <li>Butterfly, Quino checkerspot (<i>Euphydryas editha quino</i> (=E. e. <i>wrightii</i>)) Wherever found E</li> <li>Dudleya, Santa Monica Mountains (<i>Dudleya cymosa ssp. ovatifolia</i>) Wherever found T</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> <li>Liveforever, Laguna Beach (<i>Dudleya stolonifera</i>) Wherever found T</li> <li>Mouse, Pacific pocket (<i>Perognathus longimembris pacificus</i>) Wherever found E</li> <li>Toad, arroyo (=arroyo southwestern)</li> </ul>	<ul style="list-style-type: none"> <li>Boa, coastal rosy - (<i>Charina trivirgata roseofusca</i>) Wherever found SC</li> <li>Cypress, Tecate - (<i>Cupressus forbesii</i>) Wherever found SC</li> <li>Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>Lily, Catalina mariposa - (<i>Calochortus catalina</i>)</li> <li>Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>Mariposa lily, foothill - (<i>Calochortus weedii intermedius</i>) Wherever found SC</li> <li>Minutiflorus, small-flowered mountain mohogany - (<i>Cerocarpus minutiflorus</i>)</li> <li>Oak, Nuttall's scrub - (<i>Quercus dumosa</i>) Wherever found SC</li> <li>Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) Wherever found SC</li> <li>Rattlesnake, northern red diamond - (<i>Crotalus</i></li> </ul>	07/10/1996	208000 acres (California)	Data not available	75 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p>(<u><i>Anaxyrus californicus</i></u>) Wherever found E</p> <ul style="list-style-type: none"> <li>Vireo, least Bell's (<u><i>Vireo bellii pusillus</i></u>) Wherever found E</li> </ul>	<p><i>ruber ruber</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>Salamander, arboreal - (<i>Aneides lugubris</i>)</li> <li>Skink, Coronado - (<u><i>Eumeces skiltonianus interparietalis</i></u>) Wherever found SC</li> <li>Snake, San Bernardino ringneck - (<i>Diadophis punctatus modestus</i>) Wherever found SC</li> <li>Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> <li>Sparrow, Southern California rufous-crowned - (<u><i>Aimophila ruficeps canescens</i></u>) Wherever found SC</li> <li>Whiptail, coastal western - (<i>Cnemidophorus tigris multiscutatus</i>) Wherever found SC</li> <li>Whiptail, orange-throated - (<i>Cnemidophorus hyperythrus</i>) Wherever found SC</li> <li>Woodrat, San Diego desert - (<i>Neotoma lepida intermedia</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"><li>• <u>Wren, San Diego cactus - (Campylorhynchus brunneicapillus couesii) Wherever found RT</u></li></ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Orange County Southern Subregion NCCP/HCP</a>	TE144105-0 , TE144113-0 , TE144140-0	Orange County, CA	I	<ul style="list-style-type: none"> <li>• Brodiaea, thread-leaved (<a href="#">Brodiaea filifolia</a>) Wherever found T</li> <li>• Fairy shrimp, Riverside (<a href="#">Streptocephalus woottoni</a>) Wherever found E</li> <li>• Fairy shrimp, San Diego (<a href="#">Branchinecta sandiegonensis</a>) Wherever found E</li> <li>• Flycatcher, southwestern willow (<a href="#">Empidonax traillii extimus</a>) Wherever found E</li> <li>• Gnatcatcher, coastal California (<a href="#">Polioptila californica californica</a>) Wherever found T</li> <li>• Toad, arroyo (=arroyo southwestern) (<a href="#">Anaxyrus californicus</a>) Wherever found E</li> <li>• Vireo, least Bell's (<a href="#">Vireo bellii pusillus</a>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Bat, Western Red - (<a href="#">Lasiurus blosseveilli</a>)</li> <li>• beargrass, Peninsular - (<a href="#">Nolina cismontana</a>) Wherever found SC</li> <li>• Blackbird, tricolored - (<a href="#">Agelaius tricolor</a>) Wherever found UR</li> <li>• Chat, Yellow-breasted - (<a href="#">Icteria virens</a>)</li> <li>• Chub, arroyo - (<a href="#">Gila orcuttii</a>) Wherever found SC</li> <li>• Coachwhip, Red - (<a href="#">Masticophis flagellum piceus</a>)</li> <li>• <del>hawk, Cooper's</del> - (<a href="#">Accipiter cooperii</a>) Wherever found SC</li> <li>• Kite, White-tailed - (<a href="#">Elanus leucurus</a>)</li> <li>• Liveforever, many-stemmed - (<a href="#">Dudleya multicaulis</a>) Wherever found SC</li> <li>• Lizard, San Diego horned - (<a href="#">Phrynosoma coronatum blainvillii</a>) Wherever found SC</li> <li>• <u>NO COMMON NAME</u> - (<a href="#">Lasiurus blosseveilli</a>)</li> <li>• <u>Oak, Coast Live</u> - (<a href="#">Quercus agrifolia</a>)</li> </ul>	01/10/2007	132000 acres (California)	Data not available	75 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>oak, Scrub - (<i>Quercus berberidifolia</i>) Wherever found SC</li> <li>Owl, Burrowing - (<i>Athene cunicularia</i>)</li> <li>Owl, Long-eared - (<i>Asio otus</i>)</li> <li>Rattlesnake, northern red diamond - (<i>Crotalus ruber ruber</i>) Wherever found SC</li> <li><u>saltbush, Coulter's - (<i>Atriplex coulteri</i>)</u> <u>Wherever found SC</u></li> <li><u>Snake, California glossy - (<i>Arizona elegans occidentalis</i>)</u></li> <li>Snake, coast patch-nosed - (<i>Salvadora hexalepis virgultea</i>) Wherever found SC</li> <li>Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> <li>Sparrow, Grasshopper - (<i>Ammodramus savannarum</i>)</li> <li>Stickleback, Threespine - (<i>Gasterosteus aculeatus</i>)</li> <li>Tarplant, southern - (<i>Hemizonia parryi australis</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Warbler, Yellow - (<i>Dendroica petechia</i>)</li> <li>• Whiptail, Belding's orange-throated - (<i>Aspidoscelis hyperythra beldingi</i>)</li> <li>• <u>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>)</u> Wherever found RT</li> </ul>				
<u>Ox Yoke Road</u>	TE021326-0	Shasta County, CA	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		02/11/2000	19 acres (California)	Data not available	10 years, 0 months
<u>Pahrump Valley General Store Low Effect HCP</u>	TE223744	Pahrump, Nevada, east side of State Route 160 between Irene Street on the south and Adkisson Street on the north.	I	<ul style="list-style-type: none"> <li>• Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		12/08/2009	60 acres (Nevada)	Data not available	7 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Parkside Homes</u>	811259	South San Francisco, CA San Mateo County	I	<ul style="list-style-type: none"> <li>• Butterfly, callippe silverspot (<i>Speyeria callippe callippe</i>) Wherever found E</li> <li>• Butterfly, mission blue (<i>Icaricia icarioides missionensis</i>) Wherever found E</li> <li>• Butterfly, San Bruno elfin (<i>Callophrys mossii bayensis</i>) Wherever found E</li> </ul>		07/08/1996	25.4 acres (California)	Data not available	10 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">PG&amp;E Bay Area Operations and Maintenance HCP</a>	TE56826C		I	<ul style="list-style-type: none"> <li>• Beetle, delta green ground (<i>Elaphrus viridis</i>) Wherever found T</li> <li>• Butterfly, bay checkerspot (<i>Euphydryas editha bayensis</i>) Wherever found T</li> <li>• Butterfly, callippe silverspot (<i>Speyeria callippe callippe</i>) Wherever found E</li> <li>• Butterfly, Lange's metalmark (<i>Apodemia mormo langei</i>) Wherever found E</li> <li>• Butterfly, mission blue (<i>Icaricia icarioides missionensis</i>) Wherever found E</li> <li>• Butterfly, San Bruno elfin (<i>Callophrys mossii bayensis</i>) Wherever found E</li> <li>• Ceanothus, coyote (<i>Ceanothus ferrisae</i>) Wherever found E</li> <li>• Dudleya, Santa Clara Valley (<i>Dudleya setchellii</i>) Wherever found E</li> <li>• Dwarf-flax, Marin (<i>Hesperolinon congestum</i>) Wherever found T</li> <li>• Evening-primrose, Antioch Dunes (<i>Oenothera deltoides</i>)</li> </ul>		10/02/2017	402440 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li><i>ssp. howellii</i>) Wherever found E</li> <li>Fairy shrimp, Conservancy (<i>Branchinecta conservatio</i>) Wherever found E</li> <li>Fairy shrimp, longhorn (<i>Branchinecta longiantenna</i>) Wherever found E</li> <li>Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Goldfields, Burke's (<i>Lasthenia burkei</i>) Wherever found E</li> <li>Goldfields, Contra Costa (<i>Lasthenia conjugens</i>) Wherever found E</li> <li>Jewelflower, Metcalf Canyon (<i>Streptanthus albidus ssp. albidus</i>) Wherever found E</li> <li>Manzanita, pallid (<i>Arctostaphylos pallida</i>) Wherever found T</li> <li>Meadowfoam, Sebastopol</li> </ul>					



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p>(<u><i>Limnanthes</i></u> <u><i>vinculans</i></u>) Wherever found E</p> <ul style="list-style-type: none"> <li>• Mouse, salt marsh harvest</li> </ul> <p>(<u><i>Reithrodontomys</i></u> <u><i>raviventris</i></u>) wherever found E</p> <ul style="list-style-type: none"> <li>• Pentachaeta, white-rayed (<u><i>Pentachaeta</i></u> <u><i>bellidiflora</i></u>) Wherever found E</li> <li>• Rail, California clapper (<u><i>Rallus</i></u> <u><i>longirostris obsoletus</i></u>) Wherever found E</li> <li>• Salamander, California tiger (<u><i>Ambystoma</i></u> <u><i>californiense</i></u>) U.S.A. (CA - Sonoma County) E</li> <li>• Salamander, California tiger (<u><i>Ambystoma</i></u> <u><i>californiense</i></u>) U.S.A. (Central CA DPS) T</li> <li>• Shrimp, California freshwater (<u><i>Syncaris</i></u> <u><i>pacifica</i></u>) Wherever found E</li> <li>• Snake, San Francisco garter (<u><i>Thamnophis</i></u> <u><i>sirtalis tetrataenia</i></u>) Wherever found E</li> <li>• Sunshine, Sonoma (<u><i>Blennosperma</i></u> <u><i>bakeri</i></u>) Wherever found E</li> </ul>					

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>• Tadpole shrimp, vernal pool (<u><i>Lepidurus packardii</i></u>) Wherever found E</li> <li>• Thistle, fountain (<u><i>Cirsium fontinale</i> var. <i>fontinale</i></u>) Wherever found E</li> <li>• Wallflower, Contra Costa (<u><i>Erysimum capitatum</i> var. <i>angustatum</i></u>) Wherever found E</li> <li>• Whipsnake (=striped racer), Alameda (<u><i>Masticophis lateralis euryxanthus</i></u>) Wherever found T</li> </ul>					

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">PG&amp;E San Joaquin Valley Operations &amp; Maintenance HCP</a>	TE168331-0	Portions of San Joaquin, Tuolumne, Mariposa, Madera, Fresno, Tulare, Kern, Stanislaus, Merced, and Kings Counties.	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> <li>• Bird's beak, palmate-bracted (<i>Cordylanthus palmatus</i>) Wherever found E</li> <li>• Cactus, Bakersfield (<i>Opuntia treleasei</i>) Wherever found E</li> <li>• Checker-mallow, Keck's (<i>Sidalcea keckii</i>) Wherever found E</li> <li>• Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>• Fiddleneck, large-flowered (<i>Amsinckia grandiflora</i>) Wherever found E</li> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>• Grass, Colusa (<i>Neostapfia colusana</i>) Wherever found T</li> <li>• Jewelflower, California (<i>Caulanthus</i></li> </ul>	<ul style="list-style-type: none"> <li>• Adobe-lily, greenhorn - (<i>Fritillaria striata</i>) Wherever found RT</li> <li>• Birds-beak, hispid - (<i>Cordylanthus mollis hispidus</i>) Wherever found SC</li> <li>• Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>• Bush Mallow, Hall's - (<i>Malacothamnus hallii</i>)</li> <li>• Clarkia, Merced - (<i>Clarkia lingulata</i>) Wherever found RT</li> <li>• Coyote-thistle, Delta - (<i>Eryngium racemosum</i>) Wherever found SC</li> <li>• Eagle, bald - (<i>Haliaeetus leucocephalus</i>) lower 48 States DM</li> <li>• eagle, Golden - (<i>Aquila chrysaetos</i>) Wherever found SC</li> <li>• Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> <li>• Hedge-hyssop, Boggs Lake - (<i>Gratiola heterosepala</i>) Wherever found RT</li> <li>• Kite, White-tailed - (<i>Elanus leucurus</i>) Wherever found SC</li> </ul>	12/14/2007	276350 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p><u>californicus</u>) Wherever found E</p> <ul style="list-style-type: none"> <li>Kangaroo rat, giant (<u>Dipodomys ingens</u>) Wherever found E</li> <li>Kangaroo rat, Tipton (<u>Dipodomys nitratooides nitratooides</u>) Wherever found E</li> <li>Lizard, blunt-nosed leopard (<u>Gambelia silus</u>) Wherever found E</li> <li>Mallow, Kern (<u>Eremalche kernensis</u>) Wherever found E</li> <li>Orcutt grass, hairy (<u>Orcuttia pilosa</u>) Wherever found E</li> <li>Orcutt grass, San Joaquin (<u>Orcuttia inaequalis</u>) Wherever found T</li> <li>Rabbit, riparian brush (<u>Sylvilagus bachmani riparius</u>) Wherever found E</li> <li>Salamander, California tiger (<u>Ambystoma californiense</u>) U.S.A. (Central CA DPS) T</li> <li>Shrew, Buena Vista Lake ornate (<u>Sorex ornatus relictus</u>) Wherever found E</li> <li>Snake, giant garter (<u>Thamnophis gigas</u>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li><u>Layia, Comanche - (Layia leucopappa) Wherever found SC</u></li> <li>Layia, pale-yellow - (<u>Layia heterotricha</u>) Wherever found SC</li> <li>Legenere - (<u>Legenere limosa</u>) Wherever found SC</li> <li>Lilaeopsis, Mason's - (<u>Lilaeopsis masonii</u>) Wherever found SC</li> <li>madia, Showy - (<u>madia radiata</u>) Wherever found SC</li> <li>NO COMMON NAME - (<u>Pseudobahia bahifolia</u>)</li> <li>NO COMMON NAME - (<u>Neotoma fucipes riparia</u>)</li> <li>Owl, western burrowing - (<u>Athene cunicularia ssp. hypugaea</u>) Wherever found SC</li> <li>Salamander, limestone - (<u>Hydromantes brunus</u>) Wherever found UR</li> <li>Saltbush, Bakersfield - (<u>Atriplex tularensis</u>) Wherever found SC</li> <li>Shrimp, Midvalley Fairy - (<u>Branchinecta</u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>Sunburst, San Joaquin adobe (<i>Pseudobahia peirsonii</i>) Wherever found T</li> <li>Tadpole shrimp, vernal pool (<i>Lepidurus packardii</i>) Wherever found E</li> <li>Tuctoria, Greene's (<i>Tuctoria greenei</i>) Wherever found E</li> <li>Woolly-threads, San Joaquin (<i>Monolopia (=Lembertia) congdonii</i>) Wherever found E</li> </ul>	<u>mesovallensis</u> Wherever found RT <ul style="list-style-type: none"> <li>Squirrel, Nelson's antelope ground - (<i>Ammospermophilus nelsoni</i>) Wherever found SC</li> <li>Thistle, slough - (<i>Cirsium crassicaule</i>) Wherever found SC</li> </ul>				
<u>Pioneer Meadows HCP</u>	TE109731-0 , TE109737-0 , TE109738-0 , TE109736-0 , TE109739-0	Spanish Springs Valley, Washoe County, Sparks, Nevada	I	<ul style="list-style-type: none"> <li>Skipper, Carson wandering (<i>Pseudocopaeodes eunus obscurus</i>) Wherever found E</li> </ul>		08/24/2005	39 acres (Nevada) The entire project area is 610 acres, however only 39 acres was considered occupied by the skipper.	Data not available	3 years, 6 months
<u>Post-Ranch Inn</u>	TE119210-0	City of Big Sur, Monterey County	I	<ul style="list-style-type: none"> <li>Butterfly, Smith's blue (<i>Euphilotes enoptes smithi</i>) Wherever found E</li> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> </ul>		12/20/2006	91.98 acres (California)	Data not available	20 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Potrero Valley/Laborde Canyon Lockheed Martin Low-Effect HCP (Riverside Cnty. CA)</u></a>	TE-110582-0	Potrero Valley and Laborde Canyon in Riverside County	I	<ul style="list-style-type: none"> <li>Kangaroo rat, Stephens' (<i>Dipodomys stephensi</i> (incl. <i>D. cactus</i>)) Wherever found E</li> </ul>		10/14/2005	11785 acres (California) Of the 11,785 planning area, only 2.7 acres would be adversely affected by proposed covered activities, of which roughly 2.4 acres would be temporary impacts and 0.3 acres permanent.	Data not available	5 years, 0 months
<a href="#"><u>Prairie City Crossing Project Site, Regency Realty</u></a>	TE026908-0	Sacramento County, California	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		06/20/2000	11 acres (California)	Data not available	2 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Rancho Bella Vista (Pacific Bay Properties)</u></a>	TE024042-0	Unincorporated western Riverside Co., CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Butterfly, Quino checkerspot (<i>Euphydryas editha quino</i> (=E. e. <i>wrighti</i>)) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> <li>Onion, Munz's (<i>Allium munzii</i>) Wherever found E</li> <li>Orcutt grass, California (<i>Orcuttia californica</i>) Wherever found E</li> <li>Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Owl, western burrowing - (<i>Athene cunicularia</i> ssp. <i>hypugaea</i>) Wherever found SC</li> <li>Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> <li>Sparrow, Bell's sage - (<i>Amphispiza belli belli</i>) Wherever found SC</li> <li>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps canescens</i>) Wherever found SC</li> <li>Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> </ul>	05/08/2000	938 acres (California) Encompassed by Western Riverside MSHCP.	Data not available	30 years, 0 months
<a href="#"><u>Regency Center, City of Highland, San Bernadino County</u></a>	TE183658-0	South of and adjacent to Fifth Street, west of Boulder Avenue, north of the Santa Ana River and east of State Route 30 in the City of Highland.	I	<ul style="list-style-type: none"> <li>Kangaroo rat, San Bernardino Merriam's (<i>Dipodomys merriami parvus</i>) Wherever found E</li> </ul>		09/26/2008	8.4 acres (California)	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Regli Estates</u>	803749	Humboldt Co., CA	I	<ul style="list-style-type: none"> <li>Murrelet, marbled (<i>Brachyramphus marmoratus</i>) U.S.A. (CA, OR, WA) T</li> <li>Owl, northern spotted (<i>Strix occidentalis caurina</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>Eagle, bald - (<i>Haliaeetus leucocephalus</i>) lower 48 States DM</li> <li>Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> </ul>	08/30/1995	500 acres (California)	Data not available	20 years, 0 months
<u>Reichel et al.</u>	TE036467-0 , TE036470-0 , TE036469-0 , TE046730-0 , TE046731-0 , TE036465-0	Cities of Colton and Rialto, San Bernardino County	I	<ul style="list-style-type: none"> <li>Fly, Delhi Sands flower-loving (<i>Rhaphiomidas terminatus abdominalis</i>) Wherever found E</li> </ul>		02/16/2001	43.8 acres (California) The Project would result in loss of 32.8 acres of land, of which 29.9 acres contains Delhi soils that provide suitable and degraded habitat for the Delhi Sands flower-loving fly. The HCP Total Area includes management of 11 acres of conservation area.	Data not available	30 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Riverside County, Stephens' Kangaroo Rat (Long-Term)</u>	805414	Riverside Co., CA	I	<ul style="list-style-type: none"> <li>Kangaroo rat, Stephens' (<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)) Wherever found E</li> </ul>		05/03/1996	540000 acres (California) SKR Long-Term HCP is within Western Riverside MSHCP area but is a separate HCP.	Data not available	30 years, 0 months
<u>Salvation Army</u>	TE210750-0	Camp Redwood Glen, a residential camp facility located at 3100 Bean Creek Road, just northwest of the City of Scotts Valley in an unincorporated portion of Santa Cruz County (APN: 094-011-20).	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i>Polyphylla barbata</i>) Wherever found E</li> <li>Spineflower, Ben Lomond (<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>) Wherever found E</li> </ul>		08/06/2009	4.5 acres (California)	Data not available	3 years, 0 months
<u>San Bruno Mountain</u>	2-9818	San Mateo Co., CA	I	<ul style="list-style-type: none"> <li>Butterfly, mission blue (<i>Icaricia icarioides missionensis</i>) Wherever found E</li> <li>Butterfly, San Bruno elfin (<i>Callophrys mossii bayensis</i>) Wherever found E</li> <li>Snake, San Francisco garter (<i>Thamnophis sirtalis tetrataenia</i>) Wherever found E</li> </ul>		03/04/1983	3500 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">San Diego County Water Authority Subregional NCCP/HCP</a>		San Diego County and southwestern Riverside County	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Butterfly, Quino checkerspot (<i>Euphydryas editha quino</i> (= <i>E. e. wrighti</i>)) Wherever found E</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum</i> var. <i>parishii</i>) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> </ul>		12/30/2011	922000 acres (California) Planning area encompasses plan area for the approved San Diego County MSCP and MHCP. It overlaps in part with the Western Riverside MSHCP.	Data not available	55 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i>Poliophtila californica californica</i>) Wherever found T</li> <li>Kangaroo rat, Stephens' (<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)) Wherever found E</li> <li>Mesa-mint, Otay (<i>Pogogyne nudiuscula</i>) Wherever found E</li> <li>Mesa-mint, San Diego (<i>Pogogyne abramsii</i>) Wherever found E</li> <li>Monardella, willowy (<i>Monardella viminea</i>) Wherever found E</li> <li>Navarretia, spreading (<i>Navarretia fossalis</i>) Wherever found T</li> <li>Onion, Munz's (<i>Allium munzii</i>) Wherever found E</li> <li>Orcutt grass, California (<i>Orcuttia californica</i>) Wherever found E</li> <li>Tarplant, Otay (<i>Deinandra</i> (=Hemizonia) <i>conjugens</i>) Wherever found T</li> <li>Thornmint, San Diego (<i>Acanthomintha ilicifolia</i>) Wherever found T</li> <li>Toad, arroyo (=arroyo southwestern)</li> </ul>					

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<u>(<i>Anaxyrus californicus</i>)</u> Wherever found E • Vireo, least Bell's <u>(<i>Vireo bellii pusillus</i>)</u> Wherever found E					
<u>San Diego Gas and Electric - Quino Checkerspot Butterfly Low-Effect HCP</u>	TE162969-0	San Diego, Riverside, and Orange Counties.	I	• Butterfly, Quino checkerspot <u>(<i>Euphydryas editha quino</i> (=E. e. wrighti))</u> Wherever found E		01/22/2008	208153 acres (California) Includes portions of San Diego, Riverside, and Orange Counties.	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">San Diego Gas &amp; Electric</a>	809637	San Diego Co., CA	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Baccharis, Encinitas (<i>Baccharis vanessae</i>) Wherever found T</li> <li>Barberry, Nevin's (<i>Berberis nevinii</i>) Wherever found E</li> <li>Bird's-beak, salt marsh (<i>Cordylanthus maritimus ssp. maritimus</i>) Wherever found E</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum var. parishii</i>) Wherever found E</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> <li>Fairy shrimp, San Diego (<i>Branchinecta sandiegonensis</i>) Wherever found E</li> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Frog, California red-legged (<i>Rana</i></li> </ul>	<ul style="list-style-type: none"> <li>Agave, Shaw's - (<i>Agave shawii</i>) Wherever found SC</li> <li>Aphanisma - (<i>Aphanisma blitoides</i>) Wherever found SC</li> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Barrel cactus, coast - (<i>Ferocactus viridescens</i>) Wherever found SC</li> <li>Beargrass, Dehesa - (<i>Nolina interrata</i>) Wherever found RT</li> <li>Bird's-beak, Orcutt's - (<i>Cordylanthus orcuttianus</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Boa, coastal rosy - (<i>Charina trivirgata roseofusca</i>) Wherever found SC</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>Butterweed, Gander - (<i>Packera ganderi</i>) Wherever found SC</li> <li>Ceanothus, Lakeside - (<i>Ceanothus cyaneus</i>) Wherever found SC</li> </ul>	12/18/1995	124 acres (California) and up to a maximum of 400 acres, with 50 miles of electric transmission and/or new gas transmission lines.	Data not available	55 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p><u>draytonii</u>) Wherever found T</p> <ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<u>Poliophtila californica californica</u>) Wherever found T</li> <li>Kangaroo rat, Stephens' (<u>Dipodomys stephensi</u> (incl. <u>D. cactus</u>)) Wherever found E</li> <li>Manzanita, Del Mar (<u>Arctostaphylos glandulosa ssp. crassifolia</u>) Wherever found E</li> <li>Mesa-mint, Otay (<u>Pogogyne nudiuscula</u>) Wherever found E</li> <li>Mesa-mint, San Diego (<u>Pogogyne abramsii</u>) Wherever found E</li> <li>Milk-vetch, coastal dunes (<u>Astragalus tener var. titi</u>) Wherever found E</li> <li>Monardella, willowy (<u>Monardella viminea</u>) Wherever found E</li> <li>Mouse, Pacific pocket (<u>Perognathus longimembris pacificus</u>) Wherever found E</li> <li>Navarretia, spreading (<u>Navarretia fossalis</u>) Wherever found T</li> <li>Orcutt grass, California (<u>Orcuttia</u></li> </ul>	<ul style="list-style-type: none"> <li>Ceanothus, wart-stemmed - (<u>Ceanothus verrucosus</u>) Wherever found SC</li> <li>Cholla, snake - (<u>Opuntia parryi serpentina</u>) Wherever found SC</li> <li>Curlew, long-billed - (<u>Numenius americanus</u>) Wherever found RT</li> <li>Cypress, Tecate - (<u>Cupressus forbesii</u>) Wherever found SC</li> <li>Deer, southern mule - (<u>Odocoileus hemionus fuliginata</u>)</li> <li>Dudleya, short-leaved - (<u>Dudleya blochmaniae brevifolia</u>) Wherever found RT</li> <li>Dudleya, variegated - (<u>Dudleya variegata</u>) Wherever found SC</li> <li>Eagle, bald - (<u>Haliaeetus leucocephalus</u>) lower 48 States DM</li> <li>Egret, reddish - (<u>Egretta rufescens</u>) Wherever found SC</li> <li>Falcon, American peregrine - (<u>Falco peregrinus anatum</u>) Wherever found DM</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<p><u>californica</u>) Wherever found E</p> <ul style="list-style-type: none"> <li>Plover, western snowy (<u>Charadrius nivosus nivosus</u>) Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) T</li> <li>Rail, light-footed clapper (<u>Rallus longirostris levipes</u>) Wherever found E</li> <li>Spineflower, Orcutt's (<u>Chorizanthe orcuttiana</u>) Wherever found E</li> <li>Tarplant, Otay (<u>Deinandra (=Hemizonia) conjugens</u>) Wherever found T</li> <li>Tern, California least (<u>Sterna antillarum browni</u>) Wherever found E</li> <li>Thornmint, San Diego (<u>Acanthomintha ilicifolia</u>) Wherever found T</li> <li>Toad, arroyo (=arroyo southwestern) (<u>Anaxyrus californicus</u>) Wherever found E</li> <li>Vireo, least Bell's (<u>Vireo bellii pusillus</u>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Gecko, San Diego banded - (<u>Coleonyx variegatus abbotti</u>) Wherever found SC</li> <li>Goldenbush, Palmer's - (<u>Ericameria palmeri ssp. palmeri</u>) Wherever found SU</li> <li>Goldenstar, San Diego - (<u>Muilla clevelandii</u>) Wherever found SC</li> <li>Grapplinghook, Palmer's - (<u>Harpagonella palmeri palmeri</u>) Wherever found SC</li> <li>Hairstreak, Thorne's - (<u>Mitoura thornei</u>) Wherever found RT</li> <li>Hawk, ferruginous - (<u>Buteo regalis</u>) Wherever found RT</li> <li>Hawk, Swainson's - (<u>Buteo swainsoni</u>) Wherever found RT</li> <li>Hosackia, prostrate - (<u>Lotus nuttallianus</u>) Wherever found SC</li> <li>Ibis, white-faced - (<u>Plegadis chihi</u>) Wherever found SC</li> <li>Jackrabbit, San Diego black-tailed - (<u>Lepus californicus bennettii</u>) Wherever found SC</li> <li>Jewelflower, Payson's -</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p>(<i>Caulanthus simulans</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• Liveforever, many-stemmed - (<i>Dudleya multicaulis</i>) Wherever found SC</li> <li>• <u>Liveforever, sticky-leaved - (<i>Dudleya viscida</i>) Wherever found RT</u></li> <li>• Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>• Manzanita, Otay - (<i>Arctostaphylos otayensis</i>) Wherever found SC</li> <li>• Mariposa lily, Dunn's - (<i>Calochortus dunnii</i>) Wherever found SC</li> <li>• <u>Mountain lion, California - (<i>Felis concolor californica</i>) Wherever found RT</u></li> <li>• Mouse, Dulzura California pocket - (<i>Chaetodipus californicus femoralis</i>)</li> <li>• Mouse, Jacumba little pocket - (<i>Perognathus longimembris internationalis</i>) Wherever found SC</li> </ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Mouse, Los Angeles little pocket - (<i>Perognathus longimembris brevinasus</i>) Wherever found SC</li> <li>• Mouse, northwestern San Diego pocket - (<i>Chaetodipus fallax fallax</i>)</li> <li>• Mouse, pallid San Diego pocket - (<i>Chaetodipus californicus pallidus</i>)</li> <li>• Mouse, southern grasshopper - (<i>Onychomys torridus ramona</i>) Wherever found SC</li> <li>• Mousetail, little - (<i>Myosurus minimus apus</i>) Wherever found SC</li> <li>• Nightshade, narrow-leaved - (<i>Solanum tenuilobatum</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Pelican, brown - (<i>Pelecanus occidentalis</i>) except U.S. Atlantic coast, FL, AL DM</li> <li>• Pine, Torrey, Del Mar - (<i>Pinus</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><i>torreyana torreyana</i> Wherever found SC</p> <ul style="list-style-type: none"> <li>Pitcher-sage, Gander's - (<i>Lepechinia ganderi</i>) Wherever found SC</li> <li>Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) Wherever found SC</li> <li>Plover, mountain - (<i>Charadrius montanus</i>) Wherever found RT</li> <li>Rattlesnake, northern red diamond - (<i>Crotalus ruber ruber</i>) Wherever found SC</li> <li>Reedgrass, dense - (<i>Calamagrostis koelerioides</i>) Wherever found RT</li> <li>Rock-mint, felt leaf - (<i>Monardella hypoleuca lanata</i>) Wherever found RT</li> <li>Rose, small-leaved - (<i>Rosa minutifolia</i>) Wherever found SC</li> <li>Sand aster, Del Mar - (<i>Corethrogyne filaginifolia linifolia</i>) Wherever found RT</li> <li>Savory, San Miguel - (<i>Satureja chandleri</i>)</li> <li>Skink, Coronado - (<i>Eumeces skiltonianus</i>)</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<u><i>interparietalis</i></u> Wherever found SC • Skipper, wandering - ( <i>Panoquina errans</i> ) Wherever found SC • Snake, coast patch-nosed - ( <i>Salvadora hexalepis virgultea</i> ) Wherever found SC • Snake, San Diego ringneck - ( <i>Diadophis punctatus similis</i> ) Wherever found SC • Snake, two-striped garter - ( <i>Thamnophis hammondi</i> ) Wherever found SC • Spadefoot, western - ( <i>Spea hammondi</i> ) Wherever found UR • Sparrow, Belding's savannah - ( <i>Passerculus sandwichensis beldingi</i> ) Wherever found SC • Sparrow, large-billed savannah - ( <i>Passerculus sandwichensis rostratus</i> ) Wherever found SC • <u>Sparrow, Southern California rufous-crowned - (<i>Aimophila ruficeps</i></u>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><u>canescens)</u>  <u>Wherever found SC</u></p> <ul style="list-style-type: none"> <li>• Tern, elegant -  <i>(Sterna elegans)</i>  Wherever found SC</li> <li>• Tetracoccus, Parry's  - <i>(Tetracoccus dioicus)</i> Wherever found SC</li> <li>• Turkish rugging -  <u><i>(Chorizanthe staticoides chrysacantha)</i></u>  <u>Wherever found RT</u></li> <li>• Turtle, southwestern pond - <i>(Actinemys marmorata pallida)</i>  Wherever found SC</li> <li>• Wallflower, coast -  <i>(Erysimum ammophilum)</i>  Wherever found SC</li> <li>• Whiptail, orange-throated -  <i>(Cnemidophorus hyperythrus)</i>  Wherever found SC</li> <li>• Woodrat, San Diego desert - <i>(Neotoma lepida intermedia)</i>  Wherever found SC</li> <li>• Wren, San Diego cactus -  <u><i>(Campylorhynchus brunneicapillus couesi)</i></u>  <u>Wherever found RT</u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">San Joaquin County Multi-Species Habitat Conservation and Open Space Plan</a>	TE043280-0	Stockton, Tracy, Lathrop, Lodi, Manteca, Escalon, and Ripon; San Joaquin County	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> <li>• Cuckoo, yellow-billed (<i>Coccyzus americanus</i>) Western U.S. DPS T</li> <li>• Fairy shrimp, Conservancy (<i>Branchinecta conservatio</i>) Wherever found E</li> <li>• Fairy shrimp, longhorn (<i>Branchinecta longiantenna</i>) Wherever found E</li> <li>• Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>• Fiddleneck, large-flowered (<i>Amsinckia grandiflora</i>) Wherever found E</li> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>• Rabbit, riparian brush (<i>Sylvilagus bachmani riparius</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>• Coyote-thistle, Delta - (<i>Eryngium racemosum</i>) Wherever found SC</li> <li>• Crane, greater sandhill - (<i>Grus canadensis tubida</i>)</li> <li>• Eagle, Golden - (<i>Aquila chrysaetos</i>)</li> <li>• Frog, foothill yellow-legged - (<i>Rana boylei</i>) Wherever found UR</li> <li>• Goose, Aleutian Canada - (<i>Branta canadensis leucopareia</i>) Wherever found DM</li> <li>• Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> <li>• Hedge-hyssop, Boggs Lake - (<i>Gratiola heterosepala</i>) Wherever found RT</li> <li>• Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li>• Legenere - (<i>Legenere limosa</i>) Wherever found SC</li> <li>• Lilaeopsis, Mason's - (<i>Lilaeopsis masonii</i>) Wherever found SC</li> </ul>	05/31/2001	896000 acres (California)	Data not available	50 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>• Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> <li>• Smelt, delta (<i>Hypomesus transpacificus</i>) Wherever found T</li> <li>• Snake, giant garter (<i>Thamnophis gigas</i>) Wherever found T</li> <li>• Tadpole shrimp, vernal pool (<i>Lepidurus packardii</i>) Wherever found E</li> <li>• Tuctoria, Greene's (<i>Tuctoria greenei</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• madia, Showy - (<i>madia radiata</i>) Wherever found SC</li> <li>• NO COMMON NAME - (<i>Neotoma fucipes riparia</i>)</li> <li>• NO COMMON NAME - (<i>Hibiscus lasiocarpus</i>)</li> <li>• NO COMMON NAME - (<i>Limosella subulata</i>)</li> <li>• NO COMMON NAME - (<i>Delphinium californicum interius</i>)</li> <li>• NO COMMON NAME - (<i>Aster lentus</i>)</li> <li>• NO COMMON NAME - (<i>Castilleja campestris succulenta</i>)</li> <li>• NO COMMON NAME - (<i>Escholzia rhombipetala</i>)</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Plover, mountain - (<i>Charadrius montanus</i>) Wherever found RT</li> <li>• Sagittaria, valley - (<i>Sagittaria sanfordii</i>) Wherever found SC</li> <li>• Shrike, migrant loggerhead - (<i>Lanius ludovicianus</i>)</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<i>migrans</i> ) Wherever found SC • Spadefoot, western - ( <i>Spea hammondi</i> ) Wherever found UR • <u>Splittail, Sacramento - (<i>Pogonichthys macrolepidotus</i>) Wherever found RT</u> • Thistle, slough - ( <i>Cirsium crassicaule</i> ) Wherever found SC • Tule-pea, Delta - ( <i>Lathyrus jepsonii jepsonii</i> ) Wherever found SC • Turtle, northwestern pond - ( <i>Actinemys marmorata marmorata</i> ) Wherever found SC				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Santa Clara Valley HCP/NCCP</a>	TE94345	The study area includes all of the Coyote Creek and Llagas/Uvas/Pajaro watersheds within Santa Clara County. The northern edge of the study area is defined by the boundary of Alameda and Santa Clara Counties, excluding the City of Milpitas and lands owned by the San Francisco Public Utilities Commission. Lands in Joseph D. Grant County Park and Mount Madonna County Park outside the Coyote Creek and Llagas/Uvas/Pajaro watersheds are included, marking the eastern and southwestern boundaries of the study area, respectively. Tulare Hill, the Santa Teresa Hills, and the Calero Reservoir area are also included in the	I	<ul style="list-style-type: none"> <li>• Butterfly, bay checkerspot (<i>Euphydryas editha bayensis</i>) Wherever found T</li> <li>• Ceanothus, coyote (<i>Ceanothus ferrisae</i>) Wherever found E</li> <li>• Dudleya, Santa Clara Valley (<i>Dudleya setchellii</i>) Wherever found E</li> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>• Jewelflower, Metcalf Canyon (<i>Streptanthus albidus ssp. albidus</i>) Wherever found E</li> <li>• Paintbrush, Tiburon (<i>Castilleja affinis ssp. neglecta</i>) Wherever found E</li> <li>• Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> <li>• Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>• Fritillary, fragrant - (<i>Fritillaria liliacea</i>) Wherever found SC</li> <li>• Frog, foothill yellow-legged - (<i>Rana boylei</i>) Wherever found UR</li> <li>• hoita, Loma Prieta - (<i>hoita strobilina</i>) Wherever found SC</li> <li>• Jewelflower, most beautiful - (<i>Streptanthus albidus peramoenus</i>) Wherever found SC</li> <li>• No common name - (<i>Lessingia micradenia glabrata</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Thistle, Mt. Hamilton - (<i>Cirsium fontinale campylon</i>) Wherever found SC</li> <li>• Turtle, western pond - (<i>Actinemys marmorata</i>) Wherever found UR</li> </ul>	07/30/2013	508669 acres (California) The Plan contains two Permit Areas: one Permit Area applies specifically to the western burrowing owl and the second applies to all other Covered Species. The Permit Area for all Covered Species, with the exception of the western burrowing owl, is the same as the Plan's Study Area except it excludes portions of State Parks within the Study Area (see Figure 1-2 of the Plan). Thus, the Permit Area for all Covered Species, with the exception of the western burrowing owl, is 460,205	Data not available	50 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
		study area. Almaden Quicksilver County Park is included in the study area. Lands along Los Gatos Creek upstream through Vasona County Park owned by SCVWD and the Santa Clara County Parks and Recreation Department are included in the study area. The entire City of San Jose, with the exception of the Baylands including Alviso, lies within the study area.					acres. The Permit Area for the western burrowing owl includes the Permit Area described above as well as the expanded Study Area for burrowing owl conservation. The expanded Study Area for burrowing owl conservation includes portions of the cities of San Jose, Santa Clara, Mountain View, Milpitas, and Sunnyvale in northern Santa Clara County; Fremont in Alameda County; and a small portion of San Mateo County (see Figure 1-2 in the Plan). The expanded Study Area for burrowing owl conservation that falls		

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
							outside of the Permit Area for all other Covered Species totals 48,464 acres. Thus, the Permit Area for the western burrowing owl is 508,669 acres.		
<u>Santa Cruz Gardens Unit 12</u>	TE189382-0	near Soquel, Santa Cruz County, California	I	<ul style="list-style-type: none"> <li>Tarplant, Santa Cruz (<i>Holocarpha macradenia</i>) Wherever found T</li> <li>Tiger beetle, Ohlone (<i>Cicindela ohlone</i>) Wherever found E</li> </ul>		08/26/2009	58.5 acres (California)	Data not available	10 years, 0 months
<u>Santa Nella Phase I (Arnaudo Brothers/Wathen-Castanos and River East Holding Sites)</u>	TE016739-0	Santa Nella, Merced County, CA	I	<ul style="list-style-type: none"> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> </ul>		11/28/2005	630 acres (California)	Data not available	10 years, 0 months
<u>Sarment property</u>	TE144970-0	City of Carmel Highlands, Monterey County	I	<ul style="list-style-type: none"> <li>Butterfly, Smith's blue (<i>Euphilotes enoptes smithi</i>) Wherever found E</li> </ul>		03/09/2007	6.1 acres (California)	Data not available	5 years, 0 months
<u>Seascape Uplands</u>	749374	Aptos, Santa Cruz County	I	<ul style="list-style-type: none"> <li>Salamander, Santa Cruz long-toed (<i>Ambystoma macrodactylum croceum</i>) Wherever found E</li> </ul>		08/18/1997	192 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Seneca and Enron Oil and Gas</a>	TE000955-0	Bakersfield, CA Kern County	I	<ul style="list-style-type: none"> <li>• Condor, California (<i>Gymnogyps californianus</i>) U.S.A. only, except where listed as an experimental population E</li> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Kangaroo rat, giant (<i>Dipodomys ingens</i>) Wherever found E</li> <li>• Lizard, blunt-nosed leopard (<i>Gambelia silus</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Kangaroo rat, short-nosed - (<i>Dipodomys nitratoides brevinasus</i>) Wherever found SC</li> <li>• Larkspur, recurved - (<i>Delphinium recurvatum</i>) Wherever found SC</li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• Squirrel, Nelson's antelope ground - (<i>Ammospermophilus nelsoni</i>) Wherever found SC</li> <li>• Woolly-star, Hoover's - (<i>Eriastrum hooveri</i>) DM</li> </ul>	08/14/1998	650 acres (California)	Data not available	30 years, 0 months
<a href="#">Shell Oil Company/Metropolitan Water District of Southern California</a>	TE027246-1 , TE027848-1	Yorba Linda, CA	I	<ul style="list-style-type: none"> <li>• Gnatcatcher, coastal California (<i>Poliioptila californica californica</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Wren, San Diego cactus - (<i>Campylorhynchus brunneicapillus couesi</i>)</u> Wherever found RT</li> </ul>	11/07/1996	2600 acres (California)	Data not available	50 years, 0 months
<a href="#">Shiloh III</a>	TE36048A-0 , TE36048A-1	Montezuma Hills Wind Resources Area, 3 miles west of Rio Vista and south of highway 12, Solano County, CA.	I	<ul style="list-style-type: none"> <li>• Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> </ul>		05/18/2011	4600 acres (California)	Data not available	36 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Shiloh IV</a>	TA70433A-0	Montezuma Hills Wind Resource Area in Solano County, CA.	I	<ul style="list-style-type: none"> <li>Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> </ul>		04/10/2012	0 acres (California)	Data not available	36 years, 0 months
<a href="#">Shimboff Low Effect</a>	TE079118-0	City of Vacaville, Solano County	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		11/26/2003	0.16 acres (California) Mitigation was planting 53 elderberry shrubs plus 57 associated native plants within 0.45 acres.	Data not available	1 years, 0 months
<a href="#">Sonoma County Office of Education LE HCP</a>	TE190109-0	3255 and 3267 Dutton Ave, Santa Rosa, CA.	I	<ul style="list-style-type: none"> <li>Meadowfoam, Sebastopol (<i>Limnanthes vinculans</i>) Wherever found E</li> <li>Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (CA - Sonoma County) E</li> </ul>		09/12/2008	4.42 acres (California)	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Southeastern Lincoln County HCP</a>	TE09163A , TE09173A , TE09177A	Southeastern Lincoln County, Nevada	I	<ul style="list-style-type: none"> <li>Flycatcher, southwestern willow (<i>Empidonax traillii extimus</i>) Wherever found E</li> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		05/05/2010	1700000 acres (Nevada) This plan area acreage includes both private and Federal lands.	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Southern California Edison Cross Valley Loop</a>	TE15135B-0	23 mile transmission line in Tualre County, CA.	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> <li>• Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>• Orcutt grass, San Joaquin (<i>Orcuttia inaequalis</i>) Wherever found T</li> <li>• Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> <li>• Spurge, Hoover's (<i>Chamaesyce hooveri</i>) Wherever found T</li> <li>• Tadpole shrimp, vernal pool (<i>Lepidurus packardii</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• <u>NO COMMON NAME - (<i>Iasiurus blossevillei</i>)</u></li> <li>• Owl, Burrowing - (<i>Athene cunicularia</i>)</li> </ul>	10/23/2013		Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Southern California Edison Etiwanda and Miraloma Corridor Low-Effect HCP (Riverside/San Bernardino Cnty, CA)</u></a>	TE103476-0	Near Cities of Fontana and Ontario in Riverside and San Bernardino Counties	I	<ul style="list-style-type: none"> <li>Fly, Delhi Sands flower-loving (<i>Rhaphiomidas terminatus abdominalis</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> </ul>	04/20/2005	126 acres (California) Of the 126 ac. project area, 4.17 ac. would be disturbed. Of these 4.17 ac., 0.88 ac. of temporary and 0.08 ac. of permanent disturbance to Delhi Sands Flower-loving Fly habitat would occur.	Data not available	5 years, 0 months
<a href="#"><u>Spring Mountain Raceway Expansion Low-Effect HCP (Pahrump, Nye County, NV)</u></a>	TE95410A-0	Located in Pahrump, NV, on the northeast side of State Route 160, south side of Pahrump, just east of an existing racetrack.	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		01/28/2013	120 acres (Nevada)	Data not available	4 years, 0 months
<a href="#"><u>Spring Mountain Ranch State Park</u></a>	804120	Spring Mountain Ranch State Park in Clark County, Nevada; enclosed within the Red Rock National Conservation Area; closest town is Blue Diamond and about 15 miles west of Las Vegas	I	<ul style="list-style-type: none"> <li>Poolfish, Pahrump (<i>Empetrichthys latos</i>) Wherever found E</li> </ul>		09/01/1995	3.5 acres (Nevada) Total acreage of the reservoir restored to 21.7 acre feet; 6.2 of which is suitable habitat for the Pahrump poolfish.	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Stanford University HCP</u></a>	TE182827	City of Palo Alto, Santa Clara County	I	<ul style="list-style-type: none"> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Salamander, California tiger (<i>Ambystoma californiense</i>) U.S.A. (Central CA DPS) T</li> <li>Snake, San Francisco garter (<i>Thamnophis sirtalis tetrataenia</i>) Wherever found E</li> </ul>		08/13/2013	8000 acres (California)	Data not available	0 years, 0 months
<a href="#"><u>State Route 99/Cartmill Avenue Interchange Low-effect HCP</u></a>	TE96481A-0	Tulare County, California. 0.7-miles south of Cartmill Avenue (Post-mile 31.2) and 0.5-miles north of Cartmill Avenue (Post-mile 32.4).	I	<ul style="list-style-type: none"> <li>Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> </ul>		03/15/2013			5 years, 0 months
<a href="#"><u>Sunde Residence</u></a>	TE179212-0	Mount Hermon, Santa Cruz County	I	<ul style="list-style-type: none"> <li>Beetle, Mount Hermon June (<i>Polyphylla barbata</i>) Wherever found E</li> </ul>		07/29/2008	0.17 acres (California)	Data not available	3 years, 0 months
<a href="#"><u>Sunland Communities Inc.</u></a>	757505	San Bernardino Co., CA	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		06/13/1994	160 acres (California)	Data not available	100 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Teichert Esparto Mining Project</u></a>	TE019954-0	Yolo County, CA	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		12/20/1999	148 acres (California) 4 elderberry shrubs will be adversely affected	Data not available	5 years, 0 months
<a href="#"><u>Teichert Vernalis Project, Phases 1&amp;2</u></a>	820643	Tracy, CA San Joaquin County	I	<ul style="list-style-type: none"> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> </ul>	<ul style="list-style-type: none"> <li>Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> </ul>	01/09/1997	300 acres (California) Encompassed by San Joaquin Multi-species Habitat Conservation & Open Space Plan	Data not available	50 years, 0 months
<a href="#"><u>Temecula Ridge Apartments and Temecula Village Development</u></a>	TE052816-0 , TE052817-0	City of Temecula, Riverside County	I	<ul style="list-style-type: none"> <li>Gnatcatcher, coastal California (<i>Polioptila californica californica</i>) Wherever found T</li> </ul>		02/08/2002	113.97 acres (California) Encompassed by Western Riverside MSHCP. This HCP is for an infill project. All mitigation is offsite in a conservation bank.	Data not available	5 years, 0 months
<a href="#"><u>Terra Springs LLC Low Effect</u></a>	TE065890-0	Four miles north of the city of St. Helena, Napa County, California	I	<ul style="list-style-type: none"> <li>Owl, northern spotted (<i>Strix occidentalis caurina</i>) Wherever found T</li> </ul>		03/03/2004	76 acres (California) Includes 11 acres of non-habitat for northern spotted owl.	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Tinkess Parcel</u>	TE202044-0	Scotts Valley, Santa Cruz County	I	<ul style="list-style-type: none"> <li>• Beetle, Mount Hermon June (<i><u>Polyphylla barbata</u></i>) Wherever found E</li> <li>• Spineflower, Ben Lomond (<i><u>Chorizanthe pungens var. hartwegiana</u></i>) Wherever found E</li> </ul>		12/22/2008	0.44 acres (California)	Data not available	3 years, 0 months
<u>Tucker</u>	TE142277-0	Aptos, Santa Cruz Co., CA	I	<ul style="list-style-type: none"> <li>• Frog, California red-legged (<i><u>Rana draytonii</u></i>) Wherever found T</li> <li>• Salamander, Santa Cruz long-toed (<i><u>Ambystoma macrodactylum croceum</u></i>) Wherever found E</li> </ul>		03/02/2007	55 acres (California)	Data not available	10 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Tulare Irrigation District Main Intake Canal Lining Project</a>	TE022815-0	Tulare County, CA	I	<ul style="list-style-type: none"> <li>• Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> <li>• Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> </ul>		02/22/2000	9.7 linear miles (California) Within the 9.7 mile linear canal, project will result in temporary disturbance of 100 acres of low quality potential kit fox habitat containing no native vegetation (road surfaces surrounded by degraded agricultural land). Project also will result in permanent loss of 54 elderberry plants with 227 stems (beetle habitat). Mitigation fee is based on the cost of creating 465 stems.	Data not available	5 years, 0 months
<a href="#">Turkey Road Low-effect HCP</a>	TE21246B-0	24129 Turkey Road, Sonoma County, California	I	<ul style="list-style-type: none"> <li>• Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> </ul>		10/22/2014	8 acres (California)	Data not available	5 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Union Pacific, Alhambra Subdivision Low-Effect HCP (Unincorporated San Bernardino Cnty,CA)</u></a>	TE160596-0	South of Interstate 10, east of Pepper Avenue, in unincorporated San Bernardino County, CA, near City of Colton.	I	<ul style="list-style-type: none"> <li>Fly, Delhi Sands flower-loving (<i>Rhaphiomidas terminatus abdominalis</i>) Wherever found E</li> </ul>		07/31/2007	1.72 acres (California)	Data not available	3 years, 0 months
<a href="#"><u>University of California, Davis -- 2002 Campus Projects</u></a>	TE060073-0	Land owned by the University of California, Davis, Yolo and Solano counties	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		07/31/2002	12.25 acres (California) Mitigation included an additional 18 acres added into UC Davis' LE HCP (La Rue) mitigation (140 acres) for a combination of 158 acres of mitigation between the two HCPs. Combined impacts between the two HCPs was 27 acres (17 from La Rue).	Data not available	10 years, 0 months
<a href="#"><u>University of California, Davis -- La Rue Housing/Bowley Center</u></a>	TE008810-0	Yolo Co., CA	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		03/10/1999	16.7 acres (California) impacts are to 14 elderberry shrubs with 168 stems greater than 1" diameter	Data not available	10 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>University of California, Santa Cruz -- RanchView Terrace HCP</u></a>	TE089916-0	UC Santa Cruz Campus, Santa Cruz County	I	<ul style="list-style-type: none"> <li>Frog, California red-legged (<i>Rana draytonii</i>) Wherever found T</li> <li>Tiger beetle, Ohlone (<i>Cicindela ohlone</i>) Wherever found E</li> </ul>		10/27/2005	38.8 acres (California)	Data not available	60 years, 0 months
<a href="#"><u>UPRR, Sacramento Rail Yard</u></a>	TE023739-0	Sacramento, California Sacramento County	I	<ul style="list-style-type: none"> <li>Beetle, valley elderberry longhorn (<i>Desmocerus californicus dimorphus</i>) Wherever found T</li> </ul>		04/04/2000	240 acres (California)	Data not available	2 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">U.S. Borax</a>	837858	Boron, CA	I	<ul style="list-style-type: none"> <li>Shrike, San Clemente loggerhead (<i>Lanius ludovicianus mearnsi</i>) Wherever found E</li> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>	<ul style="list-style-type: none"> <li>Badger, American - (<i>Taxidea taxus</i>)</li> <li>Owl, western burrowing - (<i>Athene cunicularia</i> ssp. <i>hypugaea</i>) Wherever found SC</li> <li>Spineflower, Mojave - (<i>Chorizanthe spinosa</i>) Wherever found RT</li> <li>Squirrel, Mohave ground - (<i>Spermophilus mohavensis</i>) Wherever found RT</li> <li>Thrasher, San Joaquin LeConte's - (<i>Toxostoma lecontei macmillanorum</i>) Wherever found SC</li> <li>Tiger beetle, greenest - (<i>Cicindela tranquebarica viridissima</i>) Wherever found SC</li> </ul>	02/05/1999	3465 acres (California)	Data not available	50 years, 0 months
<a href="#">Valley of Fire State Park</a>	781039	near Overton, Nevada in Clark County; six miles west of Lake Mead National Recreation Area and 55 miles northeast of Las Vegas	I	<ul style="list-style-type: none"> <li>Tortoise, desert (<i>Gopherus agassizii</i>) Wherever found, except AZ south and east of Colorado R., and Mexico T</li> </ul>		01/20/1994	16.6 acres (Nevada)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#"><u>Valley/Pepper Intersection Realignment Low-Effect HCP (Colton, San Bernardino Cnty, CA)</u></a>	TE134528-0	Northeast intersection of Pepper Ave. and Valley Blvd., City of Colton, San Bernardino, California	I	• Fly, Delhi Sands flower-loving ( <i>Rhaphiomidas terminatus abdominalis</i> ) Wherever found E		08/31/2006	1.84 acres (California)	Data not available	10 years, 0 months
<a href="#"><u>Walton Homes (Redlands, San Bernardino Cnty, CA)</u></a>		Southwest and southeast intersection of East Pioneer Ave. and Judson St., City of REdlands, San Bernardino County, California.	I	• Kangaroo rat, San Bernardino Merriam's ( <i>Dipodomys merriami parvus</i> ) Wherever found E		09/20/2007	30 acres (California)	Data not available	3 years, 0 months
<a href="#"><u>Warmington Homes Assumption of The Bluffs HCP</u></a>	TE012114-0	City of Livermore, Alameda County, California	I	• Fox, San Joaquin kit ( <i>Vulpes macrotis mutica</i> ) wherever found E	• Salamander, California tiger - ( <i>Ambystoma californiense</i> ) Wherever found RT	05/21/1999	32.3 acres (California) development will occur on 22.8 acres with 9.5 acres established as open space.	Data not available	2 years, 0 months
<a href="#"><u>West Colton Rail Terminal (Rialto, San Bernardino County)</u></a>	TE198592-0	Union Pacific Railroad facility at northern terminus of South Date Avenue in the City of Rialto, San Bernardino County, California	I	• Fly, Delhi Sands flower-loving ( <i>Rhaphiomidas terminatus abdominalis</i> ) Wherever found E		01/08/2009	2.2 acres (California)	Data not available	3 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<a href="#">Western Riverside MSHCP (One permit w/ 22 permittees)</a>	TE088609-0	Western Riverside County.	I	<ul style="list-style-type: none"> <li>Ambrosia, San Diego (<i>Ambrosia pumila</i>) Wherever found E</li> <li>Barberry, Nevin's (<i>Berberis nevinii</i>) Wherever found E</li> <li>Brodiaea, thread-leaved (<i>Brodiaea filifolia</i>) Wherever found T</li> <li>Butterfly, Quino checkerspot (<i>Euphydryas editha quino</i> (=E. e. wrightii)) Wherever found E</li> <li>Button-celery, San Diego (<i>Eryngium aristulatum</i> var. <i>parishii</i>) Wherever found E</li> <li>Ceanothus, Vail Lake (<i>Ceanothus ophiochilus</i>) Wherever found T</li> <li>Crownscale, San Jacinto Valley (<i>Atriplex coronata</i> var. <i>notatior</i>) Wherever found E</li> <li>Cuckoo, yellow-billed (<i>Coccyzus americanus</i>) Western U.S. DPS T</li> <li>Fairy shrimp, Riverside (<i>Streptocephalus woottoni</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>alumroot, shaggyhair - (<i>Heuchera hirsutissima</i>) Wherever found SC</li> <li>barley, Vernal - (<i>hordeum intercedens</i>) Wherever found SC</li> <li>Bedstraw, San Jacinto - (<i>Galium californicum primum</i>) Wherever found SC</li> <li>bedstraw, San Jacinto Mountains - (<i>galium angustifolium</i> ssp. <i>jacinticum</i>) Wherever found SC</li> <li>Bindweed, clay - (<i>Convolvulus simulans</i>)</li> <li>bittern, American - (<i>Botaurus lentiginosus</i>) Wherever found SC</li> <li>Blackbird, tricolored - (<i>Agelaius tricolor</i>) Wherever found UR</li> <li>Boa, southern rubber - (<i>Charina bottae umbratica</i>) Wherever found UR</li> <li>Bobcat - (<i>Lynx rufus</i>) Wherever found RT</li> <li>Brittlescale, Parrish's - (<i>Atriplex</i></li> </ul>	06/22/2004	1300000 acres (California)	Data not available	75 years, 0 months



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>Fairy shrimp, vernal pool (<u><i>Branchinecta lynchi</i></u>) Wherever found T</li> <li>Flycatcher, southwestern willow (<u><i>Empidonax traillii extimus</i></u>) Wherever found E</li> <li>Fly, Delhi Sands flower-loving (<u><i>Rhaphiomidas terminatus abdominalis</i></u>) Wherever found E</li> <li>Frog, California red-legged (<u><i>Rana draytonii</i></u>) Wherever found T</li> <li>Frog, mountain yellow-legged (<u><i>Rana muscosa</i></u>) Northern California DPS E</li> <li>Frog, mountain yellow-legged (<u><i>Rana muscosa</i></u>) Southern California DPS E</li> <li>Frog, Sierra Nevada Yellow-legged (<u><i>Rana sierrae</i></u>) Wherever found E</li> <li>Gnatcatcher, coastal California (<u><i>Polioptila californica californica</i></u>) Wherever found T</li> <li>Kangaroo rat, San Bernardino Merriam's (<u><i>Dipodomys merriami parvus</i></u>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li><i>parishii</i>) Wherever found SC</li> <li>Brodiaea, Orcutt's - (<i>Brodiaea orcuttii</i>) Wherever found SC</li> <li>chat, Yellow-breasted - (<i>icteria virens</i>) Wherever found SC</li> <li>Chub, arroyo - (<i>Gila orcuttii</i>) Wherever found SC</li> <li>cinquefoil, cliff - (<i>Potentilla rimicola</i>) Wherever found SC</li> <li>clay-cress, Hammitt's - (<i>sibaropsis hammittii</i>) Wherever found SC</li> <li>cormorant, Double-crested - (<i>phalacrocorax auritus</i>) Wherever found SC</li> <li>coyote - (<i>canis latrans</i>) Wherever found SC</li> <li>Daisy, seaside, Coulter's - (<u><i>Lasthenia glabrata coulteri</i></u>) Wherever found SC</li> <li>Eagle, bald - (<i>Haliaeetus leucocephalus</i>) lower 48 States DM</li> <li>eagle, Golden - (<i>Aquila chrysaetos</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
				<ul style="list-style-type: none"> <li>• Kangaroo rat, Stephens' (<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)) Wherever found E</li> <li>• Navarretia, spreading (<i>Navarretia fossalis</i>) Wherever found T</li> <li>• Onion, Munz's (<i>Allium munzii</i>) Wherever found E</li> <li>• Orcutt grass, California (<i>Orcuttia californica</i>) Wherever found E</li> <li>• Puma (=mountain lion) (<i>Puma</i> (=Felis) <i>concolor</i> (all subsp. except <i>coryi</i>)) FL SAT</li> <li>• Spineflower, slender-horned (<i>Dodecahema leptoceras</i>) Wherever found E</li> <li>• Sucker, Santa Ana (<i>Catostomus santaanae</i>) 3 CA river basins T</li> <li>• Toad, arroyo (=arroyo southwestern) (<i>Anaxyrus californicus</i>) Wherever found E</li> <li>• Vireo, least Bell's (<i>Vireo bellii pusillus</i>) Wherever found E</li> <li>• Woolly-star, Santa Ana River (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>) Wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>• Falcon, American peregrine - (<i>Falco peregrinus anatum</i>) Wherever found DM</li> <li>• Falcon, Peregrine - (<i>Falco peregrinus</i>) Wherever found SC</li> <li>• Falcon, Prairie - (<i>Falco mexicanus</i>) Wherever found SC</li> <li>• filaree, Large-leaved - (<i>erodium macrophyllum</i>) Wherever found SC</li> <li>• Gecko, San Diego banded - (<i>Coleonyx variegatus abbotti</i>) Wherever found SC</li> <li>• Goshawk, northern - (<i>Accipiter gentilis</i>) Wherever found RT</li> <li>• grapplinghook, Palmer's - (<i>Harpagonella palmeri</i>) Wherever found SC</li> <li>• harrier, Northern - (<i>circus cyaneus</i>) Wherever found SC</li> <li>• hawk, Cooper's - (<i>Accipiter cooperii</i>) Wherever found SC</li> <li>• Hawk, ferruginous - (<i>Buteo regalis</i>) Wherever found RT</li> <li>• Hawk, Sharp shinned - (<i>Accipiter striatus</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Hawk, Swainson's - (<i>Buteo swainsoni</i>) Wherever found RT</li> <li>• heron, Great blue - (<i>Ardea herodias</i>) Wherever found SC</li> <li>• Heron, great blue - (<i>Ardea herodias</i>)</li> <li>• Hulsea, Beautiful - (<i>Hulsea vestita ssp. callicarpha</i>) Wherever found SC</li> <li>• Ibis, white-faced - (<i>Plegadis chihi</i>) Wherever found SC</li> <li>• Jackrabbit, San Diego black-tailed - (<i>Lepus californicus bennettii</i>) Wherever found SC</li> <li>• Jewelflower, Payson's - (<i>Caulanthus simulans</i>) Wherever found SC</li> <li>• kangaroo rat, Dulzura - (<i>dipodomys simulans</i>) Wherever found SC</li> <li>• Kangaroo rat, Earthquake Merriam's - (<i>Dipodomys merriami collinus</i>) Wherever found SC</li> <li>• Kite, White-tailed - (<i>Elanus leucurus</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Lark, California horned - (<i>Eremophila alpestris actia</i>)</u> Wherever found RT</li> <li>• <u>Lily, Fairchild's - (<i>Lilium fairchildii</i>)</u> Wherever found RT</li> <li>• Lily, lemon - (<i>Lilium parryi</i>) Wherever found SC</li> <li>• linderiella, Santa Rosa - (<i>Linderiella santarosae</i>) Wherever found SC</li> <li>• Liveforever, many-stemmed - (<i>Dudleya multicaulis</i>) Wherever found SC</li> <li>• <u>Liveforever, sticky-leaved - (<i>Dudleya viscida</i>)</u> Wherever found RT</li> <li>• lizard, Granite night - (<i>Xantusia henshawi</i>) Wherever found SC</li> <li>• Lizard, granite night - (<i>Xantusia henshawi henshawi</i>)</li> <li>• lizard, Granite spiny - (<i>sceloporus orcutti</i>) Wherever found SC</li> <li>• Lizard, San Diego horned - (<i>Phrynosoma coronatum blainvillii</i>) Wherever found SC</li> <li>• <u>Lizard, southern sagebrush -</u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><u>(Sceloporus graciosus vandenburgianus)</u> Wherever found RT</p> <ul style="list-style-type: none"> <li>• manzanita, Rainbow - (<i>arctostaphylos rainbowensis</i>) Wherever found SC</li> <li>• Mariposa lily, foothill - (<i>Calochortus weedii intermedius</i>) Wherever found SC</li> <li>• Mariposa lily, Munz's - (<i>Calochortus palmeri munzii</i>) Wherever found SC</li> <li>• Mariposa lily, Plummer's - (<i>Calochortus plummerae</i>) Wherever found SC</li> <li>• martin, Purple - (<i>progne subis</i>) Wherever found SC</li> <li>• <u>Meadowfoam, Parish's - (<i>Limnanthes gracilis parishii</i>)</u> Wherever found RT</li> <li>• Merlin - (<i>falco columbarius</i>) Wherever found SC</li> <li>• microseris, Small-flowered - (<i>microseris douglasii ssp. platycarpha</i>) Wherever found SC</li> <li>• Milk-vetch, Jaeger's bush - (<i>Astragalus</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><i>pachypus jaegeri</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• Milkwort, Fish's - (<i>Polygala cornuta</i> <i>var. fishiae</i>) Wherever found SC</li> <li>• <u>Monardella, Hall's -</u> (<i>Monardella</i> <i>macrantha hallii</i>) Wherever found RT</li> <li>• <u>Monkeyflower,</u> <u>Cleveland's bush -</u> (<i>Diplacus</i> <i>clevelandii</i>) Wherever found SC</li> <li>• monkeyflower, Palomar - (<i>mimulus</i> <i>diffusus</i>) Wherever found SC</li> <li>• Morning-glory, small-flowered - (<i>Convolvulus</i> <i>equitans</i>) Wherever found SC</li> <li>• <u>Mountain lion,</u> <u>California - (<i>Felis</i> <i>concolor californica</i>)</u> Wherever found RT</li> <li>• Mouse, Los Angeles little pocket - (<i>Perognathus</i> <i>longimembris</i> <i>brevinasus</i>) Wherever found SC</li> <li>• mouse, Northwestern San Diego pocket - (<i>chaetodipus fallax</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Mouse, Northwestern San Diego pocket - (<i>Perognathus fallax fallax</i>) Wherever found SC</li> <li>• mousetail, tiny - (<i>Myosurus minimus</i>) Wherever found SC</li> <li>• <u>muhly, California - (<i>Muhlenbergia californica</i>) Wherever found SC</u></li> <li>• nama, Nama - (<i>nama stenocarpum</i>) Wherever found SC</li> <li>• Navarretia, prostrate - (<i>Navarretia prostrate</i>)</li> <li>• <u>newt, Coast range - (<i>taricha torosa ssp. torosa</i>) Wherever found SC</u></li> <li>• Night-Heron, Black-crowned - (<i>Nycticorax nycticorax</i>) Wherever found SC</li> <li>• No common name - (<i>Holocarpha virgata elongata</i>) Wherever found SC</li> <li>• No common name - (<i>Coccyzus americanus ssp. occidentalis</i>) Wherever found SC</li> <li>• No common name - (<i>Chorizanthe</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><i>polygonoides longispina</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• <u>NO COMMON NAME - (<i>Phytolacca sanwicensis</i>)</u></li> <li>• oak, Engelmann - (<i>quercus engelmannii</i>) Wherever found SC</li> <li>• Onion, Yucaipa - (<i>Allium marvinii</i>)</li> <li>• onion, Yucaipa - (<i>allium haematochiton</i>) Wherever found SC</li> <li>• osprey - (<i>Pandion haliaetus</i>) Wherever found SC</li> <li>• Owl, California spotted - (<i>Strix occidentalis occidentalis</i>) <u>Wherever found UR</u></li> <li>• Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>• oxytheca, chickweed - (<i>Oxytheca caryophylloides</i>) Wherever found SC</li> <li>• <u>Penstemon, California - (<i>Penstemon californicus</i>)</u> <u>Wherever found RT</u></li> </ul>				



Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Phacelia, Brand's - (<i>Phacelia stellaris</i>)</u> <u>Wherever found RT</u></li> <li>• pincushionplant, prostrate - (<i>Navarretia prostrata</i>) <u>Wherever found SC</u></li> <li>• Pitcher-sage, heart-leaved - (<i>Lepechinia cardiophylla</i>) <u>Wherever found SC</u></li> <li>• <u>Plover, mountain - (<i>Charadrius montanus</i>)</u> <u>Wherever found RT</u></li> <li>• <u>poppy, Coulter's matilija - (<i>romneya coulteri</i>)</u> <u>Wherever found SC</u></li> <li>• <u>Quail, mountain - (<i>Oreortyx pictus</i>)</u> <u>Wherever found RT</u></li> <li>• rabbit, brush - (<i>Sylvilagus bachmani</i>) <u>Wherever found SC</u></li> <li>• Rattlesnake, northern red diamond - (<i>Crotalus ruber ruber</i>) <u>Wherever found SC</u></li> <li>• <u>Rock-cress, Johnston's - (<i>Arabis johnstonii</i>)</u> <u>Wherever found RT</u></li> <li>• saltscale, Davidson's - (<i>atriplex serenana</i>)</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<p><i>var. davidsonii</i>) Wherever found SC</p> <ul style="list-style-type: none"> <li>• Sapsucker, Williamson's - (<i>Sphyrapicus</i> <i>thyroideus</i>) Wherever found SC</li> <li>• Savory, San Miguel - (<i>Satureja</i> <i>chandleri</i>)</li> <li>• <u>Savory, San Miguel</u> <u>- (<i>Clinopodium</i></u> <u><i>chandleri</i>)</u> <u>Wherever</u> <u>found RT</u></li> <li>• Shrike, Loggerhead - (<i>Lanius</i> <i>ludovicianus</i>) Wherever found SC</li> <li>• Snake, San Bernardino mountain king - (<i>Lampropeltis</i> <i>zonata parvirubra</i>) Wherever found SC</li> <li>• Snake, San Diego Mountain king - (<i>Lampropeltis</i> <i>zonata pulchra</i>) Wherever found SC</li> <li>• Spadefoot, western - (<i>Spea hammondi</i>) Wherever found UR</li> <li>• Sparrow, Bell's sage - (<i>Amphispiza belli</i> <i>belli</i>) Wherever found SC</li> <li>• Sparrow, Grasshopper - (<i>Ammodramus</i></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<i>savannarum</i> Wherever found SC • Sparrow, Lincoln's - ( <i>Melospiza lincolnii</i> ) Wherever found SC • Sparrow, Southern California rufous-crowned - ( <i>Aimophila ruficeps canescens</i> ) Wherever found SC • Spineflower, Parry's - ( <i>Chorizanthe parryi</i> ) Wherever found SC • spineflower, Prostrate - ( <i>chorizanthe procumbens</i> ) Wherever found SC • spineflower, Ramona - ( <i>Chorizanthe leptotheca</i> ) Wherever found SC • Squirrel, San Bernardino northern flying - ( <i>Glaucmys sabrinus californicus</i> ) Wherever found RT • swallow, Tree - ( <i>tachycineta bicolor</i> ) Wherever found SC • Swift, Black - ( <i>Cypseloides niger</i> ) Wherever found SC • Swift, black - ( <i>Cypseloides americana</i> )				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• Tarplant, smooth - (<i>Hemizonia pungens laevis</i>) Wherever found SC</li> <li>• Tarweed, Mojave - (<i>Hemizonia mohavensis</i>) Wherever found SC</li> <li>• trichocoronis, Wright's - (<i>trichocoronis wrightii</i>) Wherever found SC</li> <li>• Trichocoronis, Wright's - (<i>Trichocoronis wrightii wrightii</i>) Wherever found SC</li> <li>• Turtle, southwestern pond - (<i>Actinemys marmorata pallida</i>) Wherever found SC</li> <li>• Turtle, western pond - (<i>Actinemys marmorata</i>) Wherever found UR</li> <li>• vulture, Turkey - (<i>cathartes aura</i>) Wherever found SC</li> <li>• <u>walnut, California - (<i>Juglans californica</i> var. <i>californica</i>) Wherever found SC</u></li> <li>• warbler, Macgillivray's - (<i>opornis tolmiei</i>) Wherever found SC</li> <li>• warbler, Nashville - (<i>vermivora ruficapilla</i>) Wherever found SC</li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• warbler, Wilson's - (<i>wilsonia pusilla</i>) Wherever found SC</li> <li>• warbler, Yellow - (<i>dendroica petechia ssp. brewsteri</i>) Wherever found SC</li> <li>• Weasel, Florida long-tailed - (<i>Mustela frenata peninsulae</i>) Wherever found SC</li> <li>• Whiptail, Belding's orange-throated - (<i>Aspidoscelis hyperythra beldingi</i>)</li> <li>• whiptail, Belding's orange-throated - (<i>cnemidophorus hyperythrus ssp. beldingi</i>) Wherever found SC</li> <li>• Whiptail, coastal western - (<i>Cnemidophorus tigris multiscutatus</i>) Wherever found SC</li> <li>• woodpecker, Downy - (<i>picoides pubescens</i>) Wherever found SC</li> <li>• Woodrat, San Diego desert - (<i>Neotoma lepida intermedia</i>) Wherever found SC</li> <li>• <u>Wren, Cactus - (<i>Campylorhynchus brunneicapillus</i>)</u> <u>Wherever found SC</u></li> </ul>				

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
					<ul style="list-style-type: none"> <li>• <u>Wren, San Diego cactus - (Campylorhynchus brunneicapillus couesi)</u> Wherever found RT</li> </ul>				
<u>West Residence HCP</u>	TE202043-0	Ben Lomond, Santa Cruz County, CA	I	• Beetle, Mount Hermon June ( <u>Polyphylla barbata</u> ) Wherever found E		12/22/2008	0.015 acres (California)	Data not available	3 years, 0 months
<u>Westwood Tributary Point Ltd., Office Project</u>	TE034909-0	Rancho Cordova area of Sacramento County	I	• Beetle, valley elderberry longhorn ( <u>Desmocerus californicus dimorphus</u> ) Wherever found T		11/28/2000	3.42 acres (California)	Data not available	2 years, 0 months
<u>Weyerhaeuser Venture; Tributary Point, Parcel 9</u>	TE023095-0	Sacramento Co., CA	I	• Beetle, valley elderberry longhorn ( <u>Desmocerus californicus dimorphus</u> ) Wherever found T		03/31/2000	1.39 acres (California)	Data not available	2 years, 0 months
<u>Wildcat Line LP HCP</u>	TE040317-0	Carmel Highlands, Monterey Co., CA	I	• Butterfly, Smith's blue ( <u>Euphilotes enoptes smithi</u> ) Wherever found E		09/12/2001	11.5 acres (California)	Data not available	10 years, 0 months
<u>Wilder Quarry (Granite Rock)</u>	842273	Santa Cruz, CA	I	• Frog, California red-legged ( <u>Rana draytonii</u> ) Wherever found T		06/19/1998	125 acres (California)	Data not available	30 years, 0 months

Plan Title	Permits	Location	Status	Listed Species	Non-Listed Species	Date Permit Issued	Size	Enrolled Size	Duration
<u>Woodville Solid Waste Disposal Site Expansion</u>	TE131516-0	Tulare County	I	<ul style="list-style-type: none"> <li>Fairy shrimp, vernal pool (<i>Branchinecta lynchi</i>) Wherever found T</li> <li>Fox, San Joaquin kit (<i>Vulpes macrotis mutica</i>) wherever found E</li> </ul>	<ul style="list-style-type: none"> <li>Blister beetle, Hopping's - (<i>Lytta hoppingi</i>) Wherever found SC</li> <li>Blister beetle, moestan - (<i>Lytta moesta</i>) Wherever found SC</li> <li>Blister beetle, molestan - (<i>Lytta molesta</i>) Wherever found SC</li> <li>Blister beetle, Morrison's - (<i>Lytta morrisoni</i>) Wherever found SC</li> <li>Owl, western burrowing - (<i>Athene cunicularia ssp. hypugaea</i>) Wherever found SC</li> <li>Shrimp, midvalley fairy - (<i>Branchinecta n. sp.</i>)</li> <li>Tiger beetle, San Joaquin - (<i>Cicindela tranquebarica ssp.</i>) Wherever found SC</li> </ul>	03/22/2007	414 acres (California)	Data not available	41 years, 0 months
<u>Zanker Road Resource Mgmt., Ltd.</u>	TE006962-0	Santa Clara Co., CA	I	<ul style="list-style-type: none"> <li>Mouse, salt marsh harvest (<i>Reithrodontomys raviventris</i>) wherever found E</li> </ul>		02/23/1999	0.83 acres (California)	Data not available	3 years, 0 months

Appendix E.

**Cultural Resources Documentation**





*Draft Technical Report*

**ARCHAEOLOGICAL INVENTORY REPORT**  
**CHP Quincy Office Replacement Project**  
**Quincy, Plumas County, California**

**September 2018**

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## Limitations

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This report contains confidential cultural resources location information; report distribution should be restricted to those with a need to know. Cultural resources are non-renewable, and their scientific, cultural, and aesthetic values can be significantly impaired by disturbance. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the locations of cultural resources should be kept confidential. The legal authority to restrict cultural resources information is in California Government Code 6254.1 and the National Historic Preservation Act of 1966, as amended, Section 304.

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## List of Acronyms

APE	area of potential effects
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CFR	Code of Federal Regulations
DGS	California Department of General Services
Horizon	Horizon Water and Environment, LLC
NAHC	Native American Heritage Commission
NEIC	Northeast Information Center
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	Public Resources Code
TCR	tribal cultural resource
RPA	Registered Professional Archaeologist
USC	United States Code
USGS	United State Geological Survey

## Executive Summary

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The California Highway Patrol (CHP), with support from the California Department of General Services (DGS), is proposing to replace its existing Quincy Area Office as part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The proposed facility, which would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office, would be located on a currently vacant parcel approximately 2 miles east of the current facility. CHP/DGS retained Horizon Water and Environment, LLC (Horizon) to complete the cultural resources assessment in support of the project.

This report documents cultural resources inventory methods and results as required for compliance with federal and California regulations. The study consisted of a literature review to identify any previously recorded cultural resources that could be affected by the proposed project, and a field survey to locate any archaeological sites that may exist but have not yet been recorded.

One historic era archaeological site was identified and recorded as a result of the survey. The site consists of the remains of a pole barn that was built in the 1980s and collapsed prior to 2005. The original construction of the barn was less than 50 years ago and the creation of the archaeological site by collapse of the structure was in the recent past. As a result, the site does not meet the age criteria that requires evaluation for inclusion to the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), and the proposed project will have no impact on resources eligible for listing in the NRHP/CRHR.

This report has been prepared based on certain key assumptions made by Horizon that substantially affect its conclusions and recommendations. These assumptions are that the information gathered during the record search is up to date and accurate, and that the field survey results accurately identified the presence or absence of archaeological resources visible on the ground surface. These assumptions, although thought to be reasonable and appropriate, may not prove to be true in the future. Horizon's conclusions and recommendations are conditioned upon these assumptions.

The archaeological inventory was performed based on information obtained at the Northeast Information Center (NEIC) of the California Historical Resources Information System (CHRIS), as well as on direct observation of site conditions and other information generally applicable as of July 2018. The conclusions and recommendations herein are therefore based on information available up to that point in time. Further information may come to light in the future that could substantially change the conclusions found herein.

Information obtained from these sources in this timeframe is assumed to be correct and complete. Horizon does not assume any liability for findings or lack of findings based upon misrepresentation of information presented to Horizon or for items that are not visible, made visible, accessible, or present at the time of the project area inventory.



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# 1 Introduction

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## 1.1 Location and Setting

CHP is proposing to close its office at 86 West Main Street, Quincy, and replace it with a proposed new office located on 5 acres at the intersection of Lee Road and Alta Avenue in East Quincy, California (**Figure 1**). The proposed project site is about 500 feet north of State Route 70 and about 2 miles east of the existing facility. The rectangular proposed project parcel is currently comprised of two parcels (assessor's parcel numbers 117-140-026 and 116-310-003) and covers approximately 5 acres. The proposed project area is depicted on the Quincy 7.5" USGS topographic map in Sections 18 and 19, Township 24 North, Range 10 East (**Figure 2**).

The project site is located at the east end of American Valley, one of the many high mountain valleys within the northern reaches of the Sierra Nevada. The valley and project parcel are at about 3,460 feet above mean sea level, while the adjacent mountain peaks rise to heights of nearly 8,000 feet. While the mountains are densely forested with conifers, the American Valley itself is essentially a large meadow as several mountain streams course through the valley to join Spanish Creek, which is a tributary to the North Fork Feather River. The project parcel is sparsely covered with grasses and forbes. The few trees nearby are along the west fence line; there is one old apple tree along the east fence, and several conifers grow along the fence north of the property.

## 1.2 Project Description and Area of Potential Effects

This project is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the Quincy Area Office and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to the office. The proposed new facilities would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

The area of potential effects (APE) (**Figure 3**) for the proposed project consists of the footprint identified for the facility. No additional construction staging areas are required. The maximum vertical APE is 148 feet above the ground surface to accommodate the new communications tower. Below ground, the APE is 3 to 5 feet for the installation of drainage, water supply, and wastewater pipelines, and underground utilities. These would be installed in open trenches, typically using conventional cut-and-cover construction techniques.

C:\Users\GIS\Documents\ArcGIS\PROJECTS\15002\_CHP\_CEOA\mxd\QuincyProject\QuincyProjectVicinity.mxd PG 6/27/2018

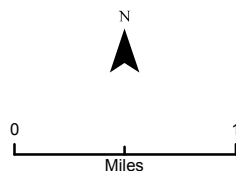


**FIGURE 1**  
**Project Vicinity**

Prepared by:



Prepared for:  
California Highway Patrol

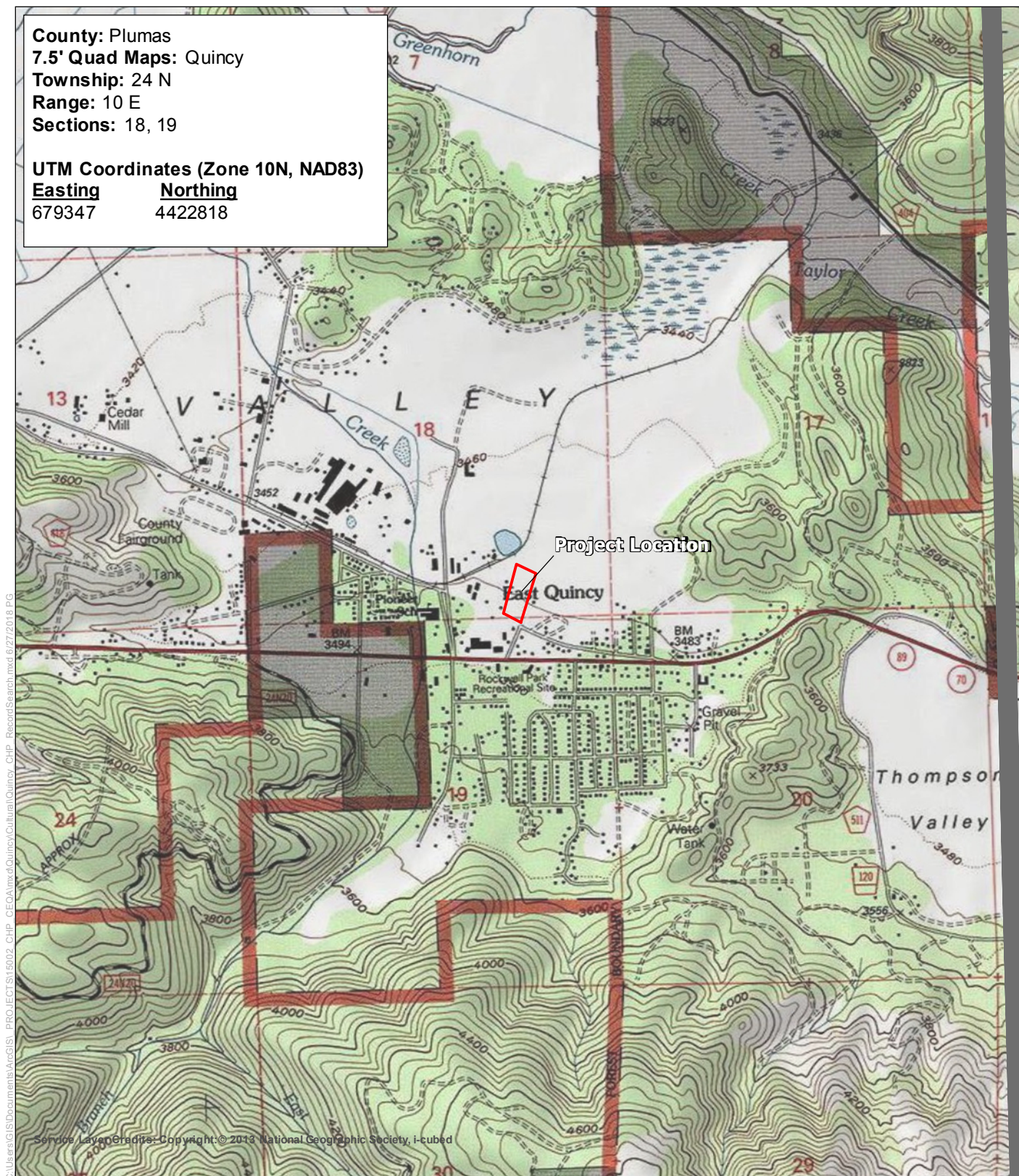


**California Highway Patrol Quincy  
Area Office Replacement Project**

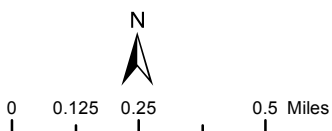


County: Plumas  
 7.5' Quad Maps: Quincy  
 Township: 24 N  
 Range: 10 E  
 Sections: 18, 19

UTM Coordinates (Zone 10N, NAD83)  
 Easting Northing  
 679347 4422818



**FIGURE 2**  
**Project Location**

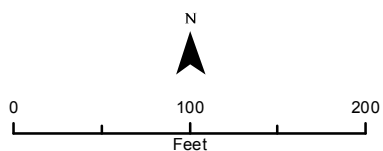




 Project Footprint





**Figure 3**  
**Area of Potential Effects**



-  Area of Potential Effects
-  Pole Barn Site Location

## 1.3 Regulatory Setting and Need for Study

### 1.3.1 State of California Regulations

#### *CEQA and State CEQA Guidelines*

The proposed project must comply with California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq. and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3), which determine, in part, whether the project has a significant effect on a unique archaeological resource (per PRC 21083.2) or a historical resource (per PRC 21084.1).

CEQA Guidelines CCR 15064.5 notes that “a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.” Lead agencies are required to identify potentially feasible measures or alternatives to avoid or mitigate significant adverse changes in the significance of a historical resource before such projects are approved. According to the CEQA guidelines, historical resources are:

- Listed in, or determined to be eligible for listing in, the California Register of Historical Resources (per PRC 5024.1(e));
- Included in a local register of historical resources (per PRC 5020.1(k)) or identified as significant in a historical resource survey meeting the requirements of PRC 5024.1(g); or
- Determined by a lead state agency to be historically significant.

CEQA Guidelines CCR 15064.5 also applies to unique archaeological resources as defined in PRC 21084.1.

Assembly Bill 52, which went into effect on July 1, 2015, requires, per PRC 21080.3.1, that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe, and if the agency intends to release a negative declaration, mitigated negative declaration, or environmental impact report for a project. The bill also specifies, under PRC 21084.2, that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource (TCR) is considered a project that may have a significant effect on the environment. This latter language was added to the CEQA checklist in September 2016. DGS, as the project’s CEQA lead agency, consulted with Native American tribes pursuant to PRC 21080.3.1.

As defined in Section 21074(a) of the PRC, TCRs are:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
  - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074(b) and (c) as follows:

- (b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to the newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

### ***California Register of Historical Resources***

PRC Section 5024.1 establishes the California Register of Historical Resources (CRHR). This register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed, or determined to be eligible for listing, in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

- 1) Are associated with the events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- 2) Are associated with the lives of persons important in our past;
- 3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
- 4) Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

### **1.3.2 Federal Regulations**

The proposed project does not require any federal permits, and it is not located on federal lands; therefore, federal laws do not apply to the proposed project. The following laws are provided for context only.

The implementing regulations of the NHPA require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking (proposed project). To determine site significance through application of NRHP criteria, several levels of potential significance that reflect different (although not necessarily mutually exclusive) values must be considered. As provided in Title 36 CFR Section 60.4, “the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association” and must be considered within the historic context. Resources must also be at least 50 years old, except in rare cases, and, to meet eligibility criteria of the NRHP, must:

- (A) Be associated with events that have made a significant contribution to the broad patterns of our history; or
- (B) Be associated with the lives of persons significant in our past; or
- (C) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) Have yielded, or may be likely to yield, information important in prehistory or history.

For archaeological sites evaluated under criterion (D) above, integrity requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

Cultural resources also may be considered separately under the National Environmental Protection Act per Title 42 USC Sections 4321 through 4327. These sections require federal agencies to consider potential environmental impacts and appropriate mitigation measures for projects with federal involvement.

## 1.4 Personnel

Fieldwork, analysis, and reporting were carried out by the below-listed professional who meets the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation (per Title 48 of the CFR, Section 44716, as amended in 1983). Procedures complied with NHPA Section 106 as set forth in Title 36 of the CFR, Section 800.

- **Janis Offermann, Registered Professional Archaeologist** (Horizon), conducted the archaeological field survey and prepared this report. She has a Bachelor’s degree in Anthropology from Sonoma State College (now University) in Rohnert Park, California, and a Master’s degree in Anthropology from the University of California at Davis. She has more than 40 years of experience in California archaeology and cultural resource management. Ms. Offermann is the cultural resources practice leader with Horizon.



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## **2 Project Context**

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### **2.1 Prehistoric Context**

Little archeological excavation has taken place in the high mountain valleys of Plumas County, and work that has occurred has largely been in Big Meadows in relationship to Lake Almanor. As a result, the archaeological sequence for the region is based on fairly limited local data and relies heavily on information from the Tahoe area and the west slopes of the northern Sierra Nevada in Plumas and Butte counties, and in particular the Lake Oroville area. This section presents a brief summary of the cultural-historical sequence recognized in the region.

#### **Paleo-Indian Period (Prior to 8000 Years Before Present [BP])**

The people living in this period were likely hunters of big game, who were highly mobile and who lived in small groups. Artifacts representing their presence usually include large fluted or stemmed spear points; only one of which has been discovered in the project region (Compas 2002:91).

#### **Early Archaic (8000 to 3000 BP)**

The Early Archaic represents a time when populations began to rely more on seeds and other plant foods, rather than focusing on large game. This is evidenced by the presence of milling equipment such as handstones and milling slabs. Pinto and Borax Lake style dart points become the norm. There is little data to suggest that the high mountain valleys of the northern Sierra Nevada were occupied during this time period (Compas 2002:91).

#### **Mesilla Complex (3000 to 2000 BP)**

By 3000 BP, during the Middle Archaic, the archaeological record becomes more abundant in the high mountain valleys. The dart and atlatl were introduced during the time period referred to as the Mesilla Complex in the project region. The dart points were leaf-shaped, stemmed, and corner-notched styles that reflected influence from the Martis tradition that spread northward from the Tahoe basin. Projectile points were largely manufactured from basalt, slate, and chert. Handstones and milling slabs continued to be used for processing seeds, though bowl mortars and cylindrical pestles also appeared at this time. Other Mesilla traits included *Haliotis* and *Olivella* shell beads, along with charm stones and bone pins, all of which indicate trade with Central Valley populations. Archaeological data suggest that occupation of the mountains was by small groups who accessed the region seasonally (Moratto 2004:299).

#### **Bidwell Complex (2000 BP to 1200 BP)**

The large dart points and milling equipment of the Mesilla Complex persisted into the Upper Archaic Bidwell Complex; however, the mortar and pestle became more common and, where available, use of steatite vessels for cooking now came into play. Data also indicate that settlements were more permanent and there was greater exploitation of riverine resources, as evidenced by the presence of grooved and notched net sinker stones used for fishing, and fresh water mussel shells (Moratto 2004:299-300).

## Sweetwater Complex (1200 BP to 500 BP)

The Sweetwater Complex is marked by the introduction of the bow and arrow into the region. This is evidenced by the presence of small, light-weight, stemmed and notched or barbed projectile point styles, which suggest influences from both the northwest portions of California and the Great Basin or Tahoe regions. In the Oroville vicinity, the steatite industry also expanded to include cups, platters, bowls, and tubular smoking pipes (Moratto 2004:300). The ancestral Maidu moved into the region sometime during this period (Compas 2002:92), bringing such characteristic traits as an expanded bone tool industry and the use of bedrock mortars that reflects a developed use of acorns (Moratto 2004:300).

## 2.2 Ethnohistoric Context

The project area is in the ethnographic territory of the Mountain, or Northeastern Maidu, who occupied the northern Sierra Nevada, including all of Plumas County and adjacent portions of Butte and Lassen counties (Riddell 1978:370-386). Their extensive lands reached from the Sierra Buttes in the south, north to Lassen Peak and Eagle Lake. The western boundary was just downstream of Richbar on the North Fork Feather River and Pilot Peak, while the eastern territory prehistorically extended into the Great Basin and encompassed Honey Lake. The high mountain valleys (Mountain Meadows, Big Meadows, Butt, American, Indian, Genesee, and Red Clover valleys) and the area around Susanville were the major tribelet centers for the Mountain Maidu, where permanent communities were maintained. Habitation in the area around Quincy in American Valley was particularly dense. This vast range provided the Mountain Maidu with a variety of ecosystems that could be drawn from for subsistence. These included mixed-conifer mountain forests and the marshlands around Honey Lake. Additionally, groves of black oak are found along the eastern base of the northern Sierra Nevada, which yielded much-sought-after acorns.

As previously mentioned, as tribelet centers, the permanent Mountain Maidu communities were located in the mountain valleys. These centers included a main village and surrounding smaller housing clusters. The largest village was generally the home of the tribelet headman, and contained a large semi-subterranean lodge used for tribelet ceremonies. The central villages likely contained up to seven semi-subterranean houses or conical bark houses, while smaller surrounding villages consisted of three to five dwellings. Shade shelters were constructed as temporary structures when community members travelled to other regions of the territory during the summer months to hunt and collect acorns or other vegetal goods.

The Mountain Maidu language is one of three closely related Maiduan languages. The other two languages, Konkow Maidu and Nisenan, are spoken by their neighbors immediately to the west and south, respectively. The three Maiduan groups were also culturally similar and actively interacted and traded with one another. In addition to trading with their linguistic and cultural relatives, the Mountain Maidu regularly traded with the Achumawi who lived along their northern border. In exchange for deer hides and bows, the Mountain Maidu received obsidian from the Achumawi, which was the preferred material for making sharp stone tools such as arrow points and knives (Riddell 1978:380).

The Greenville Rancheria, in Greenville (Indian Valley), is the closest tribe to the proposed project site. It is a federally recognized tribe. The Rancheria in Greenville was originally established on 275 acres in the late 1880s when the Bureau of Indian Affairs established a non-boarding school on land that was eventually held in trust for the Mountain Maidu. The Greenville Rancheria was

abolished in 1958 when the U.S. government withdrew the tribe's federal recognition under the California Rancheria Act. At that time tribal members were provided land holdings in fee status. However, without the protection of the federal trust status, many of the Maidu families lost their lands and were forced to leave the area for economic reasons; more than half of the tribe ultimately moved to the area around Red Bluff in Tehama County. The tribe regained its federal status in 1983 after winning a law suit against the federal government for wrongful termination of their legal status. Unfortunately, the tribe was left without a viable land base by that time. The tribe currently holds several small parcels of land in Greenville, Red Bluff and Redding, all in fee status. It successfully provides medical services to tribal members, and others, at three clinics in Greenville, Red Bluff, and Redding. It also supports an active Tribal Environmental Protection Agency and Cultural Department (Greenville Rancheria 2018).

## 2.3 Historic-Era Context

The historic era in Plumas County and the vicinity of Quincy began in 1848 when Peter Lassen pioneered a new route into California's Central Valley from Goose Lake in present-day Modoc County. The route passed through Big Meadows (now Lake Almanor) and southwest to the vicinity of Vina in the Valley (Kyle et al. 2002:282-283). During the subsequent years, with the advent of the Gold Rush, hundreds of individuals used the trail to pass through the county in search of fortune. It was not until 1849 or 1850 that the gold seekers began to explore what riches the rivers of the Plumas County region might contain, and by the spring of 1851 thousands of gold miners were streaming into the county. James Beckwith (aka Beckwourth) discovered a new route into Plumas County from the east, travelling through American Valley on his way to the Pitt River region in 1851 (Kyle et al. 2002:282). This pass, Beckworth Pass, is the lowest elevation pass over the Sierra Nevada, which allowed immigrants to move into California. Pioneers began settling in the high mountain valleys during 1852. One such early pioneer was James H. Bradley, who settled in American Valley. Bradley established the American Ranch and built a hotel, called the American Hotel (the site is now State Landmark 479), for travelers. Bradley was one of the three original county commissioners when Plumas County was split off from Butte County in 1854 and, due to his influence, the hotel became the seat of justice for the county. At this time, Bradley named the growing community Quincy, after his home town in Illinois (Kyle et al. 2002:286). During the next few years the town acquired a Masonic Hall, courthouse, post office, and jail. After numerous fires destroyed most of the earliest structures in town, including the American Hotel, the community constructed a firehouse in 1878.

Mining, agriculture, and lumber have long been the economic standards for Plumas County, and the Quincy area. Once gold was discovered in the regional rivers and streams, mining camps became prevalent throughout the region. The high mountain valleys were agricultural centers from the time of the earliest settlements by Anglo-Americans. Fruits and vegetables were grown early on in 1851 and 1852, but by 1853 wheat, oats, and barley were commonplace; so much so that the first flour mill in the county was built in American Valley in 1854. Timber was originally cut in order to supply settlers with lumber for their homes and outbuildings, but sawmills quickly sprang up by 1853. The Quincy Railroad was built in 1910 to ship lumber and provide passenger service to American Valley residents. Originally incorporated as the Quincy & Eastern Railway, and reorganized as the Quincy Western Railway, and then the Quincy Railroad, the line ran for about 5.5 miles between downtown Quincy and almost to East Quincy before turning north to join the Western Pacific Railroad line at Quincy Junction. Passenger service ended in the 1950s, and the line currently runs for 3.27 miles between Quincy Junction and Bell Lane, just east of the project site (Union Pacific 2015). The local Quincy economy continues to be supported by mining, ranching, and lumber, and by its position as the County seat.

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### 3 Native American Consultation and Archival Research

In accordance with the Secretary of the Interior's Standards and the Guidelines for Archaeology and Historic Preservation (Title 48 CFR Section 44716 [amended 1983]), the goals of this archaeological inventory were to identify and completely document the location, qualities, and condition of any potential historic properties in the project's APE. Methods employed to achieve these goals follow.

#### 3.1 Native American Consultation

An email request was made to the Native American Heritage Commission (NAHC) on July 11, 2018, to review its files for the presence of recorded sacred sites on the project site. The NAHC responded on July 12, 2018, stating that no significant resources were identified in the project area as a result of a search of their files. The NAHC also provided a list of nine tribes and tribal contacts with a traditional and cultural affiliation with the project area for notification pursuant to PRC 21080.3.1 (Assembly Bill 52).

No tribes with a traditional and cultural affiliation to the project area have requested consultation with CHP on department projects pursuant to PRC 21080.3.1. However, in the spirit of PRC 21080.3.1, DGS, on behalf of CHP, notified local tribes who were identified by the NAHC as having a traditional and cultural association with the project area about the project via letters dated July 18, 2018. DGS did not received any tribal requests for consultation on the project. **Table 1** lists all those contacted and summarizes the results of the consultation. All correspondence between the NAHC, Native American tribes, CHP, and DGS is provided in **Appendix A**.

**Table 1. Native American Consultation**

Organization/Tribe	Name of Contact	Letter Date	Comments
Estom Yumeka Maidu Tribe of the Enterprise Rancheria	Glenda Nelson, Chairperson	July 18, 2018	No response from the tribe
Greenville Rancheria of Maidu Indians	Kyle Self, Chairperson	July 18, 2018	No response from the tribe
Honey Lake Maidu	Paul Garcia, Chairperson	July 18, 2018	No response from the tribe
Honey Lake Maidu	Ron Morales, Chairperson	July 18, 2018	No response from the tribe
Mooretown Rancheria of Maidu Indians	Gary Archuleta, Chairperson	July 18, 2018	No response from the tribe
Susanville Rancheria	Brandon Guitierrez, Chairperson	July 18, 2018	No response from the tribe
Tsi Akim Maidu	Don Ryberg, Chairperson	July 18, 2018	No response from the tribe
Washoe Tribe of Nevada and California	Neil Mortimer, Chairperson	July 18, 2018	No response from the tribe
Washoe Tribe of Nevada and California	Darrel Cruz, Cultural Resources Department	July 18, 2018	No response from the tribe

## 3.2 Archival Research

Cultural resources include prehistoric archaeological sites, historic-era archaeological sites, TCRs, and historic buildings, structures, landscapes, districts, and linear features. A records search was conducted by the NEIC of the CHRIS at California State University, Chico. The purpose of the record search was to identify the presence of any previously recorded cultural resources within the project site, and to determine whether any portions of the project site had been surveyed for cultural resources. The record search (NEIC File #D18-101) indicated that one previous survey had been conducted at the south edge of the project parcel directly adjacent and parallel to Lee Road. The survey was along the Caribou-Pumas 60kV transmission line for PG&E (Cardno ENTRIX 2012). An additional 12 surveys had been conducted within the ½-mile record search buffer. No cultural resources had previously been recorded within the project parcel although two historic-era resources had been recorded within the ½-mile search buffer; these included the building at 1905 East Main Street and the Murphy Lumber Company Railroad. The NEIC record search results are provided in **Appendix B**.

The project site is underlain by Holocene alluvial fan deposits identified as part of the Forgay-Urban land complex (Natural Resources Conservation Service 2018). This soil generally consists of gravelly coarse sandy loam with a depth of over 80 inches. The Holocene deposits have the potential to contain buried archaeological materials.

A Phase I Environmental Site Assessment for the project parcel included research on the historical uses of the property (SHN Consulting Engineers & Geologists, Inc. 2017:6-10). This research involved interviews and examination of historical topographic maps from 1891 through 2012 and aerial photographs dating from 1946 through 2012. The topographic maps indicate that the property has never been developed. Those interviewed confirmed that the land has been continuously used for ranching since the late 1800s, except when a portion of the property was used as an airstrip in the 1930s and 1940s. The presence of an airstrip is corroborated in a 1946 aerial photograph. A pole barn is visible near the east edge of the property in the 1986, 1998, and 2005 aerial photographs; by 2009 the barn has been demolished and only remnants are visible.

A request for information was made to the Plumas County Museum in Quincy via email on July 18, 2018, for any information the organization has about significant historic-era resources within the project site. Scott Lawson (Lawson 2018), from the Plumas County Museum, responded by email on the same day, noting that the property was once part of the Alford Ranch, which was one of the first ranches settled in the American Valley in the 1850s. It was sold to Samuel Lee sometime in the 1860s or 1870s, and has remained in the family since that time. Mr. Lawson also stated that the Sky Harbor Airport was on the property for a short time in the mid-1900s. According to Mr. Lawson, the structure remains are “from a relatively recent barn.”

## 4 Inventory Methods and Results

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An archaeological survey was conducted of the project site on June 28, 2018, by a professional archaeologist from Horizon Water and Environment. The archaeological field survey included pedestrian transects spaced approximately 30 feet apart. Ground surface visibility was generally good with only sparse dry grasses located in patches throughout the property. Trees are restricted primarily to the west fence line; a single apple tree is on the east fence. A culvert under Lee Road drains water into a shallow ditch in the southeast corner of the parcel. The sidewalls of the ditch were examined for subsurface archaeological materials, as was the backdirt from abundant ground rodent burrows.

Cultural resources on site consist of the remains of the pole barn visible in the aerial photographs from 1986 to 2005. The remains include two trusses (one complete and one fragmented), segments of sheet metal, milled lumber, a few concrete blocks, and a metal stock gate. No foundation for the pole barn was observed. Photographs were taken of the remains and a Department of Parks and Recreation primary record was prepared; the primary record is included as **Appendix C**. The pole barn originated less than 50 years ago; therefore, the remains do not meet the age criteria for NRHP/CRHR eligibility.

Additional isolated historic-era items were scattered across the property. These included three brick fragments, one smashed tin can, a thin piece of sheet metal, and a flattened metal flask.



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## 5 Summary and Recommendations

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The CHP is proposing to replace its existing Quincy Area Office as part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. Archival research and pedestrian surveys did not identify any archaeological resources within the project's APE. A pedestrian survey of the parcel resulted in the recordation of the remains of a collapsed pole barn. Research indicates that construction of the pole barn dates to the early 1980s, and the collapse occurred between 2005 and 2009. The remains do not meet the age requirement for listing in the NRHP/CRHR; therefore, the site was not evaluated for significance.

Archaeological sites may be buried with no surface manifestation. Furthermore, as noted, the Holocene soils that underlie the project location have the potential to contain buried archaeological remains. If prehistoric or historic-era materials are encountered, all work in the vicinity should halt until a qualified archaeologist can evaluate the discovery and make recommendations in accordance with 36 CFR Section 800.13(b). Prehistoric materials would most likely include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), tool-making debris, or milling equipment such as mortars and pestles. Historic-era materials might include remains of agricultural implements; stone or concrete footings and walls; and deposits of metal, glass, and/or ceramic refuse.

The possibility of encountering human remains cannot be discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial. If human remains are encountered, work should halt in the vicinity of the remains and, as required by law, the Plumas County coroner should be notified immediately. An archaeologist should also be contacted to evaluate the find. If human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of that determination. Pursuant to PRC 5097.98, the NAHC, in turn, will immediately contact an individual who is most likely descended from the remains (the "Most Likely Descendant"). The Most Likely Descendant has 48 hours to inspect the site and recommend treatment of the remains. The landowner is obligated to work with the Most Likely Descendant in good faith to find a respectful resolution to the situation and entertain all reasonable options regarding the Most Likely Descendant's preferences for treatment.

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## 6 References

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- Compas, Lynn. 2002. Prehistoric and Ethnographic Land Use at Lake Almanor: A Tribute to Dr. Makoto Kowta. *Proceedings of the Society for California Archaeology*, Volume 16.
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- Kyle, Douglas E., Hoover, Mildred, Hero Eugene Rensch, and Ethel Grace Rensch. 2002. *Historic Spots in California*. 5th edition, Stanford, CA: Stanford University Press.
- Lawson, Scott. 2018. Email response on July 18, 2018 to an information request addressed to the Plumas County Historical Society.
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- Riddell, Francis. 1978. Maidu and Konkow. Pp. 370-386 in *California, Handbook of North American Indians*, edited by Robert F. Heizer (William C. Sturtevant, general editor). Washington, D.C.: Smithsonian Institution Press.
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- Union Pacific. 2018. Quincy Railroad QRR #656. Accessed August 29, 2018, [https://www.up.com/customers/shortline/profiles\\_q-s/qr/index.htm](https://www.up.com/customers/shortline/profiles_q-s/qr/index.htm).

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## **Appendix A**

### **Native American Correspondence**

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## Local Government Tribal Consultation List Request

### Native American Heritage Commission

1550 Harbor Blvd, Suite 100  
West Sacramento, CA 95691  
916-373-3710  
916-373-5471 – Fax  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

#### Type of List Requested

☒ **CEQA Tribal Consultation List (AB 52)** – *Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2*

☐ **General Plan (SB 18)** - *Per Government Code § 65352.3.*

#### **Local Action Type:**

☐ **General Plan**   ☐ **General Plan Element**   ☐ **General Plan Amendment**

☐ **Specific Plan**   ☐ **Specific Plan Amendment**   ☐ **Pre-planning Outreach Activity**

#### Required Information

**Project Title:** CHP Quincy Area Office Relocation Project

**Local Government/Lead Agency:** CHP/DGS

**Contact Person:** Jennifer Parson

**Street Address:** 707 Third Street, Suite 4-430

**City:** West Sacramento      **Zip:** 95605

**Phone:** 916-376-1604      **Fax:** \_\_\_\_\_

**Email:** jennifer.parson@dgs.ca.gov

#### **Specific Area Subject to Proposed Action**

**County:** Plumas      **City/Community:** Quincy

#### **Project Description:**

The California Highway Patrol is proposing to replace its currenty office in Quincy with a new office located about 2 miles to the east.

#### Additional Request

☒ **Sacred Lands File Search - Required Information:**

**USGS Quadrangle Name(s):** Quincy

**Township:** 24N      **Range:** 10E      **Section(s):** 18, 19



**NATIVE AMERICAN HERITAGE COMMISSION**

Environmental and Cultural Department  
1550 Harbor Blvd., Suite 100  
West Sacramento, CA 95691  
(916) 373-3710



July 12, 2018

Jennifer Parson  
Department of General Services / California Highway Patrol

Sent by E-mail: Jennifer.parson@dgs.ca.gov

RE: Proposed CHP Quincy Area Office Relocation Project, City of Quincy; Quincy USGS Quadrangle, Plumas County, California

Dear Ms. Parson:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent of the reference codes below is to avoid or mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

**Within 14 days** of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
  - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
  - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
  - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:
  - Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the project with negative results.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: [gayle.totton@nahc.ca.gov](mailto:gayle.totton@nahc.ca.gov).

Sincerely,



Gayle Totton, M.A., PhD.

Associate Governmental Program Analyst

**Native American Heritage Commission  
Tribal Consultation List  
Plumas County  
7/12/2018**

***Estom Yumeka Maidu Tribe of  
the Enterprise Rancheria***

Glenda Nelson, Chairperson  
2133 Monte Vista Avenue                      Maidu  
Oroville, CA, 95966  
Phone: (530) 532 - 9214  
Fax: (530) 532-1768  
info@enterpriserancheria.org

***Greenville Rancheria of Maidu  
Indians***

Kyle Self, Chairperson  
P.O. Box 279    Maidu  
Greenville, CA, 95947  
Phone: (530) 284 - 7990  
Fax: (530) 284-6612  
kself@greenvillerrancheria.com

***Honey Lake Maidu***

Paul Garcia, Chairperson  
7029 Polvadero Drive                              Maidu  
San Jose, CA, 95119  
Phone: (408) 499 - 1565  
drinkwiz@sbcglobal.net

***Honey Lake Maidu***

Ron Morales, Chairperson  
1101 Arnold Street                                      Maidu  
Susanville, CA, 96130  
Phone: (530) 257 - 3275

***Mooretown Rancheria of Maidu  
Indians***

Gary Archuleta, Chairperson  
#1 Alverda Drive                                      KonKow  
Oroville, CA, 95966                                      Maidu  
Phone: (530) 533 - 3625  
Fax: (530) 533-3680  
frontdesk@mooretown.org

***Susanville Indian Rancheria***

Brandon Guitierrez, Chairperson  
745 Joaquin Street                                      Maidu  
Susanville, CA, 96130                                      Paiute  
Phone: (530) 257 - 6264                                      Pit River  
Fax: (530) 257-7986                                      Washoe  
sirtribalchair@citlink.net

***Tsi Akim Maidu***

Don Ryberg, Chairperson  
P.O. Box 510    Maidu  
Browns Valley, CA, 95918  
Phone: (530) 274 - 7497  
tsi-akim-maidu@att.net

***Washoe Tribe of Nevada and  
California***

Darrel Cruz, Cultural Resources  
Department  
919 Highway 395 South                              Washoe  
Gardnerville, NV, 89410  
Phone: (775) 265 - 8600  
darrel.cruz@washoetribe.us

***Washoe Tribe of Nevada and  
California***

Neil Mortimer, Chairperson  
919 Highway 395 South                              Washoe  
Gardnerville, NV, 89410  
Phone: (775) 782 - 0014  
ktrovato@washoetribe.us

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed CHP Quincy Area Office Relocation Project, Plumas County.

July 18, 2018

Gary Archuleta, Chairperson  
Mooretown Rancheria of Maidu Indians  
#1 Alverda Drive  
Oroville, CA 95966

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Archuleta:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

CHP is proposing to consolidate the current office at 86 West Main Street, Quincy, and replace it with a proposed new office located on 5 acres at 2037 Lee Road in Quincy, California. The proposed project site is about 500 feet north of State Route 70 and about 2 miles east of the existing facility. This project is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the Quincy Area Office and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to the office. The proposed new facilities would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

A Sacred Lands and Files Search request at the Native American Heritage Commission (NAHC) did not identify any known tribal resources within the project area. However, the NAHC has indicated that local tribes may have information that may not be on file at the NAHC, and your contact information was provided on their List of Native American Contacts for the area as a traditionally and culturally affiliated California Native American tribal representative. We are requesting any information that you may have regarding tribal cultural resources (as defined by Public Resources Code 21074) within the project area so that this information can be incorporated into project planning. DGS is respectfully requesting input from you within 30 days of receipt of this letter.

Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at [Jennifer.Parson@dgs.ca.gov](mailto:Jennifer.Parson@dgs.ca.gov) or by phone at (916) 376-1604.

Sincerely,



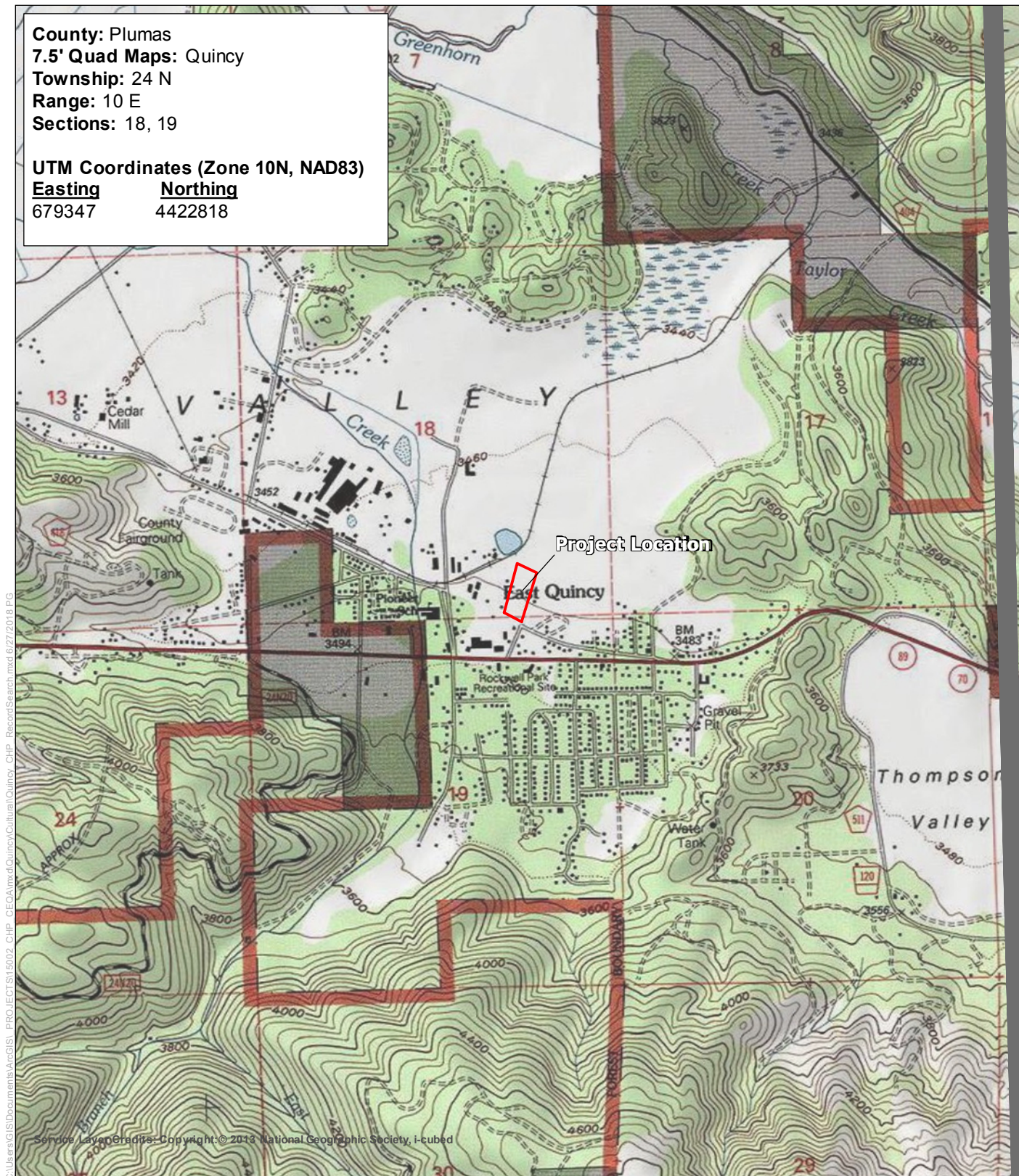
Jennifer Parson  
Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map  
Figure 2 – Project Site

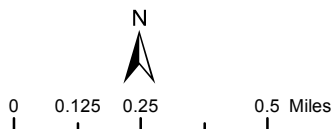


**County:** Plumas  
**7.5' Quad Maps:** Quincy  
**Township:** 24 N  
**Range:** 10 E  
**Sections:** 18, 19

**UTM Coordinates (Zone 10N, NAD83)**  
**Easting**      **Northing**  
 679347      4422818



**Figure 1 Project Vicinity Map**



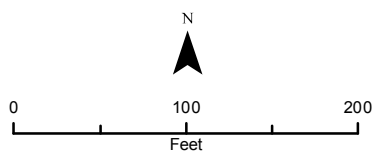
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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Darrel Cruz, Cultural Resources Department  
Washoe Tribe of Nevada and California  
919 Highway 395 South  
Gardnerville, NV, 89410

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Mr. Cruz:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

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Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at [Jennifer.Parson@dgs.ca.gov](mailto:Jennifer.Parson@dgs.ca.gov) or by phone at (916) 376-1604.

Sincerely,

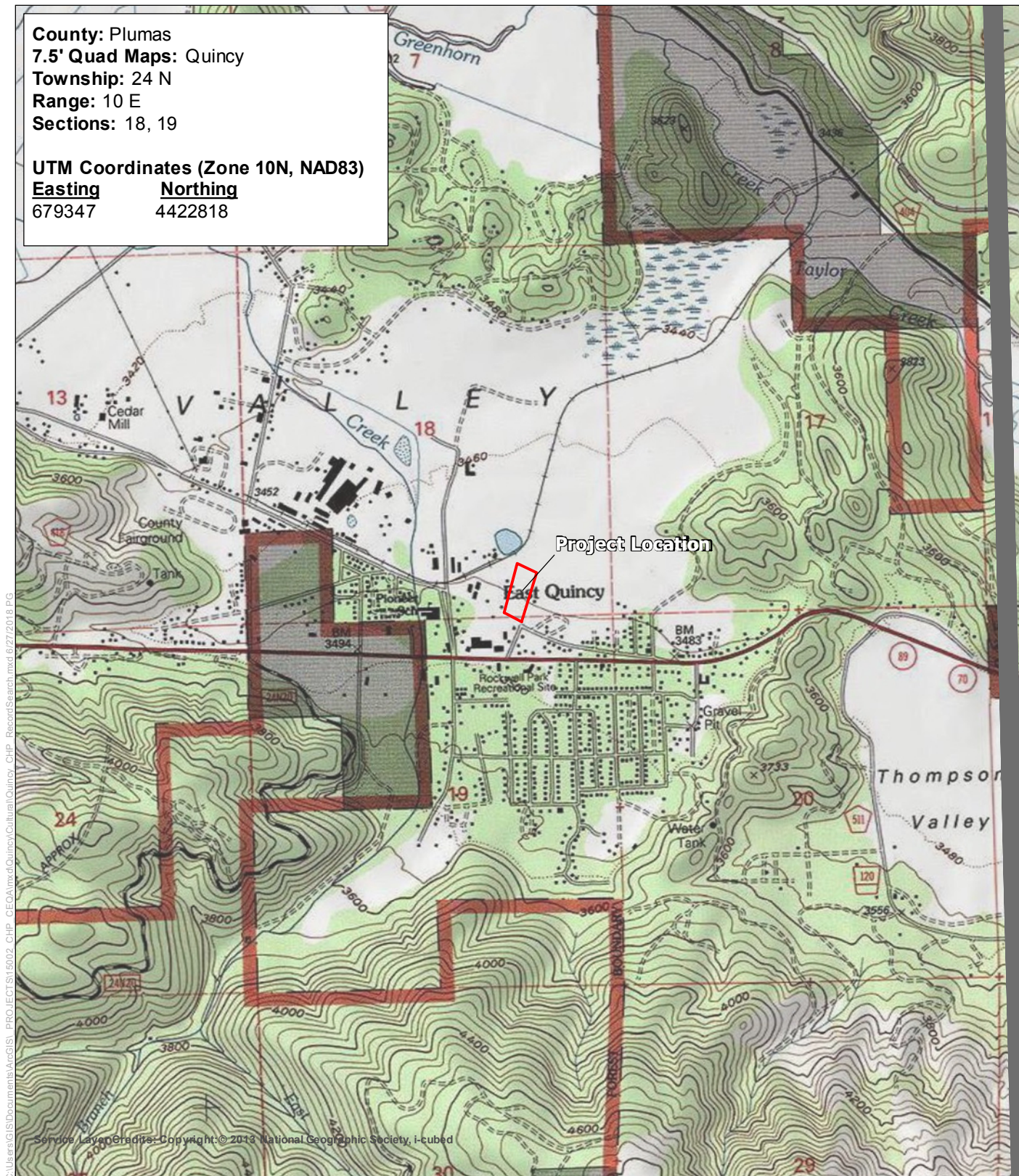


Jennifer Parson  
Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map  
Figure 2 – Project Site

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**Township:** 24 N  
**Range:** 10 E  
**Sections:** 18, 19

**UTM Coordinates (Zone 10N, NAD83)**  
**Easting**      **Northing**  
679347      4422818



**Figure 1 Project Vicinity Map**



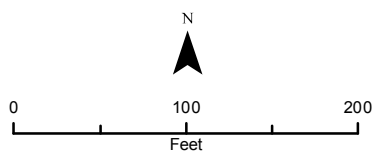
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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Paul Garcia, Chairperson  
Honey Lake Maidu  
7029 Polvadero Drive  
San Jose, CA 95119

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Garcia:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

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Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at [Jennifer.Parson@dgs.ca.gov](mailto:Jennifer.Parson@dgs.ca.gov) or by phone at (916) 376-1604.

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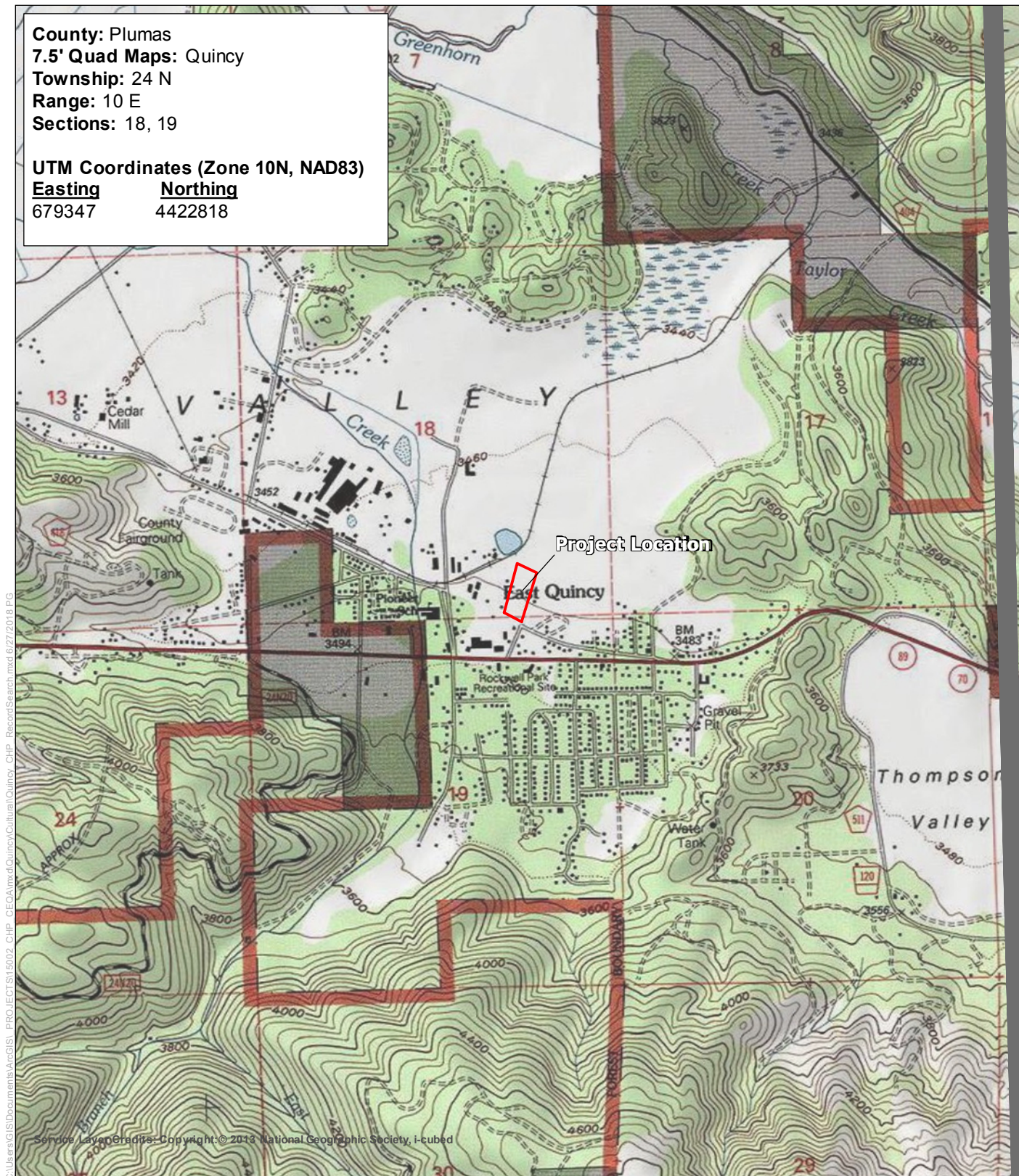
Jennifer Parson  
Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map  
Figure 2 – Project Site

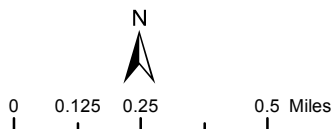


**County:** Plumas  
**7.5' Quad Maps:** Quincy  
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**Range:** 10 E  
**Sections:** 18, 19

**UTM Coordinates (Zone 10N, NAD83)**  
**Easting**      **Northing**  
 679347      4422818



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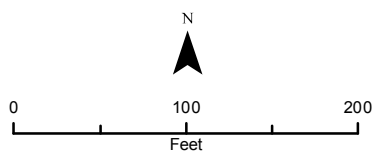
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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Brandon Guitierrez, Chairperson  
Susanville Indian Rancheria  
745 Joaquin Street  
Susanville, CA 96130

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Guitierrez:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

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Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at [Jennifer.Parson@dgs.ca.gov](mailto:Jennifer.Parson@dgs.ca.gov) or by phone at (916) 376-1604.

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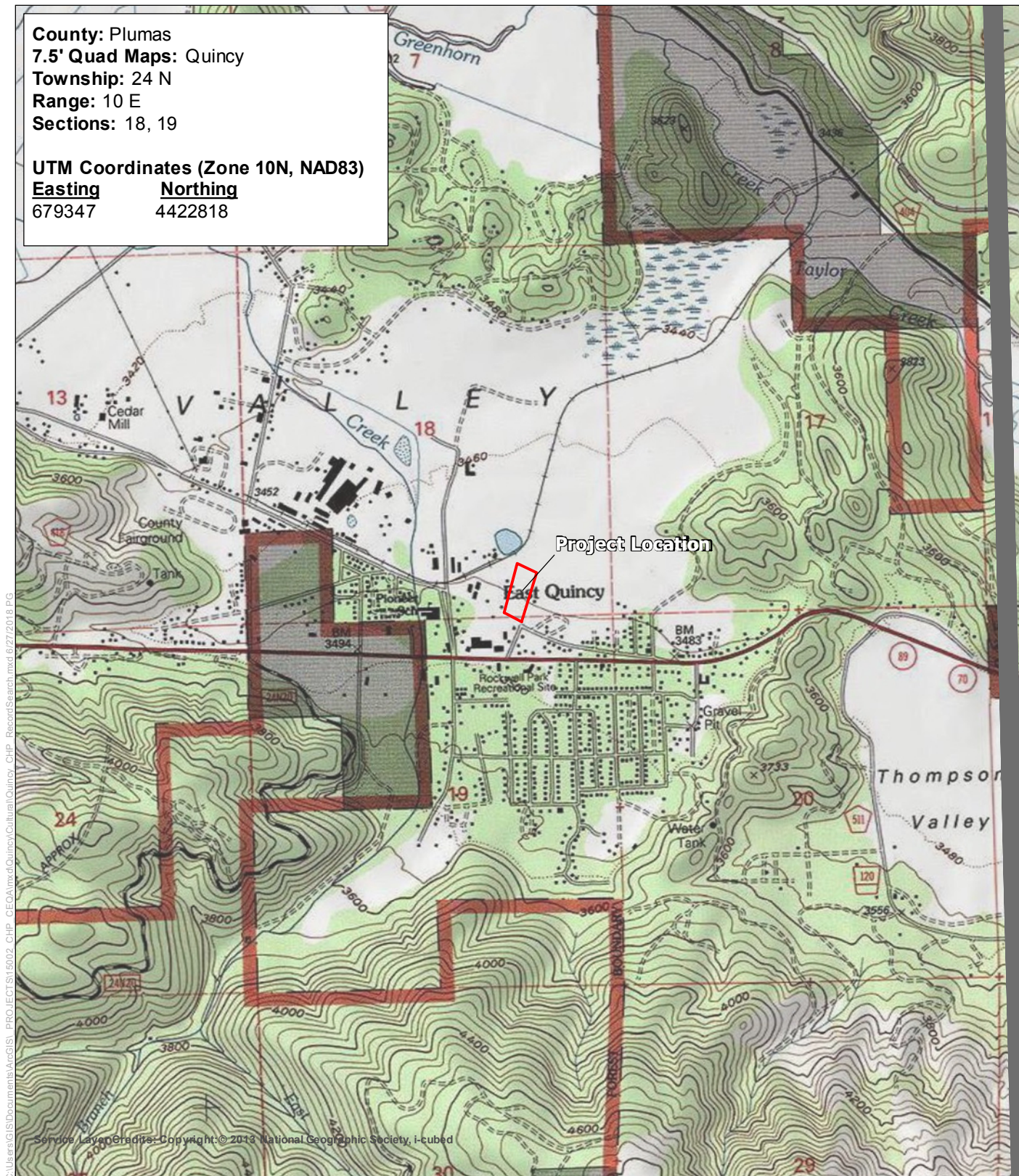


Jennifer Parson  
Senior Environmental Planner

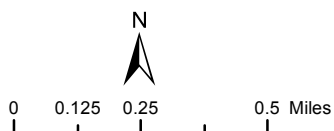
Enclosures: Figure 1 – Project Vicinity Map  
Figure 2 – Project Site

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**7.5' Quad Maps:** Quincy  
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**Range:** 10 E  
**Sections:** 18, 19

**UTM Coordinates (Zone 10N, NAD83)**  
**Easting**      **Northing**  
 679347      4422818



**Figure 1 Project Vicinity Map**



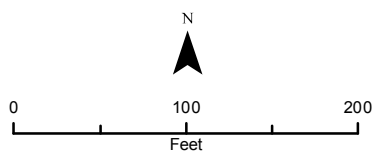
 Project Footprint



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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Ron Morales, Chairperson  
Honey Lake Maidu  
1101 Arnold Street  
Susanville, CA 96130

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Morales:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

CHP is proposing to consolidate the current office at 86 West Main Street, Quincy, and replace it with a proposed new office located on 5 acres at 2037 Lee Road in Quincy, California. The proposed project site is about 500 feet north of State Route 70 and about 2 miles east of the existing facility. This project is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the Quincy Area Office and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to the office. The proposed new facilities would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

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Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at [Jennifer.Parson@dgs.ca.gov](mailto:Jennifer.Parson@dgs.ca.gov) or by phone at (916) 376-1604.

Sincerely,



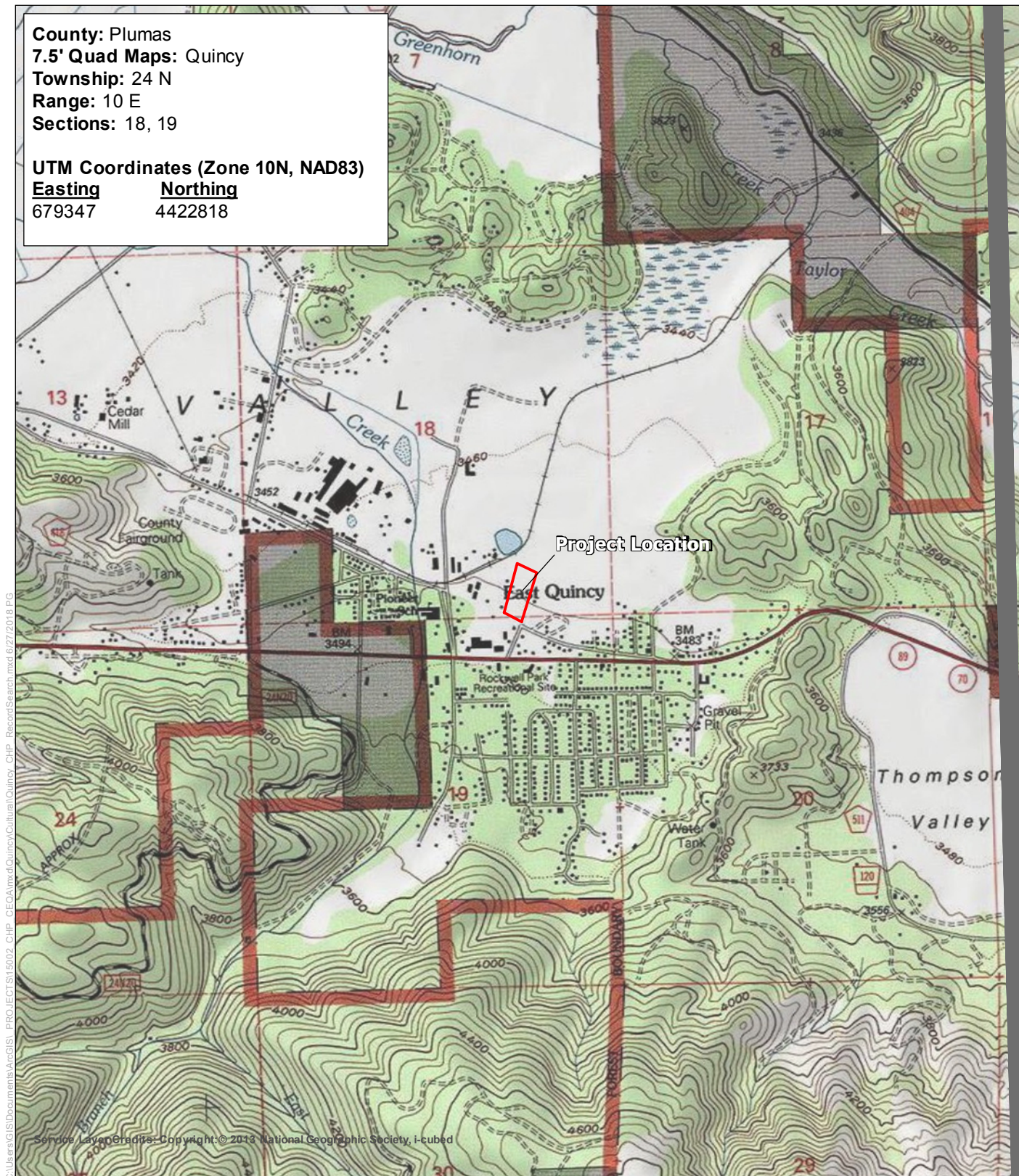
Jennifer Parson  
Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map  
Figure 2 – Project Site



**County:** Plumas  
**7.5' Quad Maps:** Quincy  
**Township:** 24 N  
**Range:** 10 E  
**Sections:** 18, 19

**UTM Coordinates (Zone 10N, NAD83)**  
**Easting**      **Northing**  
 679347      4422818



**Figure 1 Project Vicinity Map**



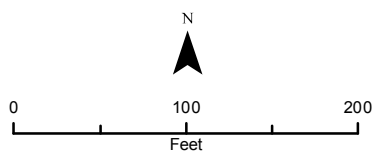
Project Footprint



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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Neil Mortimer, Chairperson  
Washoe Tribe of Nevada and California  
919 Highway 395 South  
Gardnerville, NV, 89410

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Mortimer:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

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A Sacred Lands and Files Search request at the Native American Heritage Commission (NAHC) did not identify any known tribal resources within the project area. However, the NAHC has indicated that local tribes may have information that may not be on file at the NAHC, and your contact information was provided on their List of Native American Contacts for the area as a traditionally and culturally affiliated California Native American tribal representative. We are requesting any information that you may have regarding tribal cultural resources (as defined by Public Resources Code 21074) within the project area so that this information can be incorporated into project planning. DGS is respectfully requesting input from you within 30 days of receipt of this letter.



Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at [Jennifer.Parson@dgs.ca.gov](mailto:Jennifer.Parson@dgs.ca.gov) or by phone at (916) 376-1604.

Sincerely,



Jennifer Parson  
Senior Environmental Planner

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Figure 2 – Project Site

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**Easting**      **Northing**  
 679347      4422818

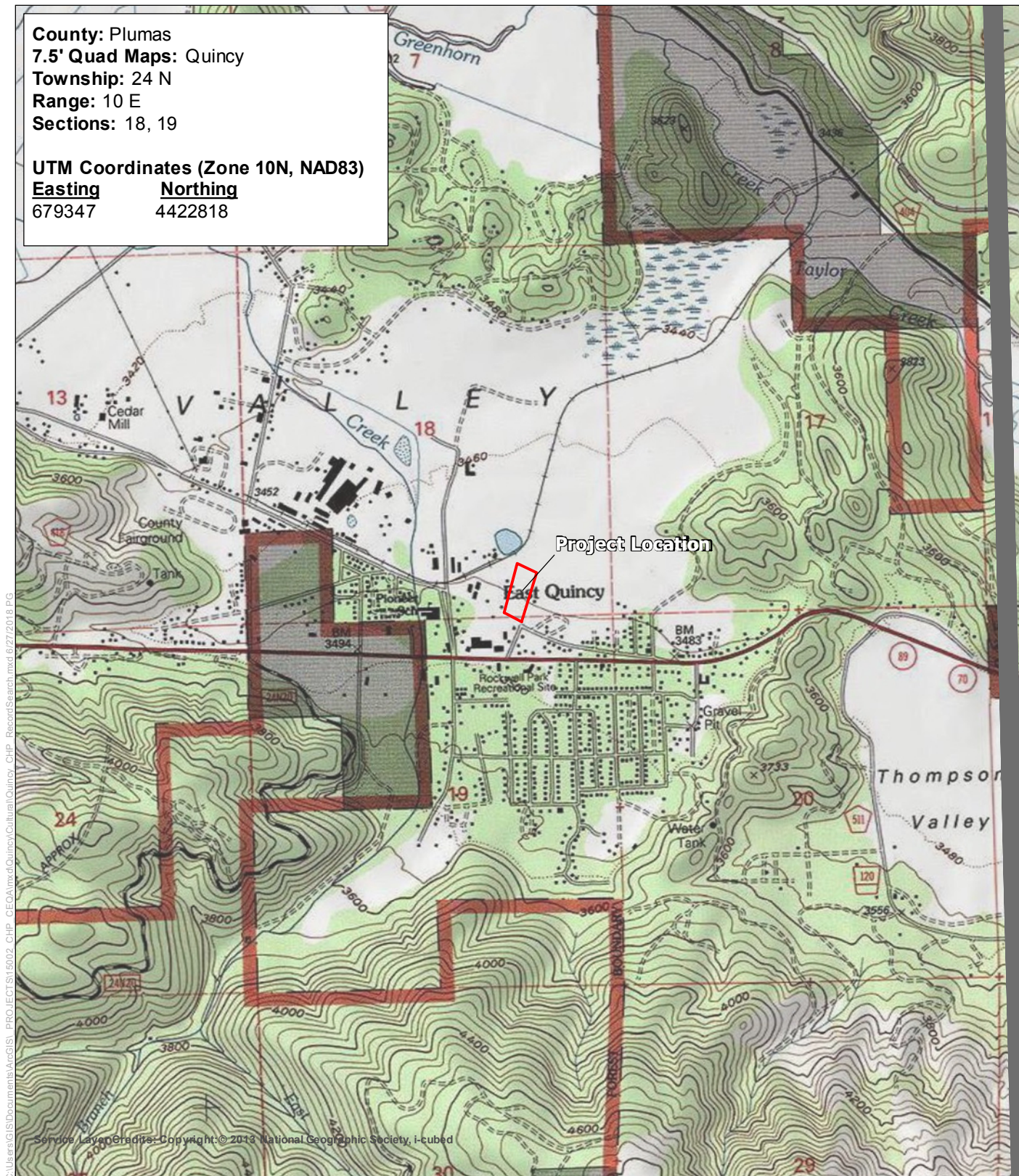


Figure 1 Project Vicinity Map



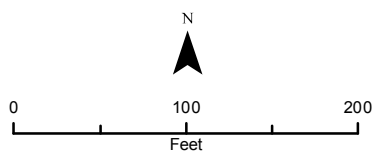
Project Footprint



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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Glenda Nelson, Chairperson  
Estom Yumeka Maidu Tribe of  
the Enterprise Rancheria  
2133 Monte Vista Avenue  
Oroville, CA 95966

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Nelson:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

CHP is proposing to consolidate the current office at 86 West Main Street, Quincy, and replace it with a proposed new office located on 5 acres at 2037 Lee Road in Quincy, California. The proposed project site is about 500 feet north of State Route 70 and about 2 miles east of the existing facility. This project is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the Quincy Area Office and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to the office. The proposed new facilities would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

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Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at [Jennifer.Parson@dgs.ca.gov](mailto:Jennifer.Parson@dgs.ca.gov) or by phone at (916) 376-1604.

Sincerely,



Jennifer Parson  
Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map  
Figure 2 – Project Site



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 Township: 24 N  
 Range: 10 E  
 Sections: 18, 19

UTM Coordinates (Zone 10N, NAD83)  
**Easting**      **Northing**  
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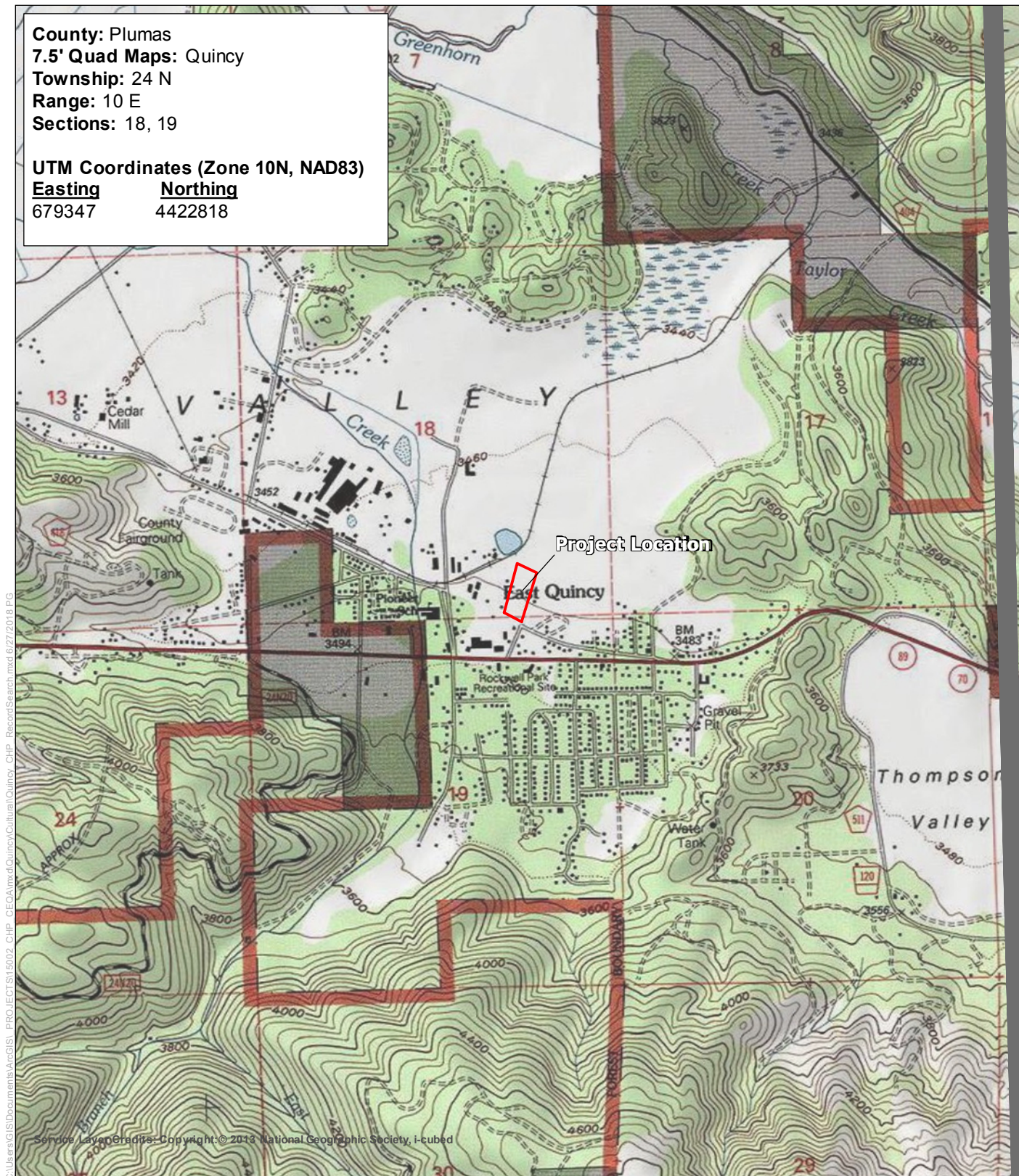
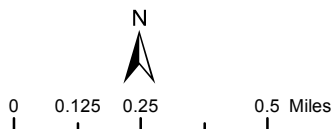


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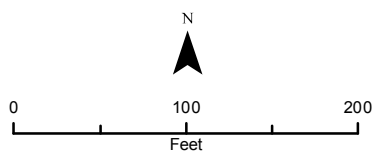
 Project Footprint



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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Don Ryberg, Chairperson  
Tsi Akim Maidu  
P.O. Box 510  
Browns Valley, CA 95918

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Ryberg:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

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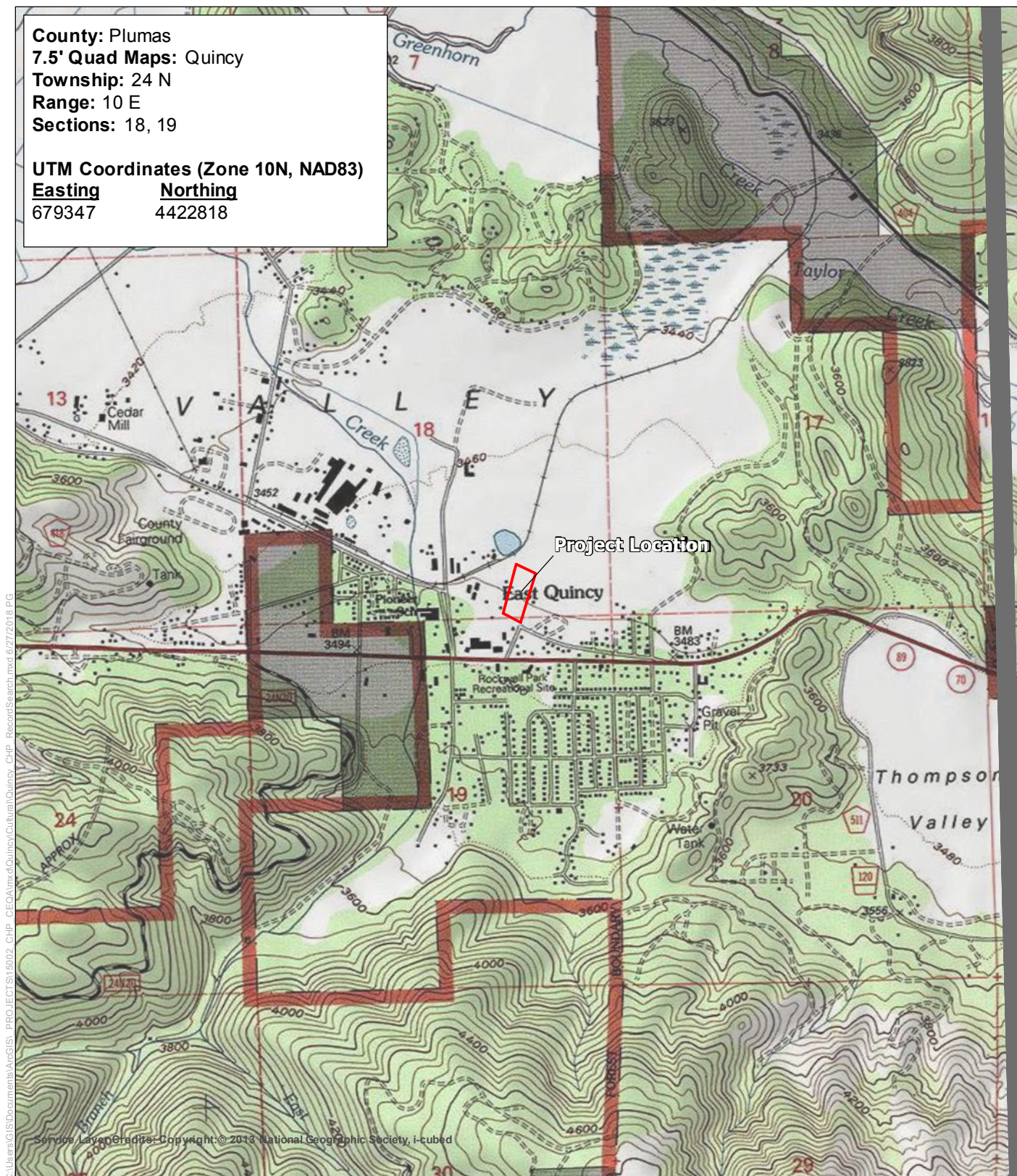


Jennifer Parson  
Senior Environmental Planner

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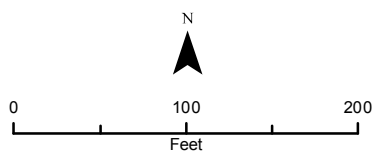
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**Figure 2 Project Site**



 Project Footprint

July 18, 2018

Kyle Self, Chairperson  
Greenville Rancheria of Maidu Indians  
P.O. Box 279  
Greenville, CA 95947

RE: CHP Quincy Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Self:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither DGS nor CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

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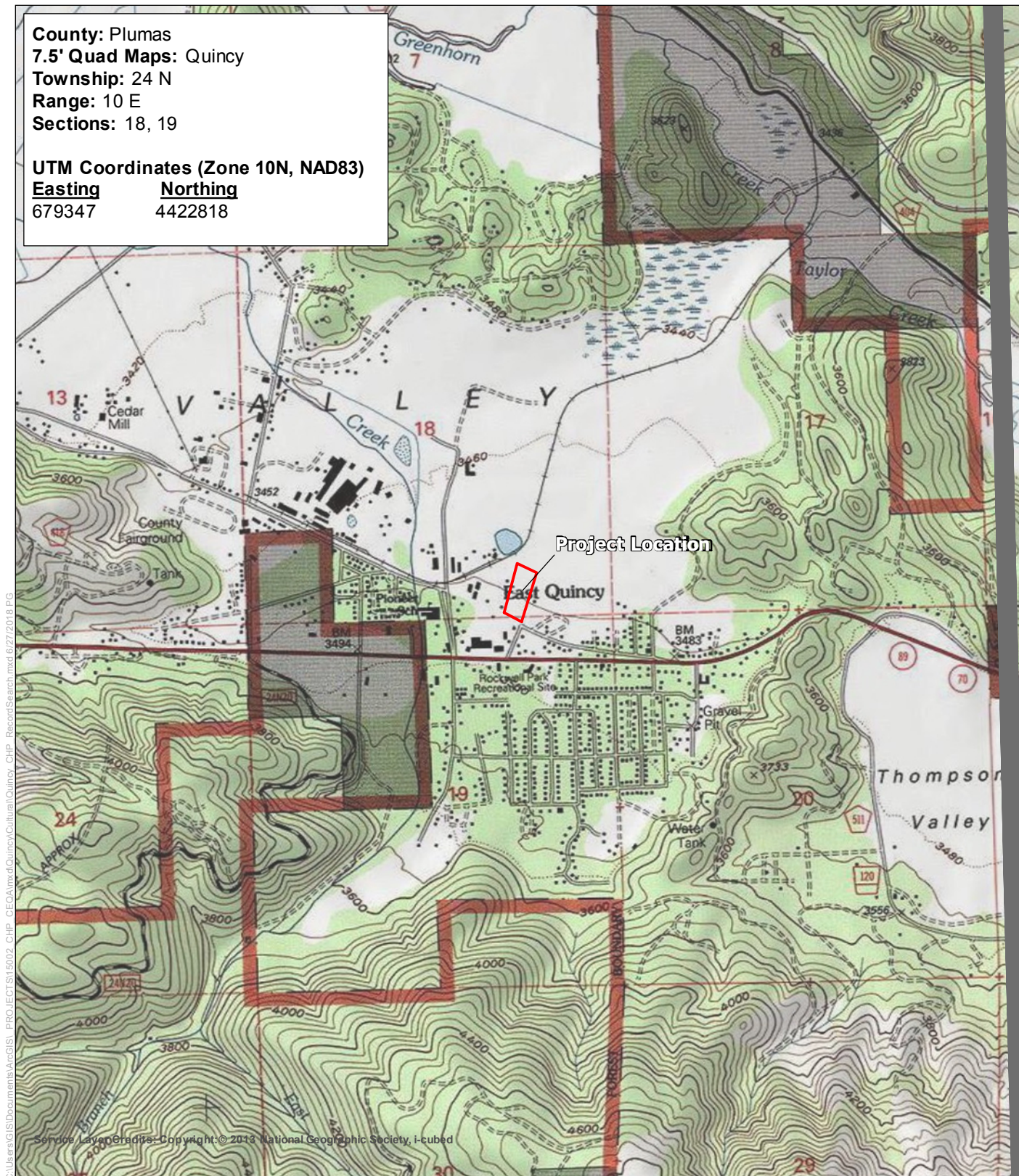
Jennifer Parson  
Senior Environmental Planner

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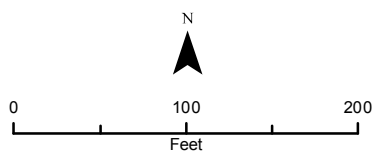
Project Footprint



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**Figure 2 Project Site**



 Project Footprint

## **Appendix B**

### **CHRIS Northeast Information Center Results**

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**Confidential**



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**Appendix C**  
**Department of Parks and Recreation Form 523**

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State of California & The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary #  
HRI #  
Trinomial  
**NRHP Status Code**

Other  
Review Code

Reviewer

Date

Listings

Page 1 of 5 \*Resource Name or #: (Assigned by recorder) Pole Barn Site

P1. Other Identifier: \_\_\_\_\_

\*P2. Location: ☐ Not for Publication ☒ Unrestricted

\*a. County Plumas and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad Quincy Date 2015 T 24N; R 10E; ☐ of ☐ of Sec 18; MD B.M.

c. Address: opposite intersection of Lee Road and Alta Avenue City: Quincy Zip: 95971

d. UTM: (Give more than one for large and/or linear resources) Zone 679381 mE/ 4422790 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

The site is in an empty field about 100 feet NNE of the intersection of Lee Road and Alta Avenue in East Quincy. Alta Avenue intersects with E. Main Street/State Route 70 on its south end. Elevation is 3280 feet above mean sea level.

\*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The site contains the remnants of a pole barn that existed from the 1980s until it blew down from the wind prior to 2009 (Scott Lawson p.c. 2018; Richard Myren p.c. 2018; SHN 2017). It sits in an open field used for cattle and horse grazing. The nearest tree is an old apple tree in the corner of a fenced parcel about 115 south of the center of the site.

The remains include two trusses (one complete and one fragmented), segments of sheet metal, milled lumber, a few concrete blocks, and a metal stock gate. The materials are spread over an area that is about 75 feet north/south and 35 feet east/west.

\*P3b. Resource Attributes: (List attributes and codes) AH16-other

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



\*P4. Resources Present: ☐ Building  
☐ Structure ☐ Object ☒ Site ☐ District  
☐ Element of District ☐ Other  
(Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) Site overview, to South

\*P6. Date Constructed/Age and Source: ☒ Historic ☐ Prehistoric

☐ Both ca. 1985

\*P7. Owner and Address: unknown

\*P8. Recorded by: (Name, affiliation, and address) J. Offermann, Horizon Water & Environment, Sacramento, CA

\*P9. Date Recorded: 06/28/2018

\*P10. Survey Type: (Describe)  
Intensive

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.")  
Horizon Water and Environment. 2018. Archaeological Inventory Report CHP Quincy Office Replacement Project, Quincy, Plumas County, California.

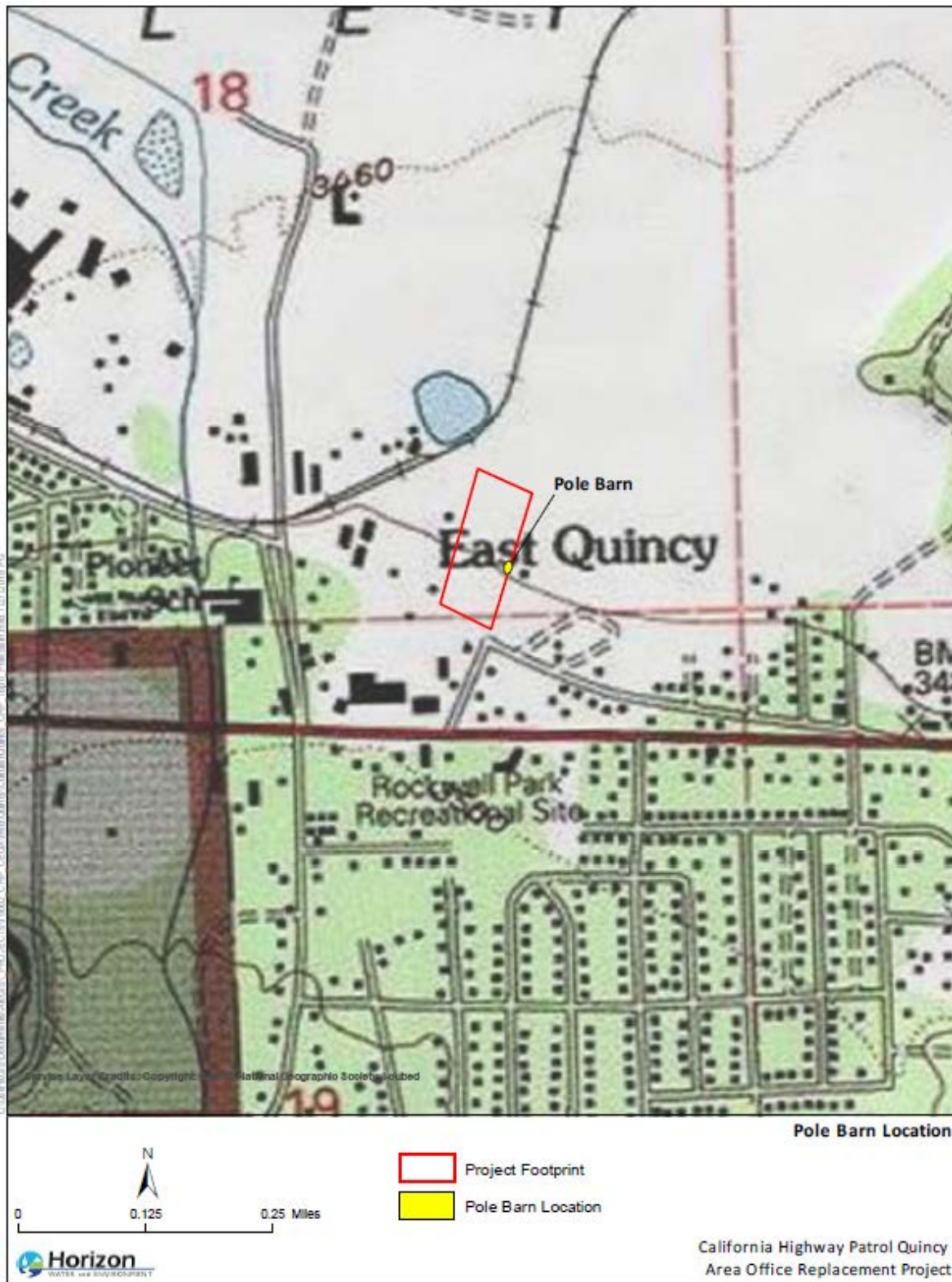
\*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record  
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record  
☐ Artifact Record ☐ Photograph Record ☐ Other (List): \_\_\_\_\_

State of California & Natural Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**LOCATION MAP**

Primary #  
HRI#  
Trinomial

Page 2 of        \*Resource Name or # (Assigned by recorder) Pole Barn Site

\*Map Name: Quincy \*Scale: 1:8,162 (1:24,000 enlarged) \*Date of map: 1995





Page 3 of 5 \*Resource Name or # (Assigned by recorder) Pole Barn Site

\*Map Name: Pole Barn Location \*Scale: 1:1,311 \*Date of map: \_\_\_\_\_



## CONTINUATION SHEET

Property Name: Pole Barn Site

Page 4 of 5

Page 4 of 5 \*Resource Name or # (Assigned by recorder) Pole Barn Site

\*Recorded by: Janis Offermann \*Date 6/28/2018

📷



Intact truss with dismantled truss behind. View to northwest.



Dismantled truss with bent stock gate on the right. View to west.



## CONTINUATION SHEET

Property Name: Pole Barn Site

Page 4 of 5

Page 4 of 5 \*Resource Name or # (Assigned by recorder) Pole Barn Site

\*Recorded by: Janis Offermann \*Date 6/28/2018

📷



Intact truss construction detail. Note shear ring for construction.



Truss construction detail.





Appendix F.  
**Noise Analysis**



## Noise Calculations for Quincy CHP

### Daytime calculations

Construction Equipment 1 (Multiple Equipment Types)	88	dBA at 50 feet
Construction Equipment 2 (Multiple Equipment Types)	88	dBA at 50 feet

### Combined Daytime Noise at 50 feet (Ltotal at 50 feet)

91.0 dBA

$$L_{total} = 10 \log(10^{L_1/10} + 10^{L_2/10})$$

### Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment

Noise Threshold	Threshold Level - Leq (dBA)	Distance to Leq Threshold from Middle of Project Site (feet)
Residential Land Use Daytime Limit (7 am-7 pm M-F, 8 am - 5 pm weekends and holidays)	75	315.9
	65	998.8
Nighttime Limit (10 pm-7 am)	60	1,776.2

Source: Plumas Draft General Plan Noise Element

### Nearest Sensitive Receptors and Approximate Distances from Middle of Project Site

Sensitive Receptor	Distance (feet)
Nearest residences to center of work area	380

### Vibration Source Levels for Construction Equipment (FTA 2006)

Equipment	PPV at 25 feet	VBA
Vibratory Roller	0.21	94
Large Bulldozer	0.089	87

### Vibration Calculations with Equations for Vibration-Causing Equipment (use of vibratory roller) for Project Site

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	36.3	Building damage threshold (sensitive buildings)
	231.5	Human Perception (65)
Lvd=Lvref-30log(D/25)	73.2	Annoyance (Federal)

65 VdB  
Federal - Annoyance 80 VdB, Damage 0.3 PPV, 0.12 for sensitive bu

### Vibration Calculations with Equations for Vibration-Causing Equipment (use of Large Bulldozer) for Project Site

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	20.5	Building damage threshold (sensitive buildings)
	135.3	Human Perception (65)
Lvd=Lvref-30log(D/25)	42.8	Annoyance (Federal)

65 VdB

Distance (feet) from Center of Project Site to Sensitive Receptors	Construction Noise level dBA	Noise Level Equation: $Leq = EL50 - 20 \cdot \log(D/50)$
380	73.4	Residence on Lee west of project
550	70.2	Residence on Lee south of project
1175	63.6	Quincy Elementary School
1810	59.8	Sierra Cascade Head Start
2230	58.0	First Baptist Church of Quincy

Appendix G.  
**Traffic Data**



# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Alta Ave & Lee Rd  
**City:** Quincy  
**Control:** 1-Way Stop (NB)

**Project ID:** 18-07282-001  
**Date:** 8/28/2018

**Total**

NS/EW Streets:	Alta Ave				Alta Ave				Lee Rd				Lee Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	21
7:15 AM	8	0	1	0	0	0	0	0	0	7	3	0	1	7	0	0	27
7:30 AM	10	0	2	0	0	0	0	0	0	6	10	0	2	6	0	0	36
7:45 AM	12	0	1	0	0	0	0	0	0	7	14	0	1	9	0	0	44
8:00 AM	14	0	0	0	0	0	0	0	0	6	10	0	0	13	0	0	43
8:15 AM	7	0	0	0	0	0	0	0	0	7	1	0	1	9	0	0	25
8:30 AM	6	0	0	0	0	0	0	0	0	7	10	0	0	7	0	0	30
8:45 AM	4	0	1	0	0	0	0	0	0	6	6	0	1	3	0	0	21
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	63	0	7	0	0	0	0	0	0	52	57	0	8	60	0	0	247
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	44	0	4	0	0	0	0	0	0	26	37	0	4	35	0	0	150
PEAK HR FACTOR :	0.786	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.929	0.661	0.000	0.500	0.673	0.000	0.000	0.852
	0.857								0.750				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	44
4:15 PM	9	0	1	0	0	0	0	0	0	16	13	0	0	5	0	0	40
4:30 PM	9	0	0	0	0	0	0	0	0	7	15	0	2	7	0	0	42
4:45 PM	10	0	2	0	0	0	0	0	0	7	10	0	0	13	0	0	42
4:45 PM	5	0	1	0	0	0	0	0	0	11	15	0	1	6	0	0	39
5:00 PM	7	0	1	0	0	0	0	0	0	9	13	0	1	8	0	0	39
5:15 PM	5	0	4	0	0	0	0	0	0	10	3	0	0	2	0	0	24
5:30 PM	4	0	0	0	0	0	0	0	0	7	7	0	0	7	0	0	25
5:45 PM	3	0	2	0	0	0	0	0	0	8	6	0	0	1	0	0	20
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	52	0	11	0	0	0	0	0	0	75	82	0	4	49	0	0	273
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	33	0	4	0	0	0	0	0	0	41	53	0	3	31	0	0	165
PEAK HR FACTOR :	0.825	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.641	0.883	0.000	0.375	0.596	0.000	0.000	0.938
	0.771								0.810				0.654				



## National Data & Surveying Services

**Location:** Alta Ave & Lee Rd  
**City:** Quincy  
**Control:** 1-Way Stop (NB)

**Project ID:** 18-07282-001  
**Date:** 8/28/2018

## Bikes

NS/EW Streets:		Alta Ave				Alta Ave				Lee Rd				Lee Rd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL VOLUMES :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
APPROACH %'s :										0.00% 0.00% 100.00% 0.00%								
PEAK HR :		07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
APPROACH %'s :										0 0 0 0				0.00% 100.00% 0.00% 0.00%				1
PEAK HR :		04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

## National Data & Surveying Services

**City:** Quincy  
**Control:** 1-Way Stop (NB)

Project ID: 18-07282-001

## Pedestrians (Crosswalks)

NS/EW Streets:	Alta Ave		Alta Ave		Lee Rd		Lee Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	1	0	0	0	0	0	0	0	1
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	2	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 0	WB 0	EB 2	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 2
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0      0		0      0		0      0		0      0		0
PEAK HR FACTOR :									

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Alta Ave & SR-70  
City: Quincy  
Control: 1-Way Stop (SB)

Project ID: 18-07282-002  
Date: 8/28/2018

**Total**

NS/EW Streets:	Alta Ave				Alta Ave				SR-70				SR-70				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	3	0	4	1	3	13	0	0	0	37	3	0	64
7:15 AM	0	0	0	0	4	0	5	0	8	21	0	0	0	39	3	0	80
7:30 AM	0	0	0	0	5	0	7	0	7	19	0	0	0	83	8	0	129
7:45 AM	0	0	0	0	3	0	9	0	8	28	0	0	0	88	8	0	144
8:00 AM	0	0	0	0	9	0	10	0	6	42	0	0	0	71	9	0	147
8:15 AM	0	0	0	0	3	0	3	0	6	22	0	0	0	38	6	0	78
8:30 AM	0	0	0	0	6	0	5	0	7	27	0	0	0	52	6	0	103
8:45 AM	0	0	0	0	4	0	7	0	7	34	0	0	0	52	2	0	106
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	37	0	50	1	52	206	0	0	0	460	45	0	851
					42.05%	0.00%	56.82%	1.14%	20.16%	79.84%	0.00%	0.00%	0.00%	91.09%	8.91%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	21	0	31	0	29	110	0	0	0	281	28	0	500
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.583	0.000	0.775	0.000	0.906	0.655	0.000	0.000	0.000	0.798	0.778	0.000	0.850
							0.684				0.724				0.805		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	11	0	8	0	3	63	0	0	0	66	8	0	159
4:15 PM	0	0	0	0	7	0	10	0	12	62	0	0	0	47	3	0	141
4:30 PM	0	0	0	0	9	0	12	0	10	68	0	0	0	47	6	0	152
4:45 PM	0	0	0	0	11	0	7	0	10	70	0	0	0	58	6	0	162
5:00 PM	0	0	0	0	10	0	5	0	8	97	0	0	0	71	8	0	199
5:15 PM	0	0	0	0	7	0	7	0	5	80	0	0	0	50	3	0	152
5:30 PM	0	0	0	0	9	0	10	0	4	76	0	0	0	52	4	0	155
5:45 PM	0	0	0	0	10	0	3	0	5	48	0	0	0	71	3	0	140
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	74	0	62	0	57	564	0	0	0	462	41	0	1260
					54.41%	0.00%	45.59%	0.00%	9.18%	90.82%	0.00%	0.00%	0.00%	91.85%	8.15%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	37	0	29	0	27	323	0	0	0	231	21	0	668
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.841	0.000	0.725	0.000	0.675	0.832	0.000	0.000	0.000	0.813	0.656	0.000	0.839
							0.868				0.833				0.797		

## Intersection Turning Movement Count

**Location:** Alta Ave & SR-70  
**City:** Quincy  
**Control:** 1-Way Stop (SB)

**Project ID:** 18-07282-002  
**Date:** 8/28/2018

## Bikes

NS/EW Streets:		Alta Ave				Alta Ave				SR-70				SR-70					
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
		0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0		
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2	
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s:		0	0	0	0	50.00%	0.00%	50.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0	0	0	0	4	
PEAK HR:		07:15 AM - 08:15 AM																	TOTAL
PEAK HR VOL:		0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	
PEAK HR FACTOR:		0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
		0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0		
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
	4:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	
	5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	
TOTAL VOLUMES:		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s:		0	0	0	0	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	10	
PEAK HR:		04:45 PM - 05:45 PM																	TOTAL
PEAK HR VOL:		0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	4	
PEAK HR FACTOR:		0.00	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.333	

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Alta Ave & SR-70  
City: Quincy  
Control: 1-Way Stop (SB)

Project ID: 18-07282-002  
Date: 8/28/2018

### Pedestrians (Crosswalks)

NS/EW Streets:	Alta Ave		Alta Ave		SR-70		SR-70		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	1	0	0	0	0	0	0	0	1
7:15 AM	1	0	0	0	0	0	0	0	1
7:30 AM	1	0	0	1	2	1	0	0	5
7:45 AM	0	1	0	3	0	0	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	1	0	1	0	0	0	2
TOTAL VOLUMES :	EB 4	WB 1	EB 1	WB 4	NB 3	SB 1	NB 0	SB 0	TOTAL 14
APPROACH %'s :	80.00%	20.00%	20.00%	80.00%	75.00%	25.00%			
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	2	1	0	4	2	1	0	0	10
PEAK HR FACTOR :	0.500	0.250		0.333	0.250	0.250			0.500
	0.750		0.333		0.250				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	1	0	0	2
4:30 PM	0	0	1	3	0	0	0	0	4
4:45 PM	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	4	5	0	0	5	4	0	0	18
5:45 PM	0	0	1	1	0	0	0	0	2
TOTAL VOLUMES :	EB 4	WB 6	EB 2	WB 5	NB 5	SB 5	NB 0	SB 0	TOTAL 27
APPROACH %'s :	40.00%	60.00%	28.57%	71.43%	50.00%	50.00%			
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	4	6	0	0	5	4	0	0	19
PEAK HR FACTOR :	0.250	0.300			0.250	0.250			0.264
	0.278				0.250				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Meadow Ln & Lee Rd  
**City:** Quincy  
**Control:** 2-Way Stop(NB/SB)

**Project ID:** 18-07282-103  
**Date:** 8/28/2018

### Total

NS/EW Streets:	Meadow Ln				Meadow Ln				Lee Rd				Lee Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	7
7:15 AM	5	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	12
7:30 AM	5	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	7
7:45 AM	10	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	13
8:00 AM	14	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	18
8:15 AM	4	0	0	0	0	1	0	0	0	0	7	0	0	0	0	0	12
8:30 AM	6	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	11
8:45 AM	5	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	12
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	55	0	0	0	0	1	2	0	0	0	34	0	0	0	0	0	92
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	34	0	0	0	0	1	0	0	0	0	19	0	0	0	0	0	54
PEAK HR FACTOR :	0.607	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.679	0.000	0.000	0.000	0.000	0.000	0.750
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	12
4:15 PM	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
4:30 PM	9	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	12
4:45 PM	2	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	9
5:00 PM	6	0	0	0	0	0	1	0	1	0	4	0	0	0	0	0	12
5:15 PM	2	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	14
5:30 PM	7	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	10
5:45 PM	3	0	0	0	0	0	0	0	2	0	4	0	0	0	0	0	9
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	44	0	0	0	0	0	2	0	3	0	40	0	0	0	0	0	89
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	19	0	0	0	0	0	1	0	1	0	26	0	0	0	0	0	47
PEAK HR FACTOR :	0.528	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.542	0.000	0.000	0.000	0.000	0.000	0.839

## Intersection Turning Movement Count

**Location:** Meadow Ln & Lee Rd  
**City:** Quincy  
**Control:** 2-Way Stop(NB/SB)

**Project ID:** 18-07282-103  
**Date:** 8/28/2018

## Bikes

[illegible]

## National Data & Surveying Services

**Location:** Meadow Ln & Lee Rd  
**City:** Quincy  
**Control:** 2-Way Stop(NB/SB)

**Project ID:** 18-07282-103  
**Date:** 8/28/2018

## Pedestrians (Crosswalks)

NS/EW Streets:	Meadow Ln	Meadow Ln	Lee Rd	Lee Rd	
<b>AM</b>	NORTH LEG EB      WB	SOUTH LEG EB      WB	EAST LEG NB      SB	WEST LEG NB      SB	TOTAL
	7:00 AM    0                  0	0                  0	0                  0	0                  0	0
	7:15 AM    0                  0	0                  0	0                  0	0                  0	0
	7:30 AM    0                  0	0                  0	0                  0	0                  0	0
	7:45 AM    0                  0	0                  0	0                  0	0                  0	0
	8:00 AM    0                  0	0                  0	0                  0	0                  0	0
	8:15 AM    0                  0	0                  0	0                  0	0                  0	0
	8:30 AM    0                  0	0                  0	0                  0	0                  0	0
	8:45 AM    0                  0	0                  0	0                  0	0                  0	0
TOTAL VOLUMES : APPROACH %'s :	EB      WB 0         0	EB      WB 0         0	NB      SB 0         0	NB      SB 0         0	TOTAL 0
PEAK HR :	07:45 AM - 08:45 AM				TOTAL
PEAK HR VOL : PEAK HR FACTOR :	0                  0	0                  0	0                  0	0                  0	0

[illegible]



# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Meadow Ln & SR-70  
**City:** Quincy  
**Control:** 2-Way Stop(NB/SB)

**Project ID:** 18-07282-003  
**Date:** 8/28/2018

### Total

NS/EW Streets:	Meadow Ln				Meadow Ln				SR-70				SR-70				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	3	0	0	0	0	0	1	0	2	20	1	0	0	29	4	0	60
7:15 AM	4	1	0	0	7	0	0	0	0	29	0	0	0	43	4	0	88
7:30 AM	4	0	0	0	2	0	0	0	1	20	2	0	1	58	5	0	93
7:45 AM	14	1	1	0	2	1	1	0	1	25	1	0	0	44	9	0	100
8:00 AM	1	1	0	0	2	2	2	0	0	36	2	0	0	58	11	0	115
8:15 AM	2	0	0	0	2	2	1	0	0	26	0	0	0	32	4	0	69
8:30 AM	3	1	1	0	5	0	2	0	1	18	1	0	0	36	5	0	73
8:45 AM	3	0	0	0	1	0	2	0	1	26	2	0	1	36	3	0	75
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	34	4	2	0	21	5	9	0	6	200	9	0	2	336	45	0	673
	85.00%	10.00%	5.00%	0.00%	60.00%	14.29%	25.71%	0.00%	2.79%	93.02%	4.19%	0.00%	0.52%	87.73%	11.75%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	23	3	1	0	13	3	3	0	2	110	5	0	1	203	29	0	396
PEAK HR FACTOR :	0.411	0.750	0.250	0.000	0.464	0.375	0.375	0.000	0.500	0.764	0.625	0.000	0.250	0.875	0.659	0.000	0.861
			0.422				0.679				0.770				0.844		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	0	0	0	7	0	0	0	0	45	5	0	2	43	4	0	114
4:15 PM	1	0	0	0	0	0	1	0	0	46	9	0	1	37	11	0	106
4:30 PM	1	2	1	0	2	0	0	0	0	58	3	0	0	38	7	0	112
4:45 PM	1	0	3	0	7	0	0	0	1	55	6	0	0	47	2	0	122
5:00 PM	4	0	2	0	5	0	0	0	1	62	7	0	3	47	4	0	135
5:15 PM	5	0	1	0	10	0	1	0	0	52	11	0	1	24	2	0	107
5:30 PM	3	2	1	0	1	2	0	0	0	51	14	0	2	30	5	0	111
5:45 PM	9	1	1	0	2	2	0	0	1	36	6	0	0	45	1	0	104
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	32	5	9	0	34	4	2	0	3	405	61	0	9	311	36	0	911
	69.57%	10.87%	19.57%	0.00%	85.00%	10.00%	5.00%	0.00%	0.64%	86.35%	13.01%	0.00%	2.53%	87.36%	10.11%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	11	2	7	0	24	0	1	0	2	227	27	0	4	156	15	0	476
PEAK HR FACTOR :	0.550	0.250	0.583	0.000	0.600	0.000	0.250	0.000	0.500	0.915	0.614	0.000	0.333	0.830	0.536	0.000	0.881
			0.833				0.568				0.914				0.810		

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Meadow Ln & SR-70  
**City:** Quincy  
**Control:** 2-Way Stop(NB/SB)

**Project ID:** 18-07282-003  
**Date:** 8/28/2018

### Bikes

NS/EW Streets:		Meadow Ln				Meadow Ln				SR-70				SR-70				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR :		07:15 AM - 08:15 AM								0.00% 100.00% 0.00% 0.00%				0.00% 100.00% 0.00% 0.00%				TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.250				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
PEAK HR :		04:30 PM - 05:30 PM								0.00% 100.00% 0.00% 0.00%				0.00% 100.00% 0.00% 0.00%				TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
PEAK HR FACTOR :		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.375
										0.250				0.500				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Meadow Ln & SR-70  
City: Quincy  
Control: 2-Way Stop(NB/SB)

Project ID: 18-07282-003  
Date: 8/28/2018

### Pedestrians (Crosswalks)

NS/EW Streets:	Meadow Ln		Meadow Ln		SR-70		SR-70		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	3	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	3	0	0	0	0	3
			0.00%	100.00%					
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Mill Creek Rd & SR-70  
**City:** Quincy  
**Control:** Signalized

**Project ID:** 18-07282-004  
**Date:** 8/28/2018

### Total

NS/EW Streets:	Mill Creek Rd				Mill Creek Rd				SR-70				SR-70				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	0.5 ST	0.5 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	4	4	1	0	1	2	2	0	2	18	2	0	1	37	4	0	78
7:15 AM	10	2	1	0	1	3	0	0	5	30	2	0	0	40	7	0	101
7:30 AM	16	6	2	0	3	2	13	0	18	23	4	0	6	81	9	0	183
7:45 AM	39	15	4	0	6	8	36	0	22	37	5	0	1	91	7	0	271
8:00 AM	10	9	0	0	7	5	27	0	35	46	14	0	4	72	10	0	239
8:15 AM	13	3	0	0	10	6	18	0	11	30	6	0	3	40	2	0	142
8:30 AM	10	2	5	0	0	5	7	0	12	38	4	0	1	57	2	0	143
8:45 AM	8	6	3	0	3	2	16	0	8	38	6	0	0	55	3	0	148
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	110	47	16	0	31	33	119	0	113	260	43	0	16	473	44	0	1305
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	78	33	6	0	26	21	94	0	86	136	29	0	14	284	28	0	835
PEAK HR FACTOR :	0.500	0.550	0.375	0.000	0.650	0.656	0.653	0.000	0.614	0.739	0.518	0.000	0.583	0.780	0.700	0.000	0.770
	0.504				0.705				0.661				0.823				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	0.5 ST	0.5 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	4	2	3	0	8	9	9	0	15	60	13	0	3	81	7	0	214
4:15 PM	7	5	4	0	1	3	11	0	4	79	15	0	4	53	9	0	195
4:30 PM	9	2	9	0	5	6	8	0	16	80	17	0	4	61	5	0	222
4:45 PM	14	4	4	0	6	5	12	0	6	67	16	0	10	67	3	0	214
5:00 PM	17	2	6	0	8	3	11	0	14	116	23	0	9	75	5	0	289
5:15 PM	16	4	6	0	6	5	6	0	15	82	26	0	7	58	6	0	237
5:30 PM	11	2	4	0	6	1	13	0	8	84	18	0	11	56	4	0	218
5:45 PM	8	2	0	0	2	7	3	0	3	45	5	0	5	70	4	0	154
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	86	23	36	0	42	39	73	0	81	613	133	0	53	521	43	0	1743
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	56	12	25	0	25	19	37	0	51	345	82	0	30	261	19	0	962
PEAK HR FACTOR :	0.824	0.750	0.694	0.000	0.781	0.792	0.771	0.000	0.797	0.744	0.788	0.000	0.750	0.870	0.792	0.000	0.832
	0.894				0.880				0.781				0.871				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Mill Creek Rd & SR-70  
**City:** Quincy  
**Control:** Signalized

**Project ID:** 18-07282-004  
**Date:** 8/28/2018

### Bikes

NS/EW Streets:	Mill Creek Rd				Mill Creek Rd				SR-70				SR-70				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	0.5 ST	0.5 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	4
7:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	NL 2	NT 7	NR 2	NU 0	SL 0	ST 1	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 1	WT 0	WR 0	WU 0	TOTAL 13
APPROACH %'s :	18.18%	63.64%	18.18%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	6	1	0	0	1	0	0	0	0	0	0	1	0	0	0	10
PEAK HR FACTOR :	0.250	0.750	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.625
	0.667				0.250								0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	0.5 ST	0.5 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
TOTAL VOLUMES :	NL 1	NT 3	NR 1	NU 0	SL 0	ST 3	SR 1	SU 0	EL 0	ET 0	ER 0	EU 0	WL 1	WT 3	WR 1	WU 0	TOTAL 14
APPROACH %'s :	20.00%	60.00%	20.00%	0.00%	0.00%	75.00%	25.00%	0.00%	0	0	0	0	20.00%	60.00%	20.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	3	1	0	0	0	0	0	1	1	1	0	8
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.500
	0.250				0.333								0.750				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Mill Creek Rd & SR-70  
City: Quincy  
Control: Signalized

Project ID: 18-07282-004  
Date: 8/28/2018

### Pedestrians (Crosswalks)

NS/EW Streets:	Mill Creek Rd		Mill Creek Rd		SR-70		SR-70		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	1
7:30 AM	0	0	0	0	1	0	3	0	4
7:45 AM	1	0	0	2	1	0	31	1	36
8:00 AM	0	0	0	0	0	0	1	3	4
8:15 AM	0	0	0	0	0	0	0	1	1
8:30 AM	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 3	WB 0	EB 0	WB 2	NB 3	SB 0	NB 35	SB 5	TOTAL 48
APPROACH %'s :	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	87.50%	12.50%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	1	0	0	2	2	0	35	5	45
PEAK HR FACTOR :	0.250			0.250	0.500		0.282	0.417	0.313
	0.250		0.250		0.500		0.313		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	1	1	0	0	2
4:30 PM	0	0	0	0	2	0	0	0	2
4:45 PM	0	0	0	0	0	1	0	0	1
5:00 PM	0	1	0	0	0	0	0	1	2
5:15 PM	0	0	0	0	1	0	0	1	2
5:30 PM	5	0	0	0	0	1	0	0	6
5:45 PM	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES :	EB 5	WB 2	EB 0	WB 0	NB 4	SB 3	NB 1	SB 2	TOTAL 17
APPROACH %'s :	71.43%	28.57%			57.14%	42.86%	33.33%	66.67%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	1	0	0	3	1	0	2	7
PEAK HR FACTOR :		0.250			0.375	0.250		0.500	0.875
	0.250				0.500		0.500		

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Mill Creek Rd & Lee Rd  
**City:** Quincy  
**Control:** 2-Way Stop(NB/SB)

**Project ID:** 18-07282-005  
**Date:** 8/28/2018

### Total

NS/EW Streets:	Mill Creek Rd				Mill Creek Rd				Lee Rd				Lee Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	3	5	0	0	0	2	1	0	1	9	6	0	0	6	1	0	34
7:15 AM	4	5	0	1	0	2	1	0	4	10	3	0	0	11	2	0	43
7:30 AM	9	9	0	0	1	3	0	0	9	13	11	0	4	9	4	1	73
7:45 AM	8	12	7	0	4	1	4	0	4	16	30	0	7	10	4	0	107
8:00 AM	13	11	5	1	1	4	3	0	7	12	17	0	9	17	5	0	105
8:15 AM	6	4	5	0	0	3	2	0	3	7	6	0	4	10	3	0	53
8:30 AM	6	8	2	0	1	5	0	0	4	14	1	0	1	11	1	0	54
8:45 AM	5	4	4	0	1	7	2	0	1	12	6	0	2	9	1	0	54
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	54	58	23	2	8	27	13	0	33	93	80	0	27	83	21	1	523
PEAK HR :	39.42%	42.34%	16.79%	1.46%	16.67%	56.25%	27.08%	0.00%	16.02%	45.15%	38.83%	0.00%	20.45%	62.88%	15.91%	0.76%	
PEAK HR VOL :	07:30 AM - 08:30 AM																TOTAL
PEAK HR FACTOR :	36	36	17	1	6	11	9	0	23	48	64	0	24	46	16	1	338
	0.692	0.750	0.607	0.250	0.375	0.688	0.563	0.000	0.639	0.750	0.533	0.000	0.667	0.676	0.800	0.250	0.790
			0.750				0.722				0.675				0.702		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	11	2	6	0	3	2	2	0	3	24	13	0	3	12	2	0	83
4:15 PM	10	2	3	0	4	3	0	0	3	15	8	0	1	15	1	0	65
4:30 PM	6	4	4	0	0	8	3	0	0	20	6	0	0	18	0	0	69
4:45 PM	7	3	3	1	5	8	3	0	4	10	8	0	2	10	2	0	66
5:00 PM	6	2	2	0	4	6	6	0	0	15	8	0	1	15	1	0	66
5:15 PM	9	6	1	0	1	4	3	0	4	9	9	0	0	6	2	0	54
5:30 PM	9	2	2	0	2	2	4	0	1	8	8	0	4	10	2	0	54
5:45 PM	5	2	1	0	2	0	1	0	1	11	6	0	1	4	0	0	34
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	63	23	22	1	21	33	22	0	16	112	66	0	12	90	10	0	491
PEAK HR :	57.80%	21.10%	20.18%	0.92%	27.63%	43.42%	28.95%	0.00%	8.25%	57.73%	34.02%	0.00%	10.71%	80.36%	8.93%	0.00%	
PEAK HR VOL :	04:00 PM - 05:00 PM																TOTAL
PEAK HR FACTOR :	34	11	16	1	12	21	8	0	10	69	35	0	6	55	5	0	283
	0.773	0.688	0.667	0.250	0.600	0.656	0.667	0.000	0.625	0.719	0.673	0.000	0.500	0.764	0.625	0.000	0.852
			0.816				0.641				0.713				0.917		

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Mill Creek Rd & Lee Rd  
**City:** Quincy  
**Control:** 2-Way Stop(NB/SB)

**Project ID:** 18-07282-005  
**Date:** 8/28/2018

### Bikes

NS/EW Streets:		Mill Creek Rd				Mill Creek Rd				Lee Rd				Lee Rd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
TOTAL VOLUMES :		NL 1	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 1	ER 2	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 4
APPROACH %'s :		100.00%	0.00%	0.00%	0.00%					0.00%	33.33%	66.67%	0.00%					
PEAK HR :		07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :		NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 1	ER 1	EU 0	WL 0	WT 3	WR 0	WU 0	TOTAL 5
APPROACH %'s :										0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :		04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	4
PEAK HR FACTOR :		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.500	0.000	0.000	0.333



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Mill Creek Rd & Lee Rd  
City: Quincy  
Control: 2-Way Stop(NB/SB)

Project ID: 18-07282-005  
Date: 8/28/2018

### Pedestrians (Crosswalks)

NS/EW Streets:	Mill Creek Rd		Mill Creek Rd		Lee Rd		Lee Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	2	2
7:15 AM	0	0	0	1	2	0	0	3	6
7:30 AM	1	0	1	2	0	5	0	2	11
7:45 AM	0	0	0	0	0	1	0	3	4
8:00 AM	1	0	0	2	0	2	0	2	7
8:15 AM	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 2	WB 0	EB 1	WB 5	NB 2	SB 8	NB 1	SB 12	TOTAL 31
APPROACH %'s :	100.00%	0.00%	16.67%	83.33%	20.00%	80.00%	7.69%	92.31%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	2	0	1	4	0	8	1	7	23
PEAK HR FACTOR :	0.500		0.250	0.500		0.400	0.250	0.583	0.523
	0.500		0.417		0.400		0.667		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	2	0	0	0	4
4:30 PM	0	0	1	0	0	0	1	0	2
4:45 PM	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	2	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 0	WB 0	EB 3	WB 1	NB 4	SB 0	NB 1	SB 0	TOTAL 9
APPROACH %'s :			75.00%	25.00%	100.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	3	1	2	0	1	0	7
PEAK HR FACTOR :			0.375	0.250	0.250		0.250		0.438
			0.500		0.250		0.250		

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Bell Ln & Lee Rd  
**City:** Quincy  
**Control:** 1-Way Stop(SB)

**Project ID:** 18-07282-006  
**Date:** 8/28/2018

### Total

NS/EW Streets:	Bell Ln				Bell Ln				Lee Rd				Lee Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	3	0	2	0	0	9	0	0	0	10	5	0	29
7:15 AM	0	0	0	0	5	0	2	0	3	18	0	0	0	11	4	0	43
7:30 AM	0	0	0	0	11	0	8	0	2	17	0	0	0	10	8	0	56
7:45 AM	0	0	0	0	16	0	4	0	1	31	0	0	0	23	7	0	82
8:00 AM	0	0	0	0	6	0	2	0	2	15	0	0	0	23	11	0	59
8:15 AM	0	0	0	0	8	0	3	0	2	13	0	0	0	18	6	0	50
8:30 AM	0	0	0	0	8	0	2	0	0	12	0	0	0	6	9	0	37
8:45 AM	0	0	0	0	7	0	3	0	1	10	0	0	0	10	6	2	39
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	64	0	26	0	11	125	0	0	0	111	56	2	395
PEAK HR :	07:30 AM - 08:30 AM				71.11%	0.00%	28.89%	0.00%	8.09%	91.91%	0.00%	0.00%	0.00%	65.68%	33.14%	1.18%	
PEAK HR VOL :	0	0	0	0	41	0	17	0	7	76	0	0	0	74	32	0	247
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.641	0.000	0.531	0.000	0.875	0.613	0.000	0.000	0.000	0.804	0.727	0.000	0.753
							0.725				0.648				0.779		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	8	0	2	0	5	15	0	0	0	20	14	0	64
4:15 PM	0	0	0	0	14	0	6	0	2	16	0	0	0	12	10	0	60
4:30 PM	0	0	0	0	10	0	3	0	1	17	0	0	0	18	13	1	63
4:45 PM	0	0	0	0	8	0	1	0	2	10	0	0	0	21	11	0	53
5:00 PM	0	0	0	0	5	0	7	0	3	17	0	0	0	18	13	0	63
5:15 PM	0	0	0	0	9	0	5	0	4	10	0	0	0	9	11	0	48
5:30 PM	0	0	0	0	9	0	2	0	8	10	0	0	0	11	5	0	45
5:45 PM	0	0	0	0	9	0	4	0	3	13	0	0	0	11	7	0	47
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	72	0	30	0	28	108	0	0	0	120	84	1	443
PEAK HR :	04:00 PM - 05:00 PM				70.59%	0.00%	29.41%	0.00%	20.59%	79.41%	0.00%	0.00%	0.00%	58.54%	40.98%	0.49%	
PEAK HR VOL :	0	0	0	0	40	0	12	0	10	58	0	0	0	71	48	1	240
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.714	0.000	0.500	0.000	0.500	0.853	0.000	0.000	0.000	0.845	0.857	0.250	0.938
							0.650				0.850				0.882		

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Bell Ln & Lee Rd  
**City:** Quincy  
**Control:** 1-Way Stop(SB)

**Project ID:** 18-07282-006  
**Date:** 8/28/2018

### Bikes

NS/EW Streets:		Bell Ln				Bell Ln				Lee Rd				Lee Rd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0	0	0	0	0	0.5	0.5	0	0	1	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM 7:15 AM 7:30 AM 7:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM 8:15 AM 8:30 AM 8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	0	0	1	0	0	1	0	0	0	2	1	0	5
PEAK HR :		07:30 AM - 08:30 AM				0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR VOL :		0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
PEAK HR FACTOR :		0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0	0	0	0	0	0.5	0.5	0	0	1	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM 4:15 PM 4:30 PM 4:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM 5:15 PM 5:30 PM 5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
PEAK HR :		04:00 PM - 05:00 PM				0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR VOL :		0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
PEAK HR FACTOR :		0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.333

## National Data &amp; Surveying Services

## Intersection Turning Movement Count

Location: Bell Ln & Lee Rd  
 City: Quincy  
 Control: 1-Way Stop(SB)

Project ID: 18-07282-006  
 Date: 8/28/2018

## Pedestrians (Crosswalks)

NS/EW Streets:	Bell Ln		Bell Ln		Lee Rd		Lee Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	1	0	0	0	0	0	1
PEAK HR :	04:00 PM - 05:00 PM		100.00%	0.00%					
PEAK HR VOL :	0	0	1	0	0	0	0	0	1
PEAK HR FACTOR :			0.250	0.250					0.250

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Quincy Junction Rd & Lee Rd  
**City:** Quincy  
**Control:** 1-Way Stop(WB)

**Project ID:** 18-07282-007  
**Date:** 8/28/2018

### Total

NS/EW Streets:	Quincy Junction Rd				Quincy Junction Rd				Lee Rd				Lee Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	0	0	0	0	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	2	5	0	0	7	0	0	0	0	0	0	11	0	1	0	26
7:15 AM	0	3	17	0	3	2	0	0	0	0	0	0	14	0	1	0	40
7:30 AM	0	5	15	0	1	22	0	0	0	0	0	0	18	0	1	0	62
7:45 AM	0	6	27	0	1	36	0	0	0	0	0	0	34	0	0	0	104
8:00 AM	0	9	15	0	0	21	0	0	0	0	0	0	25	0	0	0	70
8:15 AM	0	10	13	0	1	11	0	0	0	0	0	0	17	0	2	0	54
8:30 AM	0	5	8	0	0	10	0	0	0	0	0	0	7	0	0	0	30
8:45 AM	0	3	13	0	1	7	0	0	0	0	0	0	14	0	0	0	38
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	43	113	0	7	116	0	0	0	0	0	0	140	0	5	0	424
	0.00%	27.56%	72.44%	0.00%	5.69%	94.31%	0.00%	0.00%	0	0	0	0	96.55%	0.00%	3.45%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	30	70	0	3	90	0	0	0	0	0	0	94	0	3	0	290
PEAK HR FACTOR :	0.000	0.750	0.648	0.000	0.750	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.691	0.000	0.375	0.000	0.697
	0.758				0.628								0.713				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	0	0	0	0	0.5	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	19	27	0	0	10	0	0	0	0	0	0	23	0	3	0	82
4:15 PM	0	15	16	0	1	13	0	0	0	0	0	0	12	0	2	0	59
4:30 PM	0	14	21	0	1	6	0	0	0	0	0	0	5	0	5	0	52
4:45 PM	0	16	9	0	2	12	0	0	0	0	0	0	13	0	1	0	53
5:00 PM	0	25	24	0	1	8	0	0	0	0	0	0	23	0	3	0	84
5:15 PM	0	14	15	0	2	14	0	0	0	0	0	0	20	0	0	0	65
5:30 PM	0	16	13	1	0	9	0	0	0	0	0	0	9	0	1	0	49
5:45 PM	0	14	16	0	1	9	0	0	0	0	0	0	14	0	1	0	55
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	133	141	1	8	81	0	0	0	0	0	0	119	0	16	0	499
	0.00%	48.36%	51.27%	0.36%	8.99%	91.01%	0.00%	0.00%	0	0	0	0	88.15%	0.00%	11.85%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	69	69	0	6	40	0	0	0	0	0	0	61	0	9	0	254
PEAK HR FACTOR :	0.000	0.690	0.719	0.000	0.750	0.714	0.000	0.000	0.000	0.000	0.000	0.000	0.663	0.000	0.450	0.000	0.756
	0.704				0.719								0.673				

# National Data & Surveying Services

## Intersection Turning Movement Count

**Location:** Quincy Junction Rd & Lee Rd  
**City:** Quincy  
**Control:** 1-Way Stop(WB)

**Project ID:** 18-07282-007  
**Date:** 8/28/2018

### Bikes

NS/EW Streets:	Quincy Junction Rd				Quincy Junction Rd				Lee Rd				Lee Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0.5 WT	0.5 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	0	6
	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0.5 WT	0.5 WR	0 WU	
4:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	2	1	0	1	3	0	0	0	0	0	0	1	0	1	0	9
	0.00%	66.67%	33.33%	0.00%	25.00%	75.00%	0.00%	0.00%	0	0	0	0	50.00%	0.00%	50.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	3	0	0	0	0	0	0	1	0	0	0	5
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.313

## National Data & Surveying Services

**Location:** Quincy Junction Rd & Lee Rd  
**City:** Quincy  
**Control:** 1-Way Stop(WB)

**Project ID:** 18-07282-007  
**Date:** 8/28/2018




## Pedestrians (Crosswalks)

NS/EW Streets:	Quincy Junction Rd	Quincy Junction Rd	Lee Rd	Lee Rd	
AM	NORTH LEG EB WB	SOUTH LEG EB WB	EAST LEG NB SB	WEST LEG NB SB	TOTAL
7:00 AM	0 0	0 0	0 0	0 0	0
7:15 AM	0 0	0 0	0 0	0 0	0
7:30 AM	0 0	0 0	0 0	0 0	0
7:45 AM	0 0	0 0	0 0	0 0	0
8:00 AM	0 0	0 0	0 0	0 0	0
8:15 AM	0 0	0 0	0 0	0 0	0
8:30 AM	0 0	0 0	0 0	0 1	1
8:45 AM	0 0	0 0	0 0	0 0	0
TOTAL VOLUMES :	EB WB	EB WB	NB SB	NB SB	TOTAL
APPROACH %'s :	0 0	0 0	0 0	0 1 0.00% 100.00%	1
PEAK HR :	07:30 AM - 08:30 AM				TOTAL
PEAK HR VOL :	0 0	0 0	0 0	0 0	0
PEAK HR FACTOR :					

[illegible]

Intersection

Int Delay, s/veh 3.5





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	26	45	4	37	55	3
Future Vol, veh/h	26	45	4	37	55	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	33	58	5	47	71	4

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	91
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.3
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.38
Pot Cap-1 Maneuver	-	-	1398
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1398
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	9.7
HCM LOS			A




Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	838	-	-	1398	-
HCM Lane V/C Ratio	0.089	-	-	0.004	-
HCM Control Delay (s)	9.7	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-



Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	111	280	31	20	29
Future Vol, veh/h	27	111	280	31	20	29
Conflicting Peds, #/hr	2	0	0	2	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	35	142	359	40	26	37
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	401	0	-	0	522	205
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	141	-
Critical Hdwy	4.24	-	-	-	6.94	7.04
Critical Hdwy Stg 1	-	-	-	-	5.94	-
Critical Hdwy Stg 2	-	-	-	-	5.94	-
Follow-up Hdwy	2.27	-	-	-	3.57	3.37
Pot Cap-1 Maneuver	1119	-	-	-	472	786
Stage 1	-	-	-	-	646	-
Stage 2	-	-	-	-	856	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1117	-	-	-	455	782
Mov Cap-2 Maneuver	-	-	-	-	521	-
Stage 1	-	-	-	-	625	-
Stage 2	-	-	-	-	854	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.6	0		11.1		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1117	-	-	-	649	
HCM Lane V/C Ratio	0.031	-	-	-	0.097	
HCM Control Delay (s)	8.3	-	-	-	11.1	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	

Intersection









Int Delay, s/veh 7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	16	33	0	1	0
Future Vol, veh/h	0	16	33	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	0	21	42	0	1	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	85	1	1
Stage 1	1	-	-
Stage 2	84	-	-
Critical Hdwy	6.58	6.38	4.28
Critical Hdwy Stg 1	5.58	-	-
Critical Hdwy Stg 2	5.58	-	-
Follow-up Hdwy	3.662	3.462	2.362
Pot Cap-1 Maneuver	879	1039	1523
Stage 1	982	-	-
Stage 2	900	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	854	1039	1523
Mov Cap-2 Maneuver	854	-	-
Stage 1	955	-	-
Stage 2	900	-	-





















Approach	EB	NB	SB
HCM Control Delay, s	8.5	7.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1523	-	1039	-	-
HCM Lane V/C Ratio	0.028	-	0.02	-	-
HCM Control Delay (s)	7.4	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	107	5	1	192	29	21	2	1	8	5	4
Future Vol, veh/h	2	107	5	1	192	29	21	2	1	8	5	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	3	137	6	1	246	37	27	3	1	10	6	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	283	0	0	143	0	0	274	431	72	343	416	142
Stage 1	-	-	-	-	-	-	146	146	-	267	267	-
Stage 2	-	-	-	-	-	-	128	285	-	76	149	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1227	-	-	1388	-	-	639	500	953	570	510	858
Stage 1	-	-	-	-	-	-	822	759	-	696	670	-
Stage 2	-	-	-	-	-	-	842	657	-	904	756	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1227	-	-	1388	-	-	627	499	953	565	508	858
Mov Cap-2 Maneuver	-	-	-	-	-	-	627	499	-	565	508	-
Stage 1	-	-	-	-	-	-	820	757	-	695	669	-
Stage 2	-	-	-	-	-	-	828	656	-	898	754	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0			11.1			11.3		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	613	953	1227	-	-	1388	-	-	542	858		
HCM Lane V/C Ratio	0.048	0.001	0.002	-	-	0.001	-	-	0.031	0.006		
HCM Control Delay (s)	11.2	8.8	7.9	-	-	7.6	-	-	11.9	9.2		
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A		
HCM 95th %tile Q(veh)	0.2	0	0	-	-	0	-	-	0.1	0		

# HCM 6th Signalized Intersection Summary 5: SR-70 & N Mill Creek Rd

Quincy CHP Facility  
Existing AM Conditions

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	136	29	14	284	28	78	33	6	26	21	94
Future Volume (veh/h)	86	136	29	14	284	28	78	33	6	26	21	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.96		0.94	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	110	174	11	18	364	23	100	42	5	33	27	4
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	275	1214	76	71	826	52	501	419	50	488	407	60
Arrive On Green	0.16	0.37	0.37	0.04	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1739	3314	208	1739	3314	209	1288	1588	189	1272	1540	228
Grp Volume(v), veh/h	110	90	95	18	190	197	100	0	47	33	0	31
Grp Sat Flow(s),veh/h/ln	1739	1735	1788	1739	1735	1788	1288	0	1777	1272	0	1768
Q Serve(g_s), s	2.3	1.4	1.4	0.4	3.7	3.8	2.5	0.0	0.8	0.8	0.0	0.5
Cycle Q Clear(g_c), s	2.3	1.4	1.4	0.4	3.7	3.8	3.1	0.0	0.8	1.6	0.0	0.5
Prop In Lane	1.00		0.12	1.00		0.12	1.00		0.11	1.00		0.13
Lane Grp Cap(c), veh/h	275	635	655	71	432	445	501	0	469	488	0	467
V/C Ratio(X)	0.40	0.14	0.14	0.25	0.44	0.44	0.20	0.00	0.10	0.07	0.00	0.07
Avail Cap(c_a), veh/h	903	1502	1548	645	1502	1548	639	0	659	625	0	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	8.6	8.6	18.8	12.8	12.8	12.3	0.0	11.2	11.9	0.0	11.1
Incr Delay (d2), s/veh	0.7	0.1	0.1	1.4	1.0	1.0	0.1	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.4	0.4	0.2	1.3	1.3	0.6	0.0	0.3	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	8.7	8.7	20.2	13.8	13.8	12.4	0.0	11.3	11.9	0.0	11.2
LnGrp LOS	B	A	A	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h	295			405			147			64		
Approach Delay, s/veh	11.4			14.1			12.1			11.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	19.9		14.8	10.5	15.2		14.8				
Change Period (Y+Rc), s	4.1	5.1		4.1	4.1	5.1		4.1				
Max Green Setting (Gmax), s	15.0	35.0		15.0	21.0	35.0		15.0				
Max Q Clear Time (g_c+I1), s	2.4	3.4		3.6	4.3	5.8		5.1				
Green Ext Time (p_c), s	0.0	1.5		0.1	0.2	3.3		0.3				

## Intersection Summary

HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B





## Notes

User approved pedestrian interval to be less than phase max green.

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	23	58	64	25	58	16	37	36	17	6	11	9
Future Vol, veh/h	23	58	64	25	58	16	37	36	17	6	11	9
Conflicting Peds, #/hr	2	0	5	5	0	2	8	0	8	8	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	29	74	82	32	74	21	47	46	22	8	14	12
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	97	0	0	161	0	0	348	339	128	366	370	95
Stage 1	-	-	-	-	-	-	178	178	-	151	151	-
Stage 2	-	-	-	-	-	-	170	161	-	215	219	-
Critical Hdwy	4.23	-	-	4.23	-	-	7.23	6.63	6.33	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Follow-up Hdwy	2.317	-	-	2.317	-	-	3.617	4.117	3.417	3.617	4.117	3.417
Pot Cap-1 Maneuver	1430	-	-	1354	-	-	586	565	893	570	543	932
Stage 1	-	-	-	-	-	-	799	732	-	826	752	-
Stage 2	-	-	-	-	-	-	807	744	-	763	702	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1427	-	-	1348	-	-	540	535	882	496	514	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	540	535	-	496	514	-
Stage 1	-	-	-	-	-	-	777	712	-	806	732	-
Stage 2	-	-	-	-	-	-	756	724	-	675	683	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			2			12.7			11.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	580	1427	-	-	1348	-	-	507	923			
HCM Lane V/C Ratio	0.199	0.021	-	-	0.024	-	-	0.043	0.013			
HCM Control Delay (s)	12.7	7.6	0	-	7.7	0	-	12.4	9			
HCM Lane LOS	B	A	A	-	A	A	-	B	A			
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.1	-	-	0.1	0			

Intersection

Int Delay, s/veh 2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	86	86	32	41	17
Future Vol, veh/h	7	86	86	32	41	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	9	110	110	41	53	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	151	0	0 259 131
Stage 1	-	-	- - 131 -
Stage 2	-	-	- - 128 -
Critical Hdwy	4.28	-	- - 6.58 6.38
Critical Hdwy Stg 1	-	-	- - 5.58 -
Critical Hdwy Stg 2	-	-	- - 5.58 -
Follow-up Hdwy	2.362	-	- - 3.662 3.462
Pot Cap-1 Maneuver	1338	-	- - 697 877
Stage 1	-	-	- - 857 -
Stage 2	-	-	- - 860 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1338	-	- - 692 877
Mov Cap-2 Maneuver	-	-	- - 692 -
Stage 1	-	-	- - 851 -
Stage 2	-	-	- - 860 -

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	10.2
HCM LOS			B





Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1338	-	-	-	692	877
HCM Lane V/C Ratio	0.007	-	-	-	0.076	0.025
HCM Control Delay (s)	7.7	0	-	-	10.6	9.2
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

HCM 6th TWSC  
8: Lee Rd & Quincy Junction Rd

Quincy CHP Facility  
Existing AM Conditions

Intersection

Int Delay, s/veh 3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	106	3	30	80	3	90
Future Vol, veh/h	106	3	30	80	3	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	12	12	12	12	12	12
Mvmt Flow	136	4	38	103	4	115




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	213	90	0
Stage 1	90	-	-
Stage 2	123	-	-
Critical Hdwy	6.52	6.32	-
Critical Hdwy Stg 1	5.52	-	-
Critical Hdwy Stg 2	5.52	-	-
Follow-up Hdwy	3.608	3.408	-
Pot Cap-1 Maneuver	753	941	-
Stage 1	909	-	-
Stage 2	878	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	751	941	-
Mov Cap-2 Maneuver	751	-	-
Stage 1	906	-	-
Stage 2	878	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 751 941 1383	-	-
HCM Lane V/C Ratio	-	- 0.181 0.004 0.003	-	-
HCM Control Delay (s)	-	- 10.9 8.8 7.6	0	0
HCM Lane LOS	-	- B A A	A	A
HCM 95th %tile Q(veh)	-	- 0.7 0 0	-	-

Intersection

Int Delay, s/veh 2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	41	72	3	31	54	4
Future Vol, veh/h	41	72	3	31	54	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	45	79	3	34	59	4

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	124
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.19
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.281
Pot Cap-1 Maneuver	-	-	1421
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1421
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-





Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	857	-	-	1421	-
HCM Lane V/C Ratio	0.074	-	-	0.002	-
HCM Control Delay (s)	9.5	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	263	218	23	38	37
Future Vol, veh/h	35	263	218	23	38	37
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	38	289	240	25	42	41




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	266	0	0 475 135
Stage 1	-	-	- - 254 -
Stage 2	-	-	- - 221 -
Critical Hdwy	4.18	-	- - 6.88 6.98
Critical Hdwy Stg 1	-	-	- - 5.88 -
Critical Hdwy Stg 2	-	-	- - 5.88 -
Follow-up Hdwy	2.24	-	- - 3.54 3.34
Pot Cap-1 Maneuver	1280	-	- - 514 883
Stage 1	-	-	- - 759 -
Stage 2	-	-	- - 789 -
Platoon blocked, %		-	- -
Mov Cap-1 Maneuver	1279	-	- - 498 881
Mov Cap-2 Maneuver	-	-	- - 566 -
Stage 1	-	-	- - 735 -
Stage 2	-	-	- - 788 -

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1279	-	-	-	687
HCM Lane V/C Ratio	0.03	-	-	-	0.12
HCM Control Delay (s)	7.9	-	-	-	11
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection









Int Delay, s/veh 7.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	17	27	0	0	1
Future Vol, veh/h	0	17	27	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	23	23	23	23	23	23
Mvmt Flow	0	19	30	0	0	1

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	61	1	1
Stage 1	1	-	-
Stage 2	60	-	-
Critical Hdwy	6.63	6.43	4.33
Critical Hdwy Stg 1	5.63	-	-
Critical Hdwy Stg 2	5.63	-	-
Follow-up Hdwy	3.707	3.507	2.407
Pot Cap-1 Maneuver	895	1025	1494
Stage 1	970	-	-
Stage 2	912	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	877	1025	1494
Mov Cap-2 Maneuver	877	-	-
Stage 1	951	-	-
Stage 2	912	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	7.5	0
HCM LOS	A		





















Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1494	-	1025	-	-
HCM Lane V/C Ratio	0.02	-	0.018	-	-
HCM Control Delay (s)	7.5	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	204	23	3	165	24	11	2	4	16	0	1
Future Vol, veh/h	1	204	23	3	165	24	11	2	4	16	0	1
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	1	224	25	3	181	26	12	2	4	18	0	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	207	0	0	252	0	0	339	455	128	315	454	104
Stage 1	-	-	-	-	-	-	242	242	-	200	200	-
Stage 2	-	-	-	-	-	-	97	213	-	115	254	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	1333	-	-	1282	-	-	581	491	886	604	492	918
Stage 1	-	-	-	-	-	-	729	694	-	772	725	-
Stage 2	-	-	-	-	-	-	887	715	-	866	686	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1333	-	-	1278	-	-	578	488	883	597	489	918
Mov Cap-2 Maneuver	-	-	-	-	-	-	578	488	-	597	489	-
Stage 1	-	-	-	-	-	-	726	691	-	771	724	-
Stage 2	-	-	-	-	-	-	884	714	-	858	683	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			11			11.1		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	562	883	1333	-	-	1278	-	-	597	918		
HCM Lane V/C Ratio	0.025	0.005	0.001	-	-	0.003	-	-	0.029	0.001		
HCM Control Delay (s)	11.6	9.1	7.7	-	-	7.8	-	-	11.2	8.9		
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A		
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0	-	-	0.1	0		

# HCM 6th Signalized Intersection Summary

## 5: SR-70 & N Mill Creek Rd

Quincy CHP Facility  
Existing PM Conditions

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	286	61	21	262	24	34	13	20	20	23	40
Future Volume (veh/h)	41	286	61	21	262	24	34	13	20	20	23	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	45	314	45	23	288	15	37	14	20	22	25	-56
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	164	1143	162	92	1118	58	474	92	132	396	0	278
Arrive On Green	0.09	0.37	0.37	0.05	0.33	0.33	0.14	0.14	0.14	0.14	0.14	0.00
Sat Flow, veh/h	1753	3075	436	1753	3382	175	1733	677	967	1340	1841	0
Grp Volume(v), veh/h	45	177	182	23	148	155	37	0	34	22	-31	-31
Grp Sat Flow(s),veh/h/ln	1753	1749	1762	1753	1749	1809	1733	0	1644	1340	1841	1560
Q Serve(g_s), s	0.7	2.1	2.2	0.4	1.9	1.9	0.6	0.0	0.6	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.7	2.1	2.2	0.4	1.9	1.9	0.6	0.0	0.6	1.0	0.0	0.0
Prop In Lane	1.00		0.25	1.00		0.10	1.00		0.59	1.00		0.00
Lane Grp Cap(c), veh/h	164	650	655	92	578	598	474	0	224	396	0	0
V/C Ratio(X)	0.27	0.27	0.28	0.25	0.26	0.26	0.08	0.00	0.15	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1216	2022	2038	869	2022	2092	1097	0	815	877	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.8	6.6	6.7	13.8	7.4	7.4	11.5	0.0	11.5	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.3	0.3	1.1	0.3	0.3	0.1	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.5	0.5	0.1	0.5	0.5	0.2	0.0	0.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	7.0	7.0	14.8	7.7	7.7	11.6	0.0	11.8	12.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h	404		326				71				-40	
Approach Delay, s/veh	7.7		8.2				11.7				0.0	
Approach LOS	A		A				B				A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	16.4		8.2	6.9	15.1		8.2				
Change Period (Y+Rc), s	4.1	5.1		4.1	4.1	5.1		4.1				
Max Green Setting (Gmax), s	15.0	35.0		15.0	21.0	35.0		15.0				
Max Q Clear Time (g_c+I1), s	2.4	4.2		3.0	2.7	3.9		2.6				
Green Ext Time (p_c), s	0.0	3.1		0.0	0.0	2.5		0.1				
Intersection Summary												
HCM 6th Ctrl Delay	8.7											
HCM 6th LOS	A											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↗
Traffic Vol, veh/h	10	88	35	6	76	5	35	11	16	12	21	8
Future Vol, veh/h	10	88	35	6	76	5	35	11	16	12	21	8
Conflicting Peds, #/hr	0	0	4	4	0	0	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	11	97	38	7	84	5	38	12	18	13	23	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	89	0	0	139	0	0	261	245	121	255	262	89
Stage 1	-	-	-	-	-	-	142	142	-	101	101	-
Stage 2	-	-	-	-	-	-	119	103	-	154	161	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1457	-	-	1397	-	-	676	644	909	682	630	947
Stage 1	-	-	-	-	-	-	842	764	-	886	796	-
Stage 2	-	-	-	-	-	-	866	795	-	830	750	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1457	-	-	1392	-	-	641	633	905	652	619	945
Mov Cap-2 Maneuver	-	-	-	-	-	-	641	633	-	652	619	-
Stage 1	-	-	-	-	-	-	832	755	-	879	792	-
Stage 2	-	-	-	-	-	-	827	791	-	794	741	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.5			10.8			10.7		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	692	1457	-	-	1392	-	-	631	945			
HCM Lane V/C Ratio	0.098	0.008	-	-	0.005	-	-	0.057	0.009			
HCM Control Delay (s)	10.8	7.5	0	-	7.6	0	-	11.1	8.8			
HCM Lane LOS	B	A	A	-	A	A	-	B	A			
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2	0			

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↰					↰		↰
Traffic Vol, veh/h	10	77	0	1	92	48	0	0	0	40	0	12
Future Vol, veh/h	10	77	0	1	92	48	0	0	0	40	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	18	18	2	2	18	18	2	2	2	18	2	18
Mvmt Flow	11	85	0	1	101	53	0	0	0	44	0	13

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	154	0	-	85	0	0	237	-	128
Stage 1	-	-	-	-	-	-	130	-	-
Stage 2	-	-	-	-	-	-	107	-	-
Critical Hdwy	4.28	-	-	4.12	-	-	6.58	-	6.38
Critical Hdwy Stg 1	-	-	-	-	-	-	5.58	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.58	-	-
Follow-up Hdwy	2.362	-	-	2.218	-	-	3.662	-	3.462
Pot Cap-1 Maneuver	1334	-	0	1512	-	-	717	0	881
Stage 1	-	-	0	-	-	-	858	0	-
Stage 2	-	-	0	-	-	-	879	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1334	-	-	1512	-	-	710	0	881
Mov Cap-2 Maneuver	-	-	-	-	-	-	710	0	-
Stage 1	-	-	-	-	-	-	849	0	-
Stage 2	-	-	-	-	-	-	879	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0.1	10.1
HCM LOS			B





Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1334	-	1512	-	-	710	881
HCM Lane V/C Ratio	0.008	-	0.001	-	-	0.062	0.015
HCM Control Delay (s)	7.7	0	7.4	0	-	10.4	9.1
HCM Lane LOS	A	A	A	A	-	B	A
HCM 95th %tile Q(veh)	0	-	0	-	-	0.2	0

HCM 6th TWSC  
8: Lee Rd & Quincy Junction Rd

Quincy CHP Facility  
Existing PM Conditions

Intersection

Int Delay, s/veh 3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	11	64	92	4	41
Future Vol, veh/h	74	11	64	92	4	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	81	12	70	101	4	45




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	174	121	0
Stage 1	121	-	-
Stage 2	53	-	-
Critical Hdwy	6.51	6.31	-
Critical Hdwy Stg 1	5.51	-	-
Critical Hdwy Stg 2	5.51	-	-
Follow-up Hdwy	3.599	3.399	-
Pot Cap-1 Maneuver	796	907	-
Stage 1	882	-	-
Stage 2	947	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	794	907	-
Mov Cap-2 Maneuver	794	-	-
Stage 1	879	-	-
Stage 2	947	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	794	907
HCM Lane V/C Ratio	-	-	0.102	0.013
HCM Control Delay (s)	-	-	10.1	9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection

Int Delay, s/veh 3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	26	45	10	38	63	3
Future Vol, veh/h	26	45	10	38	63	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	33	58	13	49	81	4

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	91
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.3
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.38
Pot Cap-1 Maneuver	-	-	1398
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1398
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-





Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	814	-	-	1398	-
HCM Lane V/C Ratio	0.104	-	-	0.009	-
HCM Control Delay (s)	9.9	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-



Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	111	280	33	20	35
Future Vol, veh/h	33	111	280	33	20	35
Conflicting Peds, #/hr	2	0	0	2	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	42	142	359	42	26	45




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	403	0	0 537 206
Stage 1	-	-	- - 382 -
Stage 2	-	-	- - 155 -
Critical Hdwy	4.24	-	- - 6.94 7.04
Critical Hdwy Stg 1	-	-	- - 5.94 -
Critical Hdwy Stg 2	-	-	- - 5.94 -
Follow-up Hdwy	2.27	-	- - 3.57 3.37
Pot Cap-1 Maneuver	1117	-	- - 462 785
Stage 1	-	-	- - 645 -
Stage 2	-	-	- - 842 -
Platoon blocked, %		-	- -
Mov Cap-1 Maneuver	1115	-	- - 443 781
Mov Cap-2 Maneuver	-	-	- - 512 -
Stage 1	-	-	- - 619 -
Stage 2	-	-	- - 840 -

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1115	-	-	-	656
HCM Lane V/C Ratio	0.038	-	-	-	0.107
HCM Control Delay (s)	8.4	-	-	-	11.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection









Int Delay, s/veh 7.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	17	34	0	1	0
Future Vol, veh/h	0	17	34	0	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	0	22	44	0	1	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	89	1	1
Stage 1	1	-	-
Stage 2	88	-	-
Critical Hdwy	6.58	6.38	4.28
Critical Hdwy Stg 1	5.58	-	-
Critical Hdwy Stg 2	5.58	-	-
Follow-up Hdwy	3.662	3.462	2.362
Pot Cap-1 Maneuver	874	1039	1523
Stage 1	982	-	-
Stage 2	897	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	849	1039	1523
Mov Cap-2 Maneuver	849	-	-
Stage 1	954	-	-
Stage 2	897	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	7.4	0
HCM LOS	A		





















Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1523	-	1039	-	-
HCM Lane V/C Ratio	0.029	-	0.021	-	-
HCM Control Delay (s)	7.4	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	107	5	1	194	30	21	2	1	9	5	4
Future Vol, veh/h	2	107	5	1	194	30	21	2	1	9	5	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	3	137	6	1	249	38	27	3	1	12	6	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	287	0	0	143	0	0	276	435	72	346	419	144
Stage 1	-	-	-	-	-	-	146	146	-	270	270	-
Stage 2	-	-	-	-	-	-	130	289	-	76	149	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1223	-	-	1388	-	-	637	498	953	567	508	856
Stage 1	-	-	-	-	-	-	822	759	-	693	668	-
Stage 2	-	-	-	-	-	-	840	654	-	904	756	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1223	-	-	1388	-	-	626	497	953	562	506	856
Mov Cap-2 Maneuver	-	-	-	-	-	-	626	497	-	562	506	-
Stage 1	-	-	-	-	-	-	820	757	-	692	667	-
Stage 2	-	-	-	-	-	-	826	653	-	898	754	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0			11.1			11.3		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	612	953	1223	-	-	1388	-	-	541	856		
HCM Lane V/C Ratio	0.048	0.001	0.002	-	-	0.001	-	-	0.033	0.006		
HCM Control Delay (s)	11.2	8.8	8	-	-	7.6	-	-	11.9	9.2		
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A		
HCM 95th %tile Q(veh)	0.2	0	0	-	-	0	-	-	0.1	0		

# HCM 6th Signalized Intersection Summary

## 5: SR-70 & N Mill Creek Rd

Quincy CHP Facility  
Existing + Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	142	29	14	290	28	78	33	6	26	21	94
Future Volume (veh/h)	86	142	29	14	290	28	78	33	6	26	21	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.96		0.94	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	110	182	11	18	372	23	100	42	5	33	27	4
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	275	1218	73	71	827	51	501	419	50	488	407	60
Arrive On Green	0.16	0.37	0.37	0.04	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1739	3324	200	1739	3319	204	1288	1588	189	1272	1540	228
Grp Volume(v), veh/h	110	94	99	18	194	201	100	0	47	33	0	31
Grp Sat Flow(s),veh/h/ln	1739	1735	1789	1739	1735	1789	1288	0	1777	1272	0	1768
Q Serve(g_s), s	2.3	1.5	1.5	0.4	3.8	3.8	2.5	0.0	0.8	0.8	0.0	0.5
Cycle Q Clear(g_c), s	2.3	1.5	1.5	0.4	3.8	3.8	3.1	0.0	0.8	1.6	0.0	0.5
Prop In Lane	1.00		0.11	1.00		0.11	1.00		0.11	1.00		0.13
Lane Grp Cap(c), veh/h	275	635	655	71	432	446	501	0	469	488	0	467
V/C Ratio(X)	0.40	0.15	0.15	0.25	0.45	0.45	0.20	0.00	0.10	0.07	0.00	0.07
Avail Cap(c_a), veh/h	903	1502	1549	645	1502	1548	639	0	659	625	0	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.3	8.6	8.6	18.8	12.8	12.8	12.3	0.0	11.2	11.9	0.0	11.1
Incr Delay (d2), s/veh	0.7	0.2	0.1	1.4	1.0	1.0	0.1	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.4	0.4	0.2	1.3	1.3	0.6	0.0	0.3	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	8.7	8.7	20.2	13.9	13.9	12.4	0.0	11.3	11.9	0.0	11.2
LnGrp LOS	B	A	A	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h	303			413			147			64		
Approach Delay, s/veh	11.4			14.1			12.1			11.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	19.9		14.8	10.5	15.2		14.8				
Change Period (Y+Rc), s	4.1	5.1		4.1	4.1	5.1		4.1				
Max Green Setting (Gmax), s	15.0	35.0		15.0	21.0	35.0		15.0				
Max Q Clear Time (g_c+I1), s	2.4	3.5		3.6	4.3	5.8		5.1				
Green Ext Time (p_c), s	0.0	1.5		0.1	0.2	3.4		0.3				

### Intersection Summary

HCM 6th Ctrl Delay 12.7  
HCM 6th LOS B





### Notes

User approved pedestrian interval to be less than phase max green.

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	↔
Traffic Vol, veh/h	23	59	64	25	58	16	37	36	17	6	11	9
Future Vol, veh/h	23	59	64	25	58	16	37	36	17	6	11	9
Conflicting Peds, #/hr	2	0	5	5	0	2	8	0	8	8	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	29	76	82	32	74	21	47	46	22	8	14	12
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	97	0	0	163	0	0	350	341	130	368	372	95
Stage 1	-	-	-	-	-	-	180	180	-	151	151	-
Stage 2	-	-	-	-	-	-	170	161	-	217	221	-
Critical Hdwy	4.23	-	-	4.23	-	-	7.23	6.63	6.33	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Follow-up Hdwy	2.317	-	-	2.317	-	-	3.617	4.117	3.417	3.617	4.117	3.417
Pot Cap-1 Maneuver	1430	-	-	1351	-	-	585	564	891	569	541	932
Stage 1	-	-	-	-	-	-	797	730	-	826	752	-
Stage 2	-	-	-	-	-	-	807	744	-	761	700	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1427	-	-	1345	-	-	539	534	880	496	512	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	539	534	-	496	512	-
Stage 1	-	-	-	-	-	-	775	710	-	806	732	-
Stage 2	-	-	-	-	-	-	756	724	-	673	681	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			2			12.8			11.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	579	1427	-	-	1345	-	-	506	923			
HCM Lane V/C Ratio	0.199	0.021	-	-	0.024	-	-	0.043	0.013			
HCM Control Delay (s)	12.8	7.6	0	-	7.7	0	-	12.4	9			
HCM Lane LOS	B	A	A	-	A	A	-	B	A			
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.1	-	-	0.1	0			

Intersection





Int Delay, s/veh 2.4




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	87	86	32	41	17
Future Vol, veh/h	7	87	86	32	41	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	9	112	110	41	53	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	151	0	0 261 131
Stage 1	-	-	- - 131 -
Stage 2	-	-	- - 130 -
Critical Hdwy	4.28	-	- - 6.58 6.38
Critical Hdwy Stg 1	-	-	- - 5.58 -
Critical Hdwy Stg 2	-	-	- - 5.58 -
Follow-up Hdwy	2.362	-	- - 3.662 3.462
Pot Cap-1 Maneuver	1338	-	- - 695 877
Stage 1	-	-	- - 857 -
Stage 2	-	-	- - 858 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1338	-	- - 690 877
Mov Cap-2 Maneuver	-	-	- - 690 -
Stage 1	-	-	- - 851 -
Stage 2	-	-	- - 858 -




Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1338	-	-	-	690	877
HCM Lane V/C Ratio	0.007	-	-	-	0.076	0.025
HCM Control Delay (s)	7.7	0	-	-	10.6	9.2
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

Intersection						
Int Delay, s/veh	3.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	106	3	30	80	4	90
Future Vol, veh/h	106	3	30	80	4	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	12	12	12	12	12	12
Mvmt Flow	136	4	38	103	5	115
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	215	90	0	0	141	0
Stage 1	90	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Critical Hdwy	6.52	6.32	-	-	4.22	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.408	-	-	2.308	-
Pot Cap-1 Maneuver	751	941	-	-	1383	-
Stage 1	909	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	748	941	-	-	1383	-
Mov Cap-2 Maneuver	748	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.8	0	0.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 748 941 1383	-	-		
HCM Lane V/C Ratio	-	- 0.182 0.004 0.004	-	-		
HCM Control Delay (s)	-	- 10.9 8.8 7.6	0			
HCM Lane LOS	-	- B A A	A			
HCM 95th %tile Q(veh)	-	- 0.7 0 0	-			




Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	29	42	0	1	6
Future Vol, veh/h	0	29	42	0	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	37	54	0	1	8
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	54	0	-	0	91	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	37	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1551	-	-	-	909	1013
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1551	-	-	-	909	1013
Mov Cap-2 Maneuver	-	-	-	-	909	-
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	985	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		8.6		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1551	-	-	-	997	
HCM Lane V/C Ratio	-	-	-	-	0.009	
HCM Control Delay (s)	0	-	-	-	8.6	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	



Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	71	92	9	0	0
Future Vol, veh/h	1	71	92	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	91	118	12	0	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	130	0	-	0	217	124
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	93	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1455	-	-	-	771	927
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	931	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1455	-	-	-	770	927
Mov Cap-2 Maneuver	-	-	-	-	770	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	931	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		0		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1455	-	-	-	-	
HCM Lane V/C Ratio	0.001	-	-	-	-	
HCM Control Delay (s)	7.5	0	-	-	0	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection

Int Delay, s/veh 3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	41	72	6	32	62	4
Future Vol, veh/h	41	72	6	32	62	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	45	79	7	35	68	4





Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	124
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.19
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.281
Pot Cap-1 Maneuver	-	-	1421
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1421
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	845	-	-	1421	-
HCM Lane V/C Ratio	0.086	-	-	0.005	-
HCM Control Delay (s)	9.7	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection




Int Delay, s/veh 1.9









Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	263	218	25	38	40
Future Vol, veh/h	41	263	218	25	38	40
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	45	289	240	27	42	44

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	268	0	0 490 136
Stage 1	-	-	- - 255 -
Stage 2	-	-	- - 235 -
Critical Hdwy	4.18	-	- - 6.88 6.98
Critical Hdwy Stg 1	-	-	- - 5.88 -
Critical Hdwy Stg 2	-	-	- - 5.88 -
Follow-up Hdwy	2.24	-	- - 3.54 3.34
Pot Cap-1 Maneuver	1278	-	- - 502 881
Stage 1	-	-	- - 758 -
Stage 2	-	-	- - 776 -
Platoon blocked, %		-	- -
Mov Cap-1 Maneuver	1277	-	- - 483 879
Mov Cap-2 Maneuver	-	-	- - 554 -
Stage 1	-	-	- - 731 -
Stage 2	-	-	- - 775 -

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	11
HCM LOS			B





















Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1277	-	-	-	684
HCM Lane V/C Ratio	0.035	-	-	-	0.125
HCM Control Delay (s)	7.9	-	-	-	11
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection						
Int Delay, s/veh	7.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	19	27	0	0	1
Future Vol, veh/h	0	19	27	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	23	23	23	23	23	23
Mvmt Flow	0	21	30	0	0	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	61	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.63	6.43	4.33	-	-	-
Critical Hdwy Stg 1	5.63	-	-	-	-	-
Critical Hdwy Stg 2	5.63	-	-	-	-	-
Follow-up Hdwy	3.707	3.507	2.407	-	-	-
Pot Cap-1 Maneuver	895	1025	1494	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	912	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	877	1025	1494	-	-	-
Mov Cap-2 Maneuver	877	-	-	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	912	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.6	7.5		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1494	-	1025	-	-	
HCM Lane V/C Ratio	0.02	-	0.02	-	-	
HCM Control Delay (s)	7.5	0	8.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-	

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	204	23	3	167	24	11	2	4	18	0	1
Future Vol, veh/h	1	204	23	3	167	24	11	2	4	18	0	1
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	1	224	25	3	184	26	12	2	4	20	0	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	210	0	0	252	0	0	340	458	128	318	457	105
Stage 1	-	-	-	-	-	-	242	242	-	203	203	-
Stage 2	-	-	-	-	-	-	98	216	-	115	254	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	1329	-	-	1282	-	-	580	489	886	601	490	917
Stage 1	-	-	-	-	-	-	729	694	-	768	723	-
Stage 2	-	-	-	-	-	-	886	713	-	866	686	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1329	-	-	1278	-	-	577	486	883	594	487	917
Mov Cap-2 Maneuver	-	-	-	-	-	-	577	486	-	594	487	-
Stage 1	-	-	-	-	-	-	726	691	-	767	722	-
Stage 2	-	-	-	-	-	-	883	712	-	858	683	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.1			11			11.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	561	883	1329	-	-	1278	-	-	594	917		
HCM Lane V/C Ratio	0.025	0.005	0.001	-	-	0.003	-	-	0.033	0.001		
HCM Control Delay (s)	11.6	9.1	7.7	-	-	7.8	-	-	11.3	8.9		
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A		
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0	-	-	0.1	0		






# HCM 6th Signalized Intersection Summary 5: SR-70 & N Mill Creek Rd

Quincy CHP Facility  
Existing + Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	292	61	21	265	24	34	13	20	20	23	40
Future Volume (veh/h)	41	292	61	21	265	24	34	13	20	20	23	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	45	321	45	23	291	15	37	14	20	22	25	-56
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	164	1147	159	92	1118	57	474	92	132	396	0	278
Arrive On Green	0.09	0.37	0.37	0.05	0.33	0.33	0.14	0.14	0.14	0.14	0.14	0.00
Sat Flow, veh/h	1753	3084	428	1753	3384	174	1733	677	967	1340	1841	0
Grp Volume(v), veh/h	45	181	185	23	150	156	37	0	34	22	-31	-31
Grp Sat Flow(s),veh/h/ln	1753	1749	1764	1753	1749	1809	1733	0	1644	1340	1841	1560
Q Serve(g_s), s	0.7	2.2	2.2	0.4	1.9	1.9	0.6	0.0	0.6	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.7	2.2	2.2	0.4	1.9	1.9	0.6	0.0	0.6	1.0	0.0	0.0
Prop In Lane	1.00		0.24	1.00		0.10	1.00		0.59	1.00		0.00
Lane Grp Cap(c), veh/h	164	650	656	92	578	598	474	0	224	396	0	0
V/C Ratio(X)	0.27	0.28	0.28	0.25	0.26	0.26	0.08	0.00	0.15	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1216	2022	2039	869	2022	2092	1097	0	815	877	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.8	6.7	6.7	13.8	7.4	7.4	11.5	0.0	11.5	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.3	0.3	1.1	0.3	0.3	0.1	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.5	0.5	0.1	0.5	0.5	0.2	0.0	0.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	7.0	7.0	14.8	7.8	7.8	11.6	0.0	11.8	12.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h	411		329				71				-40	
Approach Delay, s/veh	7.7		8.2				11.7				0.0	
Approach LOS	A		A				B				A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	16.4		8.2	6.9	15.1		8.2				
Change Period (Y+Rc), s	4.1	5.1		4.1	4.1	5.1		4.1				
Max Green Setting (Gmax), s	15.0	35.0		15.0	21.0	35.0		15.0				
Max Q Clear Time (g_c+I1), s	2.4	4.2		3.0	2.7	3.9		2.6				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	2.6		0.1				
Intersection Summary												
HCM 6th Ctrl Delay	8.7											
HCM 6th LOS	A											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	10	88	35	6	77	5	1	34	11	16	12	21	8
Future Vol, veh/h	10	88	35	6	77	5	1	34	11	16	12	21	8
Conflicting Peds, #/hr	0	0	4	4	0	0	2	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	11	97	38	7	85	5	1	37	12	18	13	23	9





Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	90	0	0	139	0	0	0	262	246	121	256	263	90
Stage 1	-	-	-	-	-	-	0	142	142	-	102	102	-
Stage 2	-	-	-	-	-	-	0	120	104	-	154	161	-
Critical Hdwy	4.2	-	-	4.2	-	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1456	-	-	1397	-	-	0	675	643	909	681	629	946
Stage 1	-	-	-	-	-	-	0	842	764	-	885	795	-
Stage 2	-	-	-	-	-	-	0	865	794	-	830	750	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1456	-	-	1392	-	-	0	640	632	905	651	618	944
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	640	632	-	651	618	-
Stage 1	-	-	-	-	-	-	0	832	755	-	878	791	-
Stage 2	-	-	-	-	-	-	0	826	790	-	794	741	-

Approach	EB			WB			NB			SB			
HCM Control Delay, s	0.6			0.5			10.8			10.7			
HCM LOS							B			B			

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	692	1456	-	-	1392	-	-	630	944
HCM Lane V/C Ratio	0.097	0.008	-	-	0.005	-	-	0.058	0.009
HCM Control Delay (s)	10.8	7.5	0	-	7.6	0	-	11.1	8.8
HCM Lane LOS	B	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2	0

Intersection

Int Delay, s/veh 2.1





Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	10	77	1	93	48	40	12
Future Vol, veh/h	10	77	1	93	48	40	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	50
Veh in Median Storage, #	-	0	-	0	-	0	-
Grade, %	-	0	-	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91
Heavy Vehicles, %	18	18	18	18	18	18	18
Mvmt Flow	11	85	1	102	53	44	13




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	155	0	0 236 129
Stage 1	-	-	- - 129 -
Stage 2	-	-	- - 107 -
Critical Hdwy	4.28	-	- - 6.58 6.38
Critical Hdwy Stg 1	-	-	- - 5.58 -
Critical Hdwy Stg 2	-	-	- - 5.58 -
Follow-up Hdwy	2.362	-	- - 3.662 3.462
Pot Cap-1 Maneuver	1333	-	- - 718 880
Stage 1	-	-	- - 859 -
Stage 2	-	-	- - 879 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	1333	-	- - 712 880
Mov Cap-2 Maneuver	-	-	- - 712 -
Stage 1	-	-	- - 851 -
Stage 2	-	-	- - 879 -




Approach	EB	WB	SB
HCM Control Delay, s	0.9		10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1333	-	-	-	712	880
HCM Lane V/C Ratio	0.008	-	-	-	0.062	0.015
HCM Control Delay (s)	7.7	0	-	-	10.4	9.2
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0






Intersection						
Int Delay, s/veh	3.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	12	64	92	4	41
Future Vol, veh/h	74	12	64	92	4	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	81	13	70	101	4	45
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	174	121	0	0	171	0
Stage 1	121	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.51	6.31	-	-	4.21	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-	-
Follow-up Hdwy	3.599	3.399	-	-	2.299	-
Pot Cap-1 Maneuver	796	907	-	-	1353	-
Stage 1	882	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	794	907	-	-	1353	-
Mov Cap-2 Maneuver	794	-	-	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.9	0	0.7			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 794 907	1353	-		
HCM Lane V/C Ratio	-	- 0.102 0.015	0.003	-		
HCM Control Delay (s)	-	- 10.1 9	7.7	0		
HCM Lane LOS	-	- B A	A A	A		
HCM 95th %tile Q(veh)	-	- 0.3 0	0	-		

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	45	34	0	2	4
Future Vol, veh/h	0	45	34	0	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	49	37	0	2	4
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	37	0	-	0	86	37
Stage 1	-	-	-	-	37	-
Stage 2	-	-	-	-	49	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1574	-	-	-	915	1035
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	973	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1574	-	-	-	915	1035
Mov Cap-2 Maneuver	-	-	-	-	915	-
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	973	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		8.7		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1574	-	-	-	992	
HCM Lane V/C Ratio	-	-	-	-	0.007	
HCM Control Delay (s)	0	-	-	-	8.7	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	113	86	8	0	0
Future Vol, veh/h	0	113	86	8	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	124	95	9	0	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	104	0	-	0	224	100
Stage 1	-	-	-	-	100	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1488	-	-	-	764	956
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	902	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1488	-	-	-	764	956
Mov Cap-2 Maneuver	-	-	-	-	764	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	902	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1488	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	-	-	0	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection

Int Delay, s/veh 3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	60	10	40	60	10
Future Vol, veh/h	30	60	10	40	60	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	38	77	13	51	77	13





Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	115
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.3
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.38
Pot Cap-1 Maneuver	-	-	1369
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1369
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	807	-	-	1369	-
HCM Lane V/C Ratio	0.111	-	-	0.009	-
HCM Control Delay (s)	10	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	120	300	40	30	40
Future Vol, veh/h	30	120	300	40	30	40
Conflicting Peds, #/hr	2	0	0	2	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	38	154	385	51	38	51




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	438	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.24	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.27	-	-
Pot Cap-1 Maneuver	1084	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1082	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1082	-	-	-	620
HCM Lane V/C Ratio	0.036	-	-	-	0.145
HCM Control Delay (s)	8.4	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection









Int Delay, s/veh 5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	40	20	10	0
Future Vol, veh/h	0	20	40	20	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	0	26	51	26	13	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	141	13	13
Stage 1	13	-	-
Stage 2	128	-	-
Critical Hdwy	6.58	6.38	4.28
Critical Hdwy Stg 1	5.58	-	-
Critical Hdwy Stg 2	5.58	-	-
Follow-up Hdwy	3.662	3.462	2.362
Pot Cap-1 Maneuver	816	1023	1507
Stage 1	970	-	-
Stage 2	860	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	788	1023	1507
Mov Cap-2 Maneuver	788	-	-
Stage 1	937	-	-
Stage 2	860	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1507	-	1023	-	-
HCM Lane V/C Ratio	0.034	-	0.025	-	-
HCM Control Delay (s)	7.5	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	120	10	10	210	40	30	10	10	10	10	10
Future Vol, veh/h	10	120	10	10	210	40	30	10	10	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	13	154	13	13	269	51	38	13	13	13	13	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	320	0	0	167	0	0	354	533	84	431	514	160
Stage 1	-	-	-	-	-	-	187	187	-	321	321	-
Stage 2	-	-	-	-	-	-	167	346	-	110	193	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1188	-	-	1359	-	-	559	436	936	492	448	835
Stage 1	-	-	-	-	-	-	777	727	-	646	633	-
Stage 2	-	-	-	-	-	-	799	617	-	863	723	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1188	-	-	1359	-	-	530	427	936	467	439	835
Mov Cap-2 Maneuver	-	-	-	-	-	-	530	427	-	467	439	-
Stage 1	-	-	-	-	-	-	768	719	-	639	627	-
Stage 2	-	-	-	-	-	-	763	611	-	827	715	-

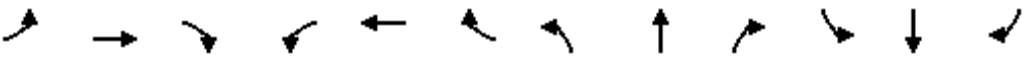








Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.3			12.2			12.1		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	500	936	1188	-	-	1359	-	-	453	835
HCM Lane V/C Ratio	0.103	0.014	0.011	-	-	0.009	-	-	0.057	0.015
HCM Control Delay (s)	13	8.9	8.1	-	-	7.7	-	-	13.4	9.4
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.3	0	0	-	-	0	-	-	0.2	0

# HCM 6th Signalized Intersection Summary 5: SR-70 & N Mill Creek Rd

Quincy CHP Facility  
Future Year No Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	150	40	20	300	30	90	40	10	30	30	100
Future Volume (veh/h)	100	150	40	20	300	30	90	40	10	30	30	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.96		0.94	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	128	192	25	26	385	25	115	51	10	38	38	11
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	292	1100	141	98	808	52	485	389	76	475	356	103
Arrive On Green	0.17	0.36	0.36	0.06	0.24	0.24	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1739	3091	397	1739	3308	214	1270	1465	287	1258	1340	388
Grp Volume(v), veh/h	128	107	110	26	201	209	115	0	61	38	0	49
Grp Sat Flow(s),veh/h/ln	1739	1735	1753	1739	1735	1787	1270	0	1752	1258	0	1728
Q Serve(g_s), s	2.7	1.7	1.8	0.6	4.1	4.1	3.1	0.0	1.1	1.0	0.0	0.9
Cycle Q Clear(g_c), s	2.7	1.7	1.8	0.6	4.1	4.1	4.0	0.0	1.1	2.1	0.0	0.9
Prop In Lane	1.00		0.23	1.00		0.12	1.00		0.16	1.00		0.22
Lane Grp Cap(c), veh/h	292	617	624	98	424	436	485	0	466	475	0	459
V/C Ratio(X)	0.44	0.17	0.18	0.27	0.48	0.48	0.24	0.00	0.13	0.08	0.00	0.11
Avail Cap(c_a), veh/h	885	1471	1487	632	1471	1516	609	0	637	598	0	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	9.1	9.1	18.7	13.3	13.3	13.0	0.0	11.5	12.3	0.0	11.4
Incr Delay (d2), s/veh	0.8	0.2	0.2	1.1	1.2	1.2	0.2	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.5	0.5	0.2	1.4	1.5	0.8	0.0	0.4	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	9.3	9.3	19.7	14.5	14.5	13.1	0.0	11.6	12.4	0.0	11.5
LnGrp LOS	B	A	A	B	B	B	B	A	B	B	A	B
Approach Vol, veh/h	345				436				176			
Approach Delay, s/veh	11.9				14.8				12.6			
Approach LOS	B				B				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	19.8		15.1	11.0	15.2		15.1				
Change Period (Y+Rc), s	4.1	5.1		4.1	4.1	5.1		4.1				
Max Green Setting (Gmax), s	15.0	35.0		15.0	21.0	35.0		15.0				
Max Q Clear Time (g_c+I1), s	2.6	3.8		4.1	4.7	6.1		6.0				
Green Ext Time (p_c), s	0.0	1.8		0.2	0.2	3.5		0.3				

## Intersection Summary

HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

## Notes





User approved pedestrian interval to be less than phase max green.



Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↗
Traffic Vol, veh/h	30	80	70	40	70	20	50	40	20	10	20	10
Future Vol, veh/h	30	80	70	40	70	20	50	40	20	10	20	10
Conflicting Peds, #/hr	2	0	5	5	0	2	8	0	8	8	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	38	103	90	51	90	26	64	51	26	13	26	13
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	118	0	0	198	0	0	462	449	161	478	481	113
Stage 1	-	-	-	-	-	-	229	229	-	207	207	-
Stage 2	-	-	-	-	-	-	233	220	-	271	274	-
Critical Hdwy	4.23	-	-	4.23	-	-	7.23	6.63	6.33	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Follow-up Hdwy	2.317	-	-	2.317	-	-	3.617	4.117	3.417	3.617	4.117	3.417
Pot Cap-1 Maneuver	1405	-	-	1311	-	-	492	489	856	480	469	911
Stage 1	-	-	-	-	-	-	750	695	-	770	710	-
Stage 2	-	-	-	-	-	-	746	701	-	711	664	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1402	-	-	1305	-	-	432	451	845	398	432	902
Mov Cap-2 Maneuver	-	-	-	-	-	-	432	451	-	398	432	-
Stage 1	-	-	-	-	-	-	723	670	-	745	679	-
Stage 2	-	-	-	-	-	-	673	670	-	612	640	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			2.4			15.5			13.1		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	482	1402	-	-	1305	-	-	420	902			
HCM Lane V/C Ratio	0.293	0.027	-	-	0.039	-	-	0.092	0.014			
HCM Control Delay (s)	15.5	7.6	0	-	7.9	0	-	14.4	9			
HCM Lane LOS	C	A	A	-	A	A	-	B	A			
HCM 95th %tile Q(veh)	1.2	0.1	-	-	0.1	-	-	0.3	0			

Intersection





Int Delay, s/veh 2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	100	100	40	50	20
Future Vol, veh/h	10	100	100	40	50	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	13	128	128	51	64	26

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	179	0	0 308 154
Stage 1	-	-	- 154 -
Stage 2	-	-	- 154 -
Critical Hdwy	4.28	-	- 6.58 6.38
Critical Hdwy Stg 1	-	-	- 5.58 -
Critical Hdwy Stg 2	-	-	- 5.58 -
Follow-up Hdwy	2.362	-	- 3.662 3.462
Pot Cap-1 Maneuver	1306	-	- 652 852
Stage 1	-	-	- 837 -
Stage 2	-	-	- 837 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1306	-	- 645 852
Mov Cap-2 Maneuver	-	-	- 645 -
Stage 1	-	-	- 828 -
Stage 2	-	-	- 837 -




Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1306	-	-	-	645	852
HCM Lane V/C Ratio	0.01	-	-	-	0.099	0.03
HCM Control Delay (s)	7.8	0	-	-	11.2	9.4
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0.1

Intersection						
Int Delay, s/veh	4.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	120	10	40	90	20	100
Future Vol, veh/h	120	10	40	90	20	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	12	12	12	12	12	12
Mvmt Flow	154	13	51	115	26	128
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	289	109	0	0	166	0
Stage 1	109	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.52	6.32	-	-	4.22	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.408	-	-	2.308	-
Pot Cap-1 Maneuver	681	918	-	-	1354	-
Stage 1	891	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	667	918	-	-	1354	-
Mov Cap-2 Maneuver	667	-	-	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.8	0	1.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 667 918	1354	-		
HCM Lane V/C Ratio	-	- 0.231 0.014	0.019	-		
HCM Control Delay (s)	-	- 12 9	7.7	0		
HCM Lane LOS	-	- B A	A	A		
HCM 95th %tile Q(veh)	-	- 0.9 0	0.1	-		

Intersection

Int Delay, s/veh 3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	50	80	10	40	60	10
Future Vol, veh/h	50	80	10	40	60	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	55	88	11	44	66	11





Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	143
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.19
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.281
Pot Cap-1 Maneuver	-	-	1398
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1398
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	821	-	-	1398	-
HCM Lane V/C Ratio	0.094	-	-	0.008	-
HCM Control Delay (s)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection

Int Delay, s/veh 2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	280	230	30	40	50
Future Vol, veh/h	40	280	230	30	40	50
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	44	308	253	33	44	55




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	287	0	0 513 145
Stage 1	-	-	- - 271 -
Stage 2	-	-	- - 242 -
Critical Hdwy	4.18	-	- - 6.88 6.98
Critical Hdwy Stg 1	-	-	- - 5.88 -
Critical Hdwy Stg 2	-	-	- - 5.88 -
Follow-up Hdwy	2.24	-	- - 3.54 3.34
Pot Cap-1 Maneuver	1258	-	- - 486 870
Stage 1	-	-	- - 744 -
Stage 2	-	-	- - 770 -
Platoon blocked, %		-	- -
Mov Cap-1 Maneuver	1257	-	- - 468 868
Mov Cap-2 Maneuver	-	-	- - 543 -
Stage 1	-	-	- - 717 -
Stage 2	-	-	- - 769 -

Approach	EB	WB	SB
HCM Control Delay, s	1	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1257	-	-	-	686
HCM Lane V/C Ratio	0.035	-	-	-	0.144
HCM Control Delay (s)	8	-	-	-	11.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection









Int Delay, s/veh 5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	40	10	10	10
Future Vol, veh/h	0	20	40	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	23	23	23	23	23	23
Mvmt Flow	0	22	44	11	11	11

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	116	17	22
Stage 1	17	-	-
Stage 2	99	-	-
Critical Hdwy	6.63	6.43	4.33
Critical Hdwy Stg 1	5.63	-	-
Critical Hdwy Stg 2	5.63	-	-
Follow-up Hdwy	3.707	3.507	2.407
Pot Cap-1 Maneuver	832	1004	1467
Stage 1	954	-	-
Stage 2	875	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	807	1004	1467
Mov Cap-2 Maneuver	807	-	-
Stage 1	925	-	-
Stage 2	875	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	1004	-	-
HCM Lane V/C Ratio	0.03	-	0.022	-	-
HCM Control Delay (s)	7.5	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	220	30	10	180	30	20	10	10	20	0	10
Future Vol, veh/h	10	220	30	10	180	30	20	10	10	20	0	10
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	11	242	33	11	198	33	22	11	11	22	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	231	0	0	278	0	0	405	537	141	386	537	116
Stage 1	-	-	-	-	-	-	284	284	-	237	237	-
Stage 2	-	-	-	-	-	-	121	253	-	149	300	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	1305	-	-	1253	-	-	521	440	869	537	440	902
Stage 1	-	-	-	-	-	-	688	665	-	734	698	-
Stage 2	-	-	-	-	-	-	859	687	-	827	654	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1305	-	-	1249	-	-	506	431	867	513	431	902
Mov Cap-2 Maneuver	-	-	-	-	-	-	506	431	-	513	431	-
Stage 1	-	-	-	-	-	-	680	658	-	728	692	-
Stage 2	-	-	-	-	-	-	841	681	-	796	647	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.4			12.1			11.2		
HCM LOS							B			B		























  

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	478	867	1305	-	-	1249	-	-	513	902
HCM Lane V/C Ratio	0.069	0.013	0.008	-	-	0.009	-	-	0.043	0.012
HCM Control Delay (s)	13.1	9.2	7.8	-	-	7.9	-	-	12.3	9
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.2	0	0	-	-	0	-	-	0.1	0






# HCM 6th Signalized Intersection Summary





## 5: SR-70 & N Mill Creek Rd





Quincy CHP Facility  
Future Year No Project PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	310	70	30	280	30	40	20	30	30	30	50
Future Volume (veh/h)	50	310	70	30	280	30	40	20	30	30	30	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	55	341	55	33	308	22	44	22	31	33	33	-45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	189	1018	163	125	995	71	482	131	185	435	0	278
Arrive On Green	0.11	0.34	0.34	0.07	0.30	0.30	0.19	0.19	0.19	0.19	0.19	0.00
Sat Flow, veh/h	1753	3020	482	1753	3312	235	1384	683	962	1321	1841	0
Grp Volume(v), veh/h	55	196	200	33	162	168	44	0	53	33	-12	-12
Grp Sat Flow(s),veh/h/ln	1753	1749	1754	1753	1749	1798	1384	0	1645	1321	1841	1560
Q Serve(g_s), s	1.0	2.8	2.8	0.6	2.4	2.4	0.9	0.0	0.9	0.7	0.0	0.0
Cycle Q Clear(g_c), s	1.0	2.8	2.8	0.6	2.4	2.4	0.9	0.0	0.9	1.6	0.0	0.0
Prop In Lane	1.00		0.28	1.00		0.13	1.00		0.58	1.00		0.00
Lane Grp Cap(c), veh/h	189	590	591	125	525	540	482	0	316	435	0	0
V/C Ratio(X)	0.29	0.33	0.34	0.26	0.31	0.31	0.09	0.00	0.17	0.08	0.00	0.00
Avail Cap(c_a), veh/h	1106	1839	1845	790	1839	1891	840	0	741	776	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.7	8.2	8.3	14.6	9.0	9.0	11.2	0.0	11.2	11.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.5	0.5	0.8	0.5	0.5	0.1	0.0	0.2	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.7	0.8	0.2	0.7	0.7	0.2	0.0	0.3	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	8.7	8.7	15.5	9.4	9.4	11.3	0.0	11.4	11.9	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h	451		363				97		9			
Approach Delay, s/veh	9.4		10.0				11.3		43.8			
Approach LOS	A		A				B		D			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.5	16.3	10.5		7.7	15.1	10.5					
Change Period (Y+Rc), s	4.1	5.1	4.1		4.1	5.1	4.1					
Max Green Setting (Gmax), s	15.0	35.0	15.0		21.0	35.0	15.0					
Max Q Clear Time (g_c+I1), s	2.6	4.8	3.6		3.0	4.4	2.9					
Green Ext Time (p_c), s	0.0	3.4	0.0		0.1	2.8	0.2					
Intersection Summary												
HCM 6th Ctrl Delay	10.2											
HCM 6th LOS	B											
Notes												






Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	100	40	10	80	10	50	20	20	20	30	10
Future Vol, veh/h	20	100	40	10	80	10	50	20	20	20	30	10
Conflicting Peds, #/hr	0	0	4	4	0	0	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	22	110	44	11	88	11	55	22	22	22	33	11
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	158	0	0	320	301	137	315	318	96
Stage 1	-	-	-	-	-	-	180	180	-	116	116	-
Stage 2	-	-	-	-	-	-	140	121	-	199	202	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1445	-	-	1374	-	-	618	599	891	622	585	939
Stage 1	-	-	-	-	-	-	803	736	-	870	784	-
Stage 2	-	-	-	-	-	-	844	780	-	785	719	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1445	-	-	1369	-	-	569	581	887	577	567	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	569	581	-	577	567	-
Stage 1	-	-	-	-	-	-	786	721	-	855	777	-
Stage 2	-	-	-	-	-	-	790	773	-	729	704	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0.8			11.9			11.5		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	621	1445	-	-	1369	-	-	571	937			
HCM Lane V/C Ratio	0.159	0.015	-	-	0.008	-	-	0.096	0.012			
HCM Control Delay (s)	11.9	7.5	0	-	7.7	0	-	12	8.9			
HCM Lane LOS	B	A	A	-	A	A	-	B	A			
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3	0			

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	90	0	10	100	60	0	0	0	50	0	20
Future Vol, veh/h	20	90	0	10	100	60	0	0	0	50	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	18	18	2	2	18	18	2	2	2	18	2	18
Mvmt Flow	22	99	0	11	110	66	0	0	0	55	0	22
Major/Minor	Major1		Major2				Minor2					
Conflicting Flow All	176	0	-	99	0	0				308	-	143
Stage 1	-	-	-	-	-	-				165	-	-
Stage 2	-	-	-	-	-	-				143	-	-
Critical Hdwy	4.28	-	-	4.12	-	-				6.58	-	6.38
Critical Hdwy Stg 1	-	-	-	-	-	-				5.58	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-				5.58	-	-
Follow-up Hdwy	2.362	-	-	2.218	-	-				3.662	-	3.462
Pot Cap-1 Maneuver	1309	-	0	1494	-	-				652	0	864
Stage 1	-	-	0	-	-	-				827	0	-
Stage 2	-	-	0	-	-	-				846	0	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	1309	-	-	1494	-	-				635	0	864
Mov Cap-2 Maneuver	-	-	-	-	-	-				635	0	-
Stage 1	-	-	-	-	-	-				805	0	-
Stage 2	-	-	-	-	-	-				846	0	-
Approach	EB		WB				SB					
HCM Control Delay, s	1.4		0.4				10.7					
HCM LOS	B											
Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2					
Capacity (veh/h)	1309	-	1494	-	-	635	864					
HCM Lane V/C Ratio	0.017	-	0.007	-	-	0.087	0.025					
HCM Control Delay (s)	7.8	0	7.4	0	-	11.2	9.3					
HCM Lane LOS	A	A	A	A	-	B	A					
HCM 95th %tile Q(veh)	0.1	-	0	-	-	0.3	0.1					

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	20	70	100	10	50
Future Vol, veh/h	80	20	70	100	10	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	88	22	77	110	11	55
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	209	132	0	0	187	0
Stage 1	132	-	-	-	-	-
Stage 2	77	-	-	-	-	-
Critical Hdwy	6.51	6.31	-	-	4.21	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-	-
Follow-up Hdwy	3.599	3.399	-	-	2.299	-
Pot Cap-1 Maneuver	760	894	-	-	1335	-
Stage 1	872	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	754	894	-	-	1335	-
Mov Cap-2 Maneuver	754	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.1	0	1.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 754 894	1335	-		
HCM Lane V/C Ratio	-	- 0.117 0.025	0.008	-		
HCM Control Delay (s)	-	- 10.4 9.1	7.7	0		
HCM Lane LOS	-	- B A	A	A		
HCM 95th %tile Q(veh)	-	- 0.4 0.1	0	-		

Intersection





Int Delay, s/veh 4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	60	16	41	68	10
Future Vol, veh/h	30	60	16	41	68	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	38	77	21	53	87	13

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	115
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.3
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.38
Pot Cap-1 Maneuver	-	-	1369
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1369
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-




Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	784	-	-	1369	-
HCM Lane V/C Ratio	0.128	-	-	0.015	-
HCM Control Delay (s)	10.3	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	120	300	42	30	46
Future Vol, veh/h	36	120	300	42	30	46
Conflicting Peds, #/hr	2	0	0	2	0	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	46	154	385	54	38	59
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	441	0	-	0	583	225
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	169	-
Critical Hdwy	4.24	-	-	-	6.94	7.04
Critical Hdwy Stg 1	-	-	-	-	5.94	-
Critical Hdwy Stg 2	-	-	-	-	5.94	-
Follow-up Hdwy	2.27	-	-	-	3.57	3.37
Pot Cap-1 Maneuver	1081	-	-	-	432	763
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	829	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1079	-	-	-	412	759
Mov Cap-2 Maneuver	-	-	-	-	487	-
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	827	-
Approach	EB	WB		SB		
HCM Control Delay, s	2	0		11.9		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1079	-	-	-	622	
HCM Lane V/C Ratio	0.043	-	-	-	0.157	
HCM Control Delay (s)	8.5	-	-	-	11.9	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6	

Intersection









Int Delay, s/veh 5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	41	20	10	0
Future Vol, veh/h	0	21	41	20	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	0	27	53	26	13	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	145	13	13
Stage 1	13	-	-
Stage 2	132	-	-
Critical Hdwy	6.58	6.38	4.28
Critical Hdwy Stg 1	5.58	-	-
Critical Hdwy Stg 2	5.58	-	-
Follow-up Hdwy	3.662	3.462	2.362
Pot Cap-1 Maneuver	811	1023	1507
Stage 1	970	-	-
Stage 2	856	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	782	1023	1507
Mov Cap-2 Maneuver	782	-	-
Stage 1	935	-	-
Stage 2	856	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	5	0
HCM LOS	A		





















Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1507	-	1023	-	-
HCM Lane V/C Ratio	0.035	-	0.026	-	-
HCM Control Delay (s)	7.5	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	120	10	10	212	41	30	10	10	11	10	10
Future Vol, veh/h	10	120	10	10	212	41	30	10	10	11	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	13	154	13	13	272	53	38	13	13	14	13	13
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	325	0	0	167	0	0	356	538	84	435	518	163
Stage 1	-	-	-	-	-	-	187	187	-	325	325	-
Stage 2	-	-	-	-	-	-	169	351	-	110	193	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1182	-	-	1359	-	-	557	434	936	489	445	831
Stage 1	-	-	-	-	-	-	777	727	-	642	630	-
Stage 2	-	-	-	-	-	-	796	613	-	863	723	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1182	-	-	1359	-	-	528	425	936	464	436	831
Mov Cap-2 Maneuver	-	-	-	-	-	-	528	425	-	464	436	-
Stage 1	-	-	-	-	-	-	768	719	-	635	624	-
Stage 2	-	-	-	-	-	-	760	607	-	827	715	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.3			12.3			12.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	498	936	1182	-	-	1359	-	-	450	831		
HCM Lane V/C Ratio	0.103	0.014	0.011	-	-	0.009	-	-	0.06	0.015		
HCM Control Delay (s)	13.1	8.9	8.1	-	-	7.7	-	-	13.5	9.4		
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A		
HCM 95th %tile Q(veh)	0.3	0	0	-	-	0	-	-	0.2	0		

# HCM 6th Signalized Intersection Summary

## 5: SR-70 & N Mill Creek Rd

Quincy CHP Facility  
Future Year + Project AM





												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	156	40	20	306	30	90	40	10	30	30	100
Future Volume (veh/h)	100	156	40	20	306	30	90	40	10	30	30	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.96		0.94	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	128	200	25	26	392	25	115	51	10	38	38	11
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	292	1105	136	98	809	51	485	389	76	475	356	103
Arrive On Green	0.17	0.36	0.36	0.06	0.24	0.24	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1739	3107	383	1739	3312	210	1270	1465	287	1258	1340	388
Grp Volume(v), veh/h	128	111	114	26	205	212	115	0	61	38	0	49
Grp Sat Flow(s),veh/h/ln	1739	1735	1756	1739	1735	1788	1270	0	1752	1258	0	1728
Q Serve(g_s), s	2.7	1.8	1.9	0.6	4.2	4.2	3.1	0.0	1.1	1.0	0.0	0.9
Cycle Q Clear(g_c), s	2.7	1.8	1.9	0.6	4.2	4.2	4.0	0.0	1.1	2.1	0.0	0.9
Prop In Lane	1.00		0.22	1.00		0.12	1.00		0.16	1.00		0.22
Lane Grp Cap(c), veh/h	292	617	625	98	424	436	485	0	466	475	0	459
V/C Ratio(X)	0.44	0.18	0.18	0.27	0.48	0.49	0.24	0.00	0.13	0.08	0.00	0.11
Avail Cap(c_a), veh/h	885	1471	1489	632	1471	1516	609	0	637	598	0	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	9.1	9.2	18.7	13.4	13.4	13.0	0.0	11.5	12.3	0.0	11.4
Incr Delay (d2), s/veh	0.8	0.2	0.2	1.1	1.2	1.2	0.2	0.0	0.1	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.5	0.6	0.2	1.4	1.5	0.8	0.0	0.4	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	9.3	9.4	19.7	14.6	14.6	13.1	0.0	11.6	12.4	0.0	11.5
LnGrp LOS	B	A	A	B	B	B	B	A	B	B	A	B
Approach Vol, veh/h	353		443				176		87			
Approach Delay, s/veh	11.8		14.9				12.6		11.9			
Approach LOS	B		B				B		B			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.4	19.8	15.1		11.0	15.2	15.1					
Change Period (Y+Rc), s	4.1	5.1	4.1		4.1	5.1	4.1					
Max Green Setting (Gmax), s	15.0	35.0	15.0		21.0	35.0	15.0					
Max Q Clear Time (g_c+I1), s	2.6	3.9	4.1		4.7	6.2	6.0					
Green Ext Time (p_c), s	0.0	1.8	0.2		0.2	3.6	0.3					
Intersection Summary												
HCM 6th Ctrl Delay	13.2											
HCM 6th LOS	B											
Notes												



Intersection												
Int Delay, s/veh	6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↗
Traffic Vol, veh/h	30	81	70	40	70	20	50	40	20	10	20	10
Future Vol, veh/h	30	81	70	40	70	20	50	40	20	10	20	10
Conflicting Peds, #/hr	2	0	5	5	0	2	8	0	8	8	0	8
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	38	104	90	51	90	26	64	51	26	13	26	13
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	118	0	0	199	0	0	463	450	162	479	482	113
Stage 1	-	-	-	-	-	-	230	230	-	207	207	-
Stage 2	-	-	-	-	-	-	233	220	-	272	275	-
Critical Hdwy	4.23	-	-	4.23	-	-	7.23	6.63	6.33	7.23	6.63	6.33
Critical Hdwy Stg 1	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.23	5.63	-	6.23	5.63	-
Follow-up Hdwy	2.317	-	-	2.317	-	-	3.617	4.117	3.417	3.617	4.117	3.417
Pot Cap-1 Maneuver	1405	-	-	1310	-	-	491	488	855	479	468	911
Stage 1	-	-	-	-	-	-	749	694	-	770	710	-
Stage 2	-	-	-	-	-	-	746	701	-	710	663	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1402	-	-	1304	-	-	432	450	844	397	431	902
Mov Cap-2 Maneuver	-	-	-	-	-	-	432	450	-	397	431	-
Stage 1	-	-	-	-	-	-	722	669	-	745	679	-
Stage 2	-	-	-	-	-	-	673	670	-	611	639	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.3			2.4			15.5			13.1		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	482	1402	-	-	1304	-	-	419	902			
HCM Lane V/C Ratio	0.293	0.027	-	-	0.039	-	-	0.092	0.014			
HCM Control Delay (s)	15.5	7.6	0	-	7.9	0	-	14.5	9			
HCM Lane LOS	C	A	A	-	A	A	-	B	A			
HCM 95th %tile Q(veh)	1.2	0.1	-	-	0.1	-	-	0.3	0			

Intersection





Int Delay, s/veh 2.6




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	101	100	40	50	20
Future Vol, veh/h	10	101	100	40	50	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	50
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	13	129	128	51	64	26




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	179	0	0 309 154
Stage 1	-	-	- - 154 -
Stage 2	-	-	- - 155 -
Critical Hdwy	4.28	-	- - 6.58 6.38
Critical Hdwy Stg 1	-	-	- - 5.58 -
Critical Hdwy Stg 2	-	-	- - 5.58 -
Follow-up Hdwy	2.362	-	- - 3.662 3.462
Pot Cap-1 Maneuver	1306	-	- - 651 852
Stage 1	-	-	- - 837 -
Stage 2	-	-	- - 836 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1306	-	- - 644 852
Mov Cap-2 Maneuver	-	-	- - 644 -
Stage 1	-	-	- - 828 -
Stage 2	-	-	- - 836 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1306	-	-	-	644	852
HCM Lane V/C Ratio	0.01	-	-	-	0.1	0.03
HCM Control Delay (s)	7.8	0	-	-	11.2	9.4
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0.1




Intersection						
Int Delay, s/veh	4.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	120	10	40	90	21	100
Future Vol, veh/h	120	10	40	90	21	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	12	12	12	12	12	12
Mvmt Flow	154	13	51	115	27	128
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	291	109	0	0	166	0
Stage 1	109	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Critical Hdwy	6.52	6.32	-	-	4.22	-
Critical Hdwy Stg 1	5.52	-	-	-	-	-
Critical Hdwy Stg 2	5.52	-	-	-	-	-
Follow-up Hdwy	3.608	3.408	-	-	2.308	-
Pot Cap-1 Maneuver	679	918	-	-	1354	-
Stage 1	891	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	665	918	-	-	1354	-
Mov Cap-2 Maneuver	665	-	-	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.8	0	1.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 665 918	1354	-		
HCM Lane V/C Ratio	-	- 0.231 0.014	0.02	-		
HCM Control Delay (s)	-	- 12 9	7.7	0		
HCM Lane LOS	-	- B A	A	A		
HCM 95th %tile Q(veh)	-	- 0.9 0	0.1	-		

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	40	51	0	1	6
Future Vol, veh/h	0	40	51	0	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	51	65	0	1	8
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	65	0	-	0	116	65
Stage 1	-	-	-	-	65	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1537	-	-	-	880	999
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	-	-	-	880	999
Mov Cap-2 Maneuver	-	-	-	-	880	-
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	971	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		8.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1537	-	-	-	980	
HCM Lane V/C Ratio	-	-	-	-	0.009	
HCM Control Delay (s)	0	-	-	-	8.7	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	90	100	9	0	0
Future Vol, veh/h	1	90	100	9	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	115	128	12	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	140	0	-	0	251	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	117	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1443	-	-	-	738	915
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	908	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1443	-	-	-	737	915
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	908	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		0		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1443	-	-	-	-	
HCM Lane V/C Ratio	0.001	-	-	-	-	
HCM Control Delay (s)	7.5	0	-	-	0	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection

Int Delay, s/veh 3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	50	80	13	41	68	10
Future Vol, veh/h	50	80	13	41	68	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	55	88	14	45	75	11





Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	143
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.19
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.281
Pot Cap-1 Maneuver	-	-	1398
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1398
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	810	-	-	1398	-
HCM Lane V/C Ratio	0.106	-	-	0.01	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	280	230	32	40	53
Future Vol, veh/h	46	280	230	32	40	53
Conflicting Peds, #/hr	1	0	0	1	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	51	308	253	35	44	58




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	289	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.18	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.24	-	-
Pot Cap-1 Maneuver	1255	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1254	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1254	-	-	-	681
HCM Lane V/C Ratio	0.04	-	-	-	0.15
HCM Control Delay (s)	8	-	-	-	11.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection

Int Delay, s/veh 5.3









Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	22	40	10	10	10
Future Vol, veh/h	0	22	40	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	23	23	23	23	23	23
Mvmt Flow	0	24	44	11	11	11

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	116	17	22
Stage 1	17	-	-
Stage 2	99	-	-
Critical Hdwy	6.63	6.43	4.33
Critical Hdwy Stg 1	5.63	-	-
Critical Hdwy Stg 2	5.63	-	-
Follow-up Hdwy	3.707	3.507	2.407
Pot Cap-1 Maneuver	832	1004	1467
Stage 1	954	-	-
Stage 2	875	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	807	1004	1467
Mov Cap-2 Maneuver	807	-	-
Stage 1	925	-	-
Stage 2	875	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	1004	-	-
HCM Lane V/C Ratio	0.03	-	0.024	-	-
HCM Control Delay (s)	7.5	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-



Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	220	30	10	182	30	20	10	10	22	0	10
Future Vol, veh/h	10	220	30	10	182	30	20	10	10	22	0	10
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	11	242	33	11	200	33	22	11	11	24	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	233	0	0	278	0	0	406	539	141	388	539	117
Stage 1	-	-	-	-	-	-	284	284	-	239	239	-
Stage 2	-	-	-	-	-	-	122	255	-	149	300	-
Critical Hdwy	4.22	-	-	4.22	-	-	7.62	6.62	7.02	7.62	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.62	5.62	-	6.62	5.62	-
Follow-up Hdwy	2.26	-	-	2.26	-	-	3.56	4.06	3.36	3.56	4.06	3.36
Pot Cap-1 Maneuver	1303	-	-	1253	-	-	520	439	869	536	439	900
Stage 1	-	-	-	-	-	-	688	665	-	732	697	-
Stage 2	-	-	-	-	-	-	858	685	-	827	654	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1303	-	-	1249	-	-	505	430	867	512	430	900
Mov Cap-2 Maneuver	-	-	-	-	-	-	505	430	-	512	430	-
Stage 1	-	-	-	-	-	-	680	658	-	726	691	-
Stage 2	-	-	-	-	-	-	840	679	-	796	647	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.4			12.1			11.3		
HCM LOS							B			B		





















  

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	477	867	1303	-	-	1249	-	-	512	900
HCM Lane V/C Ratio	0.069	0.013	0.008	-	-	0.009	-	-	0.047	0.012
HCM Control Delay (s)	13.1	9.2	7.8	-	-	7.9	-	-	12.4	9
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.2	0	0	-	-	0	-	-	0.1	0

# HCM 6th Signalized Intersection Summary

## 5: SR-70 & N Mill Creek Rd

Quincy CHP Facility  
Future Year + Project PM






												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	316	70	30	283	30	40	20	30	30	30	50
Future Volume (veh/h)	50	316	70	30	283	30	40	20	30	30	30	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.98	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	55	347	55	33	311	22	44	22	31	33	33	-45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	189	1021	160	125	996	70	482	131	185	435	0	278
Arrive On Green	0.11	0.34	0.34	0.07	0.30	0.30	0.19	0.19	0.19	0.19	0.19	0.00
Sat Flow, veh/h	1753	3028	476	1753	3314	233	1384	683	962	1321	1841	0
Grp Volume(v), veh/h	55	199	203	33	163	170	44	0	53	33	-12	-12
Grp Sat Flow(s),veh/h/ln	1753	1749	1755	1753	1749	1799	1384	0	1645	1321	1841	1560
Q Serve(g_s), s	1.0	2.8	2.9	0.6	2.4	2.4	0.9	0.0	0.9	0.7	0.0	0.0
Cycle Q Clear(g_c), s	1.0	2.8	2.9	0.6	2.4	2.4	0.9	0.0	0.9	1.6	0.0	0.0
Prop In Lane	1.00		0.27	1.00		0.13	1.00		0.58	1.00		0.00
Lane Grp Cap(c), veh/h	189	590	592	125	525	541	482	0	316	435	0	0
V/C Ratio(X)	0.29	0.34	0.34	0.26	0.31	0.31	0.09	0.00	0.17	0.08	0.00	0.00
Avail Cap(c_a), veh/h	1106	1839	1846	790	1839	1892	840	0	741	776	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.7	8.2	8.3	14.6	9.0	9.0	11.2	0.0	11.2	11.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.5	0.5	0.8	0.5	0.5	0.1	0.0	0.2	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	0.8	0.2	0.7	0.7	0.2	0.0	0.3	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	8.7	8.8	15.5	9.5	9.5	11.3	0.0	11.4	11.9	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h	457			366			97			9		
Approach Delay, s/veh	9.4			10.0			11.3			43.8		
Approach LOS	A			A			B			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	16.3		10.5	7.7	15.1		10.5				
Change Period (Y+Rc), s	4.1	5.1		4.1	4.1	5.1		4.1				
Max Green Setting (Gmax), s	15.0	35.0		15.0	21.0	35.0		15.0				
Max Q Clear Time (g_c+I1), s	2.6	4.9		3.6	3.0	4.4		2.9				
Green Ext Time (p_c), s	0.0	3.5		0.0	0.1	2.8		0.2				

### Intersection Summary

HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

### Notes

User approved pedestrian interval to be less than phase max green.

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	100	40	10	81	10	50	20	20	20	30	10
Future Vol, veh/h	20	100	40	10	81	10	50	20	20	20	30	10
Conflicting Peds, #/hr	0	0	4	4	0	0	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	22	110	44	11	89	11	55	22	22	22	33	11
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	100	0	0	158	0	0	321	302	137	316	319	97
Stage 1	-	-	-	-	-	-	180	180	-	117	117	-
Stage 2	-	-	-	-	-	-	141	122	-	199	202	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1444	-	-	1374	-	-	617	598	891	621	585	938
Stage 1	-	-	-	-	-	-	803	736	-	869	784	-
Stage 2	-	-	-	-	-	-	843	780	-	785	719	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1444	-	-	1369	-	-	568	580	887	576	567	936
Mov Cap-2 Maneuver	-	-	-	-	-	-	568	580	-	576	567	-
Stage 1	-	-	-	-	-	-	786	721	-	854	777	-
Stage 2	-	-	-	-	-	-	789	773	-	729	704	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0.8			11.9			11.5		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	620	1444	-	-	1369	-	-	571	936			
HCM Lane V/C Ratio	0.16	0.015	-	-	0.008	-	-	0.096	0.012			
HCM Control Delay (s)	11.9	7.5	0	-	7.7	0	-	12	8.9			
HCM Lane LOS	B	A	A	-	A	A	-	B	A			
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3	0			

Intersection

Int Delay, s/veh 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔					↔		↔
Traffic Vol, veh/h	20	90	0	10	101	60	0	0	0	50	0	20
Future Vol, veh/h	20	90	0	10	101	60	0	0	0	50	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	18	18	2	2	18	18	2	2	2	18	2	18
Mvmt Flow	22	99	0	11	111	66	0	0	0	55	0	22





Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	177	0	-	99	0	0	309	-	144
Stage 1	-	-	-	-	-	-	166	-	-
Stage 2	-	-	-	-	-	-	143	-	-
Critical Hdwy	4.28	-	-	4.12	-	-	6.58	-	6.38
Critical Hdwy Stg 1	-	-	-	-	-	-	5.58	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.58	-	-
Follow-up Hdwy	2.362	-	-	2.218	-	-	3.662	-	3.462
Pot Cap-1 Maneuver	1308	-	0	1494	-	-	651	0	863
Stage 1	-	-	0	-	-	-	826	0	-
Stage 2	-	-	0	-	-	-	846	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1308	-	-	1494	-	-	634	0	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	634	0	-
Stage 1	-	-	-	-	-	-	805	0	-
Stage 2	-	-	-	-	-	-	846	0	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0.4	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1308	-	1494	-	-	634	863
HCM Lane V/C Ratio	0.017	-	0.007	-	-	0.087	0.025
HCM Control Delay (s)	7.8	0	7.4	0	-	11.2	9.3
HCM Lane LOS	A	A	A	A	-	B	A
HCM 95th %tile Q(veh)	0.1	-	0	-	-	0.3	0.1




HCM 6th TWSC  
8: Lee Rd & Quincy Junction Rd

Quincy CHP Facility  
Future Year + Project PM

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	21	70	100	10	50
Future Vol, veh/h	80	21	70	100	10	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	88	23	77	110	11	55
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	209	132	0	0	187	0
Stage 1	132	-	-	-	-	-
Stage 2	77	-	-	-	-	-
Critical Hdwy	6.51	6.31	-	-	4.21	-
Critical Hdwy Stg 1	5.51	-	-	-	-	-
Critical Hdwy Stg 2	5.51	-	-	-	-	-
Follow-up Hdwy	3.599	3.399	-	-	2.299	-
Pot Cap-1 Maneuver	760	894	-	-	1335	-
Stage 1	872	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	754	894	-	-	1335	-
Mov Cap-2 Maneuver	754	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.1	0	1.3			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 754 894	1335	-		
HCM Lane V/C Ratio	-	- 0.117 0.026	0.008	-		
HCM Control Delay (s)	-	- 10.4 9.1	7.7	0		
HCM Lane LOS	-	- B A	A	A		
HCM 95th %tile Q(veh)	-	- 0.4 0.1	0	-		

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	60	50	0	2	4
Future Vol, veh/h	0	60	50	0	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	66	55	0	2	4




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	55	0	0 121 55
Stage 1	-	-	- 55 -
Stage 2	-	-	- 66 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1550	-	- 874 1012
Stage 1	-	-	- 968 -
Stage 2	-	-	- 957 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1550	-	- 874 1012
Mov Cap-2 Maneuver	-	-	- 874 -
Stage 1	-	-	- 968 -
Stage 2	-	-	- 957 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1550	-	-	-	961
HCM Lane V/C Ratio	-	-	-	-	0.007
HCM Control Delay (s)	0	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	130	101	8	0	0
Future Vol, veh/h	0	130	101	8	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	143	111	9	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	120	0	0 259 116
Stage 1	-	-	- 116 -
Stage 2	-	-	- 143 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1468	-	- 730 936
Stage 1	-	-	- 909 -
Stage 2	-	-	- 884 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1468	-	- 730 936
Mov Cap-2 Maneuver	-	-	- 730 -
Stage 1	-	-	- 909 -
Stage 2	-	-	- 884 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1468	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Appendix H.

## **Mitigation Monitoring and Reporting Program**





## MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the California Highway Patrol (CHP) Quincy Office Replacement Project Initial Study/Mitigated Negative Declaration (IS/MND). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out, the party responsible for implementing these actions, and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed. It is the responsibility of the Contractor to ensure that actions required for all of the mitigation measures listed herein are included in the project plans and specifications. It is the responsibility of the State to review and confirm that all of the mitigation measure actions described herein are in the project plans and specifications.

### ***Acronyms and Abbreviations***

BMP	Best Management Practice
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
CRHR	California Register of Historical Resources
DGS	California Department of General Services
HSC	California Health and Safety Code
IS/MND	Initial Study/Mitigated Negative Declaration
MLD	Most Likely Descendant
MMRP	mitigation monitoring and reporting program
NAHC	Native American Heritage Commission
NSAQMD	Northern Sierra Air Quality Management District
NO <sub>x</sub>	nitrogen oxides
PRC	Public Resources Code

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Mitigation Measure		Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
<b>Air Quality</b>					
<b>AQ-1</b>	<p><b>Implement Best Management Practices (BMPs) for Construction Air Quality</b></p> <p>The State or its designee shall implement the following BMPs to reduce fugitive dust emissions and construction equipment emissions to the extent feasible:</p> <ul style="list-style-type: none"> <li>▪ All exposed areas of bare soil (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered once per day or as needed to minimize fugitive dust emissions.</li> <li>▪ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>▪ All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.</li> <li>▪ All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.</li> <li>▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13 California Code of Regulations Section 2485). Clear signage regarding this requirement shall be</li> </ul>	<ol style="list-style-type: none"> <li>1. Include BMPs to reduce fugitive dust into the project plans and specifications.</li> <li>2. Implement BMPs to reduce fugitive dust.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm BMPs are incorporated into the project plans and specifications.</li> <li>2. Confirm BMPs are adequate and implemented properly.</li> </ol>	<ol style="list-style-type: none"> <li>1. During development of the plans and specifications</li> <li>2. During construction</li> </ol>	

	<p>provided for construction workers at all access points.</p> <ul style="list-style-type: none"> <li>▪ All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.</li> <li>▪ The contractor shall use construction equipment that minimizes air emissions by using to the extent feasible so that overall fleet emissions are equal to or less than emissions compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.</li> <li>▪ A publicly visible sign shall be posted with the name and telephone number of the contact person at the State regarding dust complaints. This person shall respond to any complaints and take corrective action within 48 hours. The Northern Sierra Air Quality Management District (NSAQMD) phone number shall also be visible to ensure compliance with applicable regulations.</li> </ul>				
<b>AQ-2</b>	<p><b>Implement Mitigation for Construction Air Quality</b></p> <p>The Contractor shall implement, as applicable, the following NSAQMD-recommended mitigations for Level C emission sources:</p> <ul style="list-style-type: none"> <li>▪ Alternatives to open burning of vegetative material will be used unless otherwise deemed infeasible by</li> </ul>	<ol style="list-style-type: none"> <li>1. Include NSAQMD-recommended mitigations into the project plans and specifications.</li> <li>2. Implement NSAQMD-recommended mitigations.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm NSAQMD-recommended mitigations are incorporated into the project plans and specifications.</li> <li>2. Confirm NSAQMD-recommended mitigations are</li> </ol>	<ol style="list-style-type: none"> <li>1. During development of the plans and specifications</li> <li>2. During construction</li> </ol>	

	<p>the NSAQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel.</p> <ul style="list-style-type: none"><li>▪ Grid power shall be used (as opposed to diesel generators) for job site power needs where feasible during construction.</li><li>▪ Temporary traffic control shall be provided during all phases of the construction to improve traffic flow as deemed appropriate by local transportation agencies and/or Caltrans.</li><li>▪ Construction activities shall be scheduled to direct traffic flow to off-peak hours as much as practicable.</li><li>▪ During initial grading, earth moving, or site preparation, larger projects may be required to construct a paved, coarse gravel or dust palliative treated apron, at least 100 feet in length, leading onto the paved road(s).</li><li>▪ Wheel washers shall be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads on larger projects. Vehicles and/or equipment will be washed prior to each trip, if necessary.</li><li>▪ All self-propelled off-road diesel-powered equipment and vehicles greater than 25 horsepower shall be equipped with an engine meeting at least Tier 1 emission standards (typically manufactured 1996 or later).</li></ul>		adequate and implemented properly.		
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<b>AQ-3</b>	<b>Material Hauling Nitrogen Oxides (NOx) Control Measures</b> <p>The Contractor shall implement any combination of the following measures to reduce NOx emissions to below 136 pounds per day:</p> <ol style="list-style-type: none"> <li>Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.</li> <li>Limit the number of daily one-way material hauling trips to less than 295.</li> <li>Use newer model year material hauling vehicles that emit less NOx emissions per trip.</li> </ol>	<ol style="list-style-type: none"> <li>1. Include NOx emission reduction measures into the project plans and specifications.</li> <li>2. Implement and document NOx emission reduction measures to meet threshold (136 pounds per day).</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm NOx emission reduction measures are incorporated into the project plans and specifications.</li> <li>2. Confirm NOx emission reduction measures are adequate and implemented properly.</li> </ol>	<ol style="list-style-type: none"> <li>1. During development of the plans and specifications</li> <li>2. During construction</li> </ol>	
<b>Biological Resources</b>					
<b>BIO-1</b>	<b>Conduct Preconstruction Surveys for Nesting Birds, and Establish Non-Disturbance Buffers If Necessary</b> <p>To the extent feasible, all vegetation removal shall occur between September 1 and January 14, which is outside the bird/raptor nesting season, to avoid potential impacts on nesting birds. If construction activities (including staging and vegetation removal) will occur during the nesting season (January 15 through August 31), the Project proponent shall retain a qualified wildlife biologist to conduct focused surveys for active bird nests on the Proposed Project site and within a 250-foot buffer no more than 7 days before initiation of construction activities. If no work occurs for a period of 5 days during the nesting season, surveys must be performed before work within 250 feet of suitable nesting substrate is resumed. If the survey indicates that no active nests are present, no further mitigation shall be required.</p>	<ol style="list-style-type: none"> <li>1. N/A</li> <li>2. Provide the State with advance notice of construction schedule and anticipated start date. Support site access for qualified biologist. Do not initiate construction activities until Step #4 occurs.</li> <li>3. Inform the State if no work occurs for a period of 5 days during the nesting</li> </ol>	<ol style="list-style-type: none"> <li>1. Retain a qualified biologist to conduct pre-construction surveys.</li> <li>2. Ensure qualified biologist conducts pre-construction surveys of construction work area within 7 days before construction activity.</li> <li>3. If no construction work occurs for a period of 5 days during the nesting</li> </ol>	<ol style="list-style-type: none"> <li>1. Prior to construction</li> <li>2. Prior to construction</li> <li>3. During construction</li> <li>4. During construction</li> </ol>	

	<p>If an active bird or raptor nest is located during the preconstruction surveys, a qualified biologist shall establish appropriate species-specific non-disturbance buffer zones in consultation with U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife (CDFW). No Project activity shall commence within the non-disturbance buffer until a qualified biologist confirms that the nest is no longer active.</p>	<p>season, and follow Step #4.</p> <p>4. Halt or do not initiate construction activities until authorization received from the State (based on nesting bird survey results).</p>	<p>season, surveys must be performed before work is resumed.</p> <p>4. Authorize construction activities to proceed if a qualified biologist has confirmed that the young have fledged or that any nests located in the buffer are no longer active.</p>		
<b>BIO-2</b>	<p><b>Conduct Pre-construction Surveys for Special-Status Bat Species, Implement Non-disturbance Buffer Areas if Necessary, and Exclude Bats if Necessary.</b></p> <p>Pre-construction surveys consisting of visual encounter surveys using binoculars, shall be conducted by a bat biologist for all areas within 50 feet of the Project site to identify potential bat-roosting cavities and assess the presence of bats. If roosting cavities are found, CDFW shall be consulted to determine appropriate buffer and exclusion zones. If no suitable roost sites are identified, no further minimization measures are necessary.</p>	<p>1. N/A</p> <p>2. Provide the State with advance notice of construction schedule and anticipated start date. Support site access for qualified bat biologist. Do not initiate construction activities until Step #4 occurs.</p> <p>3. N/A</p> <p>4. Do not initiate construction activities until authorization received from the</p>	<p>1. Retain a qualified bat biologist to conduct pre-construction surveys.</p> <p>2. Ensure qualified biologist conducts pre-construction surveys of construction work area before construction activity.</p> <p>3. If roosting cavities are found, consult with CDFW.</p> <p>4. Authorize construction</p>	<p>1. Prior to construction</p> <p>2. Prior to construction</p> <p>3. Prior to construction</p> <p>4. Prior to construction</p>	



		State (based on bat survey results).	activities to proceed if a qualified bat biologist has confirmed that no suitable roost sites are identified.		
<b>Cultural Resources</b>					
<b>CR-1</b>	<p><b>Immediately Halt Construction if Cultural Resources Are Discovered, Evaluate All Identified Cultural Resources for Eligibility for Inclusion in the California Register of Historical Resources (CRHR), and Implement Appropriate Mitigation Measures for Eligible Resources.</b></p> <p>If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during any project construction activities, work shall be suspended immediately at the location of the find and within a radius of at least 50 feet and the State will be contacted. Items of a recent historic nature related to the pole barn do not need to be reported.</p> <p>All cultural resources accidentally uncovered during construction within the project site shall be evaluated for eligibility for inclusion in the CRHR. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate. For finds that are of Native American concerns, local Native American tribes will be notified, if they have requested notification. If any of the resources meet the eligibility criteria identified in Public Resources Code (PRC) Section 5024.1 or California Environmental</p>	<ol style="list-style-type: none"> <li>1. Coordinate with the State to provide workers information about potential buried cultural resources.</li> <li>2. If any cultural resources are discovered, halt construction immediately within 50 feet of the find, contact the State.</li> <li>3. Do not resume construction in the vicinity of the finds until clearance is given by the State.</li> <li>4. Implement all additional mitigation measures determined by the State.</li> </ol>	<ol style="list-style-type: none"> <li>1. Provide workers information about potential buried cultural resources</li> <li>2. Confirm that any discoveries of archaeological finds are evaluated and addressed properly in accordance with the mitigation measure.</li> <li>3. Provide clearance for construction activities to resume once appropriate.</li> <li>4. For any resources that would be rendered ineligible for listing in CRHR due to effects of project</li> </ol>	<ol style="list-style-type: none"> <li>1. Prior to construction</li> <li>2. During construction, if necessary</li> <li>3. Following any cultural resource discovery</li> <li>4. Following any cultural resource discovery</li> </ol>	

	<p>Quality Act (CEQA) Section 21083.2(g), mitigation measures will be developed and implemented in accordance with CEQA Guidelines Section 15126.4(b) before construction resumes.</p> <p>For resources eligible for listing in the CRHR that would be rendered ineligible by the effects of Project construction, additional mitigation measures will be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources shall be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Native American consultation is required if an archaeological site is determined to be a tribal cultural resource. Implementation of the approved mitigation would be required before resuming any construction activities with potential to affect identified eligible resources at the site.</p>		<p>construction, determine additional mitigation measures. Ensure implementation of those measures.</p>		
<b>CR-2</b>	<p><b>Immediately Halt Construction if Human Remains Are Discovered and Implement Applicable Provisions of the California Health and Safety Code (HSC) Section 7050.5.</b></p> <p>If human remains are accidentally discovered during the Proposed Project's construction activities, the requirements of HSC Section 7050.5 shall be followed. Potentially damaging excavation shall halt on the Project site within a minimum radius of 100 feet of the remains, and the County coroner shall be notified. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (HSC Section 7050.5[b]). If the coroner determines that the remains are those of a Native</p>	<ol style="list-style-type: none"> <li>1. Include a stop work provision for the discovery of human remains in the project plans and specifications.</li> <li>2. In the event that human remains are encountered, halt work and contact the State.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm that a stop work measure for the discovery of human remains is included in project plans and specifications.</li> <li>2. The State shall immediately contact the Imperial County Coroner upon</li> </ol>	<ol style="list-style-type: none"> <li>1. During preparation of plans and specifications</li> <li>2. During construction</li> <li>3. During construction</li> </ol>	

	American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (HSC Section 7050[c]). Pursuant to the provisions of PRC Section 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The State shall work with the MLD to ensure that the remains are removed to a protected location and treated with dignity and respect. Native American human remains may also be determined to be tribal cultural resources. The County coroner will contend with the human remains if they are not of Native American origin.	3. Do not resume construction in the vicinity of the finds until clearance is given by the State.	notification of any findings of human remains. 3. Confirm that any discoveries of human remains are evaluated and addressed properly in accordance with the mitigation measure.		
<b><i>Geology, Soils and Seismicity</i></b>					
<b>GEO-1</b>	<p><b>Immediately Halt Construction if Paleontological Resources Are Discovered, Evaluate the Significance of the Resources, and Implement Appropriate Mitigation Measures as Necessary.</b></p> <p>Paleontological resources are not necessarily visible on the ground surface. If any items of paleontological interest are unearthed during construction, work shall be immediately suspended within 50 feet of the discovery site, or to the extent needed to protect the finds, and the State shall be notified. A qualified paleontologist will be retained to examine the discovery.</p> <p>Any discovery of paleontological resources during construction shall be evaluated by the qualified paleontologist. If it is determined that construction could damage a unique paleontological resource, additional mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4. If avoidance is not feasible, the paleontologist shall develop a</p>	<p>1. If any paleontological resources are discovered, halt construction immediately within 50 feet of the find, and contact the State.</p> <p>2. Do not resume construction in the vicinity of the finds until clearance is given by the State.</p> <p>3. Implement additional mitigation.</p>	<p>1. For any discovered paleontological resources, evaluate as a unique paleontological resource, in accordance with the mitigation measure.</p> <p>2. Provide clearance for construction activities to resume once appropriate.</p>	<p>1. During construction, if necessary</p> <p>2. Following any paleontological resource discovery</p> <p>3. Following any paleontological resource discovery</p>	

	treatment plan in consultation with the State. Work shall not be resumed until authorization is received from the State and any recommendations received from the qualified paleontologist are implemented.		3. For any resources that are determined to be unique, ensure implementation of those additional mitigation measures.		
<b>Transportation/Traffic</b>					
<b>TRA-1</b>	<p><b>Prepare and Implement a Construction Traffic Management Plan.</b></p> <p>The Contractor shall prepare and implement a construction traffic management plan to reduce potential interference with an emergency response plan, as well as to reduce potential traffic safety hazards and ensure adequate access for emergency responders. Development and implementation of this plan shall be coordinated with Plumas County. CHP or the California Department of General Services (DGS) shall ensure that the plan is implemented during construction. The plan shall include, but will not be limited to, the following items:</p> <ul style="list-style-type: none"> <li>Identify construction truck haul routes to limit truck and automobile traffic on nearby streets. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety. Identified haul routes will be recorded in the construction documents.</li> <li>Implement comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning and detour signs (if required), lane closure procedures (if required), and cones for drivers.</li> </ul>	<ol style="list-style-type: none"> <li>1. Prepare project construction plans and specifications to include the mitigation measure.</li> <li>2. Prepare and implement a Traffic Management Plan that includes, at a minimum, all of the elements in the mitigation measure.</li> <li>3. Document road pavement conditions for all routes that would be used by construction vehicles before and after project construction.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review and approve project construction plans and specifications to confirm that the mitigation measure is included.</li> <li>2. Review and approve the Traffic Management Plan, and ensure that it is implemented.</li> <li>3. Ensure that the Contractor documents road pavement conditions for all routes that would be used by construction vehicles before</li> </ol>	<ol style="list-style-type: none"> <li>1. During development of plans and specifications</li> <li>2. Prior to construction</li> <li>3. Prior to construction and after construction</li> <li>4. At the end of construction</li> </ol>	

	<ul style="list-style-type: none"> <li>▪ Evaluate the need to provide flaggers or temporary traffic control at key intersections along the haul route during all or some portion of the construction period.</li> <li>▪ Notify adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures.</li> <li>▪ Develop a process for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint manager. Post 24-hour contact information for the complaint manager on the site.</li> <li>▪ Document road pavement conditions for all routes that would be used by construction vehicles before and after project construction. Make provisions to monitor the condition of surface streets used for haul routes so that any damage and debris attributable to the haul trucks could be identified and corrected. Roads damaged by construction vehicles shall be repaired to the level at which they existed before project construction.</li> </ul>	4. Repair damaged areas to level at which they existed before project construction.	and after project construction. 4. Ensure damaged areas are repaired to level at which they existed before project construction.		
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