DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

HIGHWAY 120 LODGING HOSPITALITY PROJECT GROVELAND, TUOLUMNE COUNTY, CALIFORNIA

Project No. 2002-4723

Prepared for:

Tuolumne County Community Development Department 2 South Green Street Sonora, California 95370

Prepared by:

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JULY 2021





TABLE OF CONTENTS

| 1.0 INT | RODUCTION | 1-1 |
|---------|---|------|
| 1.1 PF | ROJECT LOCATION | 1-1 |
| 1.2 SI | TE HISTORY | 1-1 |
| 1.3 PF | ROPOSED PROJECT | 1-1 |
| 1.3.1 | Guest Suites | 1-1 |
| 1.3.2 | Site Access and Circulation | 1-4 |
| 1.3.3 | Lodge and Market | 1-4 |
| 1.3.4 | Events Pavilion | 1-4 |
| 1.3.5 | Pool and Soaking Tubs | 1-4 |
| 1.3.6 | Other Lodge Amenities | 1-4 |
| 1.3.7 | Parking | 1-4 |
| 1.3.8 | Site Lighting | 1-6 |
| 1.3.9 | Utilities | 1-6 |
| 1.3.1 | 0 Fires | 1-6 |
| 1.3.1 | 1 Employee Housing | 1-6 |
| 1.3.1 | 2 Construction Methods and Design | 1-6 |
| | 3 Project Schedule and Work Hours | |
| | 4 Equipment | |
| 1.4 PF | ROJECT APPROVALS AND PERMITS | 1-9 |
| 2.0 SU | MMARY OF FINDINGS | 2-1 |
| 2.1 El | NVIRONMENTAL FACTORS POTENTIALLY AFFECTED | 2-1 |
| 2.2 El | NVIRONMENTAL DETERMINATION | 2-1 |
| 3.0 EN\ | IRONMENTAL ANALYSIS AND INITIAL STUDY CHECKLIST | 3-1 |
| 3.1 A | ESTHETICS | 3-1 |
| 3.1.1 | Environmental Setting | 3-2 |
| 3.1.2 | Regional/Local Regulatory Setting | 3-2 |
| 3.1.3 | Impact Analysis | 3-3 |
| 3.1.4 | | |
| 3.2 A | GRICULTURE AND FORESTRY RESOURCES | 3-7 |
| 3.2.1 | Environmental Setting | 3-7 |
| 3.2.2 | Impact Analysis | 3-8 |
| 3.2.3 | Mitigation Measures | 3-9 |
| 3.3 AI | R QUALITY | 3-10 |
| 3.3.1 | Environmental Setting | 3-10 |
| 3.3.2 | Regional/Local Regulatory Setting | 3-10 |
| 3.3.3 | Impact Analysis | 3-14 |
| 3.3.4 | Mitigation Measures | 3-18 |
| 3.4 BI | OLOGICAL RESOURCES | 3-19 |
| 3.4.1 | Environmental Setting | 3-19 |
| 3.4.2 | Regional/Local Regulatory Setting | 3-43 |
| 3.4.3 | Impact Analysis | 3-45 |



| | Mitigation Measures | |
|---|--|--|
| 3.5 CU | LTURAL RESOURCES | 3-58 |
| 3.5.1 | Environmental Setting | |
| 3.5.2 | Impact Analysis | |
| 3.5.3 | Mitigation Measures | |
| 3.6 ENI | ERGY | |
| 3.6.1 | Environmental Setting | 3-63 |
| 3.6.2 | Regulatory Setting | 3-63 |
| 3.6.3 | Impact Analysis | 3-64 |
| 3.6.4 | Mitigation Measures | |
| _ | OLOGY AND SOILS | |
| 3.7.1 | Environmental Setting | 3-66 |
| 3.7.2 | Impact Analysis | |
| 3.7.3 | Mitigation Measures | |
| | EENHOUSE GAS EMISSIONS | 3-71 |
| 3.8.1 | Environmental Setting | 3-71 |
| 3.8.2 | Regulatory Setting | 3-72 |
| 3.8.3 | Impact Analysis | 3-73 |
| 3.8.4 | Mitigation Measures | |
| 3.9 HA | ZARDS AND HAZARDOUS MATERIALS | |
| 3.9.1 | Environmental Setting | 3-76 |
| 3.9.2 | Impact Analysis | 3-77 |
| | | 0 00 |
| 3.9.3 | Mitigation Measures | |
| | Mitigation Measures DROLOGY AND WATER QUALITY | |
| 3.10 HYI 3.10.1 | DROLOGY AND WATER QUALITYEnvironmental Setting | 3-81 3-81 |
| 3.10 HYI 3.10.1 3.10.2 | DROLOGY AND WATER QUALITYEnvironmental SettingImpact Analysis | 3-81 3-81 3-82 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures | 3-81 3-81 3-82 3-85 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING | 3-81 3-81 3-82 3-85 3-86 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting | 3-81 3-81 3-82 3-85 3-86 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting | 3-81 3-81 3-82 3-85 3-86 3-86 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis | 3-81 3-81 3-85 3-86 3-86 3-86 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures | 3-81 3-82 3-85 3-86 3-86 3-89 3-89 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures NERAL RESOURCES | 3-81 3-81 3-85 3-86 3-86 3-86 3-89 3-89 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures NERAL RESOURCES Environmental Setting | 3-81 3-82 3-85 3-86 3-86 3-86 3-89 3-90 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 3.12.2 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures NERAL RESOURCES Environmental Setting Impact Analysis | 3-81 3-81 3-85 3-86 3-86 3-89 3-90 3-90 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 3.12.2 3.12.3 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures NERAL RESOURCES Environmental Setting Impact Analysis Mitigation Measures Mitigation Measures Measures Mitigation Measures | 3-81 3-81 3-85 3-86 3-86 3-89 3-90 3-90 3-90 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 3.12.2 3.12.3 3.13 NO | DROLOGY AND WATER QUALITY Environmental Setting | 3-81 3-81 3-85 3-86 3-86 3-86 3-89 3-90 3-90 3-90 3-91 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 3.12.2 3.12.3 3.13 NO 3.13.1 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures NERAL RESOURCES Environmental Setting Impact Analysis Mitigation Measures Impact Analysis Mitigation Measures Impact Analysis Mitigation Measures ISE Environmental Setting | 3-81 3-81 3-85 3-86 3-86 3-89 3-90 3-90 3-90 3-91 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.12.1 3.12.2 3.12.3 3.13 NO 3.13.1 3.13.2 | DROLOGY AND WATER QUALITY Environmental Setting | 3-81 3-81 3-85 3-86 3-86 3-89 3-90 3-90 3-90 3-91 3-91 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.12 MIN 3.12.1 3.12.3 3.13 NO 3.13.1 3.13.2 3.13.3 | DROLOGY AND WATER QUALITY Environmental Setting Impact Analysis Mitigation Measures ND USE AND PLANNING Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures NERAL RESOURCES Environmental Setting Impact Analysis Mitigation Measures Ise Environmental Setting Regional/Local Regulatory Setting Impact Analysis Mitigation Measures ISE Environmental Setting Regional/Local Regulatory Setting Impact Analysis | 3-813-813-853-863-863-893-903-903-913-913-943-95 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 3.12.2 3.12.3 3.13 NO 3.13.1 3.13.2 3.13.3 | DROLOGY AND WATER QUALITY Environmental Setting | 3-813-813-853-863-863-893-903-903-913-913-953-97 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 3.12.3 3.13 NO 3.13.1 3.13.2 3.13.3 3.13.4 3.14 POI | DROLOGY AND WATER QUALITY Environmental Setting | 3-813-813-853-863-863-893-903-903-913-913-943-953-98 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.1 3.11.2 3.11.3 3.12 MIN 3.12.1 3.12.3 3.13 NO 3.13.1 3.13.2 3.13.3 3.13.4 3.14 POI 3.14.1 | DROLOGY AND WATER QUALITY Environmental Setting | 3-813-813-853-863-863-893-903-903-913-913-943-953-983-98 |
| 3.10 HYI 3.10.1 3.10.2 3.10.3 3.11 LAN 3.11.2 3.11.3 3.11.4 3.12 MIN 3.12.1 3.12.2 3.12.3 3.13 NO 3.13.1 3.13.2 3.13.4 3.14.1 3.14.2 | DROLOGY AND WATER QUALITY Environmental Setting | 3-813-813-853-863-863-893-903-903-913-913-943-953-983-983-98 |



| 3.15 PUBLIC SERVICES | 3-99 |
|--|-------|
| 3.15.1 Environmental Setting | 3-99 |
| 3.15.2 Impact Analysis | |
| 3.15.3 Mitigation Measures | |
| 3.16 RECREATION | |
| 3.16.1 Environmental Setting | |
| 3.16.2 Impact Analysis | |
| 3.16.3 Mitigation Measures | |
| 3.17 TRANSPORTATION | |
| 3.17.1 Environmental Setting | |
| 3.17.3 Mitigation Measures | |
| 3.18 TRIBAL CULTURAL RESOURCES | |
| 3.18.1 Environmental Setting | |
| 3.18.2 Impact Analysis | |
| 3.18.3 Mitigation Measures | |
| 3.19 UTILITIES AND SERVICE SYSTEMS | 3-110 |
| 3.19.1 Environmental Setting | 3-110 |
| 3.19.2 Impact Analysis | |
| 3.19.3 Mitigation Measures | |
| 3.20 WILDFIRE | |
| 3.20.1 Environmental Setting | |
| 3.20.2 Regional/Local Regulatory Setting | |
| 3.20.3 Impact Analysis | |
| 3.20.4 Mitigation Measures | |
| | |
| 4.0 REFERENCES | 4-1 |
| LIST OF PREPARERS | 4-4 |
| LIST OF FIGURES | |
| | 4.0 |
| Figure 1-1. Site Location | |
| Figure 1-2. Project Site Plan | |
| Figure 1-3. Main Entrance | 1-5 |
| Figure 1-4. Project Phasing | 1-8 |
| Figure 3.1-1. Existing and Simulated View from State Route 120 Looking Northeast | 3-4 |
| Figure 3.1-2. Existing and Simulated View from State Route 120 Looking Southwest | 3-5 |
| Figure 3.4-1. Plant Community Map | |
| Figure 3.4-2. Aquatic Resources | |
| Figure 3.4-3. Regional Special-Status Biological Resources | |
| · · · · · · · · · · · · · · · · · · · | |



LIST OF TABLES

| Table 1-1. Construction Equipment | 1-7 |
|--|------|
| Table 1-2. Project Approvals and Permits | 1-9 |
| Table 2-1. Environmental Issues and Potentially Significant Impacts | 2-1 |
| Table 3.3-1. TCAPCD Thresholds of Significance (Operational and Construction) | 3-11 |
| Table 3.3-2. Estimated Construction Phase Criteria Pollutant Project Emissions | 3-15 |
| Table 3.3-3. Estimated Operational Phase Criteria Pollutant Project Emissions | 3-16 |
| Table 3.4-1. Plant Community and Habitat Acreage Table | 3-22 |
| Table 3.4-2 – Special Status Plant Species | 3-36 |
| Table 3.4-3. Special-Status Wildlife Species | 3-38 |
| Table 3.4-4. Aquatic Resources Impact Summary Table | 3-51 |
| Table 3.4-5. Plant Community and Habitat Impact Summary Table | 3-52 |
| Table 3.6-1. Electricity Use Per Land Use | 3-65 |
| Table 3.13-1. Common Sound Levels/Sources and Subjective Human Responses | 3-92 |
| Table 3.15-1. Summary of Public Service Providers | 3-99 |

APPENDICES

| Appendix A. | Air Quality and Greenhouse Gas Emissions |
|-------------|--|
| Appendix B. | Biological Resources Survey Report |
| Appendix C. | Phase I Environmental Site Assessment |
| Appendix D. | Water Demand Calculations |



LIST OF ACRONYMS

AB Assembly Bill

ACOE U.S. Army Corps of Engineers
ADA Americans with Disabilities Act

ADL Aerially Deposited Lead

APN Assessor's Parcel Number

BACT Best Available Control Technologies

BLM Bureau of Land Management

BMP Best Management Practices

BSA Biological Survey Area

CAAQS California Ambient Air Quality Standards

CalEEMod California Emissions Estimator Model®

CAL FIRE California Department of Forestry and Fire Protection

CalGEM Geologic Energy Management Division

CAP Climate Action Plan

Caltrans California Department of Transportation

CARB California Air Pollution Control Board

CCAA California Clean Air Act

CCIC Central California Information Center

CDC California Department of Conservation

CDFW California Department of Fish and Wildlife

CEQA California Environmental Quality Act

CGOPR California Governor's Office of Planning and Research

CH₄ Methane

CHRIS California Historical Resources Information System

CNDDB California Natural Diversity Database

CNEL Community Noise Level Equivalent

CNPS California Native Plant Society

CO Carbon Monoxide

CO₂ Carbon Dioxide

CO₂e CO₂ equivalents



County Tuolumne County

CRHR California Register of Historical Resources

CRPR California Rare Plant Rank

CSC California Species of Concern

CVRWQCB Central Valley Regional Water Quality Control Board

CWA Clean Water Act

dB decibels

dBA A-weighted Decibel

DBH Diameter at Breast Height

DPM Diesel Particulate Matter

ECORP Consulting, Inc.

ECOS Environmental Conservation Online System

EIR Environmental Impact Report

EMFAC Emission Factors

ESA Environmental Site Assessment

FCAA Federal Clean Air Act

FESA Federal Environmental Species Act

FMMP Farmland Mapping and Monitoring Program

FR Federal Register

FRAP Fire and Resource Assessment Program

FT Federally Threatened

GCSD Groveland Community Services District

GHG Greenhouse Gas

GLO General Land Office

GPS Global Positioning System

H₂S Hydrogen Sulfide

HI Heavy Industrial

IPAC Information Planning and Consultation

IPCC Intergovernmental Panel on Climate Change

IS Initial Study

lb pounds



Ldn Day-Night Average Sound Level

LDR Low Density Residential
Leq Equivalent Sound Level

LOS Level of Service

MBTA Migratory Bird Treaty Act

MJHMP Multi-Jurisdictional Hazard Mitigation Plan

MM Mitigation Measure

MND Mitigated Negative Declaration

MRZ Mineral Resource Zone

MTCO₂e Carbon Dioxide Equivalent GHG Emissions

MTCO₂e/SP MTCO₂e per service population

N₂O Nitrous Oxide

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission

NO₂ Nitrogen Dioxide
NOx Oxides of Nitrogen

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service

NWI National Wetlands Inventory

O Open Space

 O_3 Ozone

OHWM Ordinary High Water Mark

OSHA Occupational Safety and Health Administration

P Public

PG&E Pacific Gas and Electric

PM_{2.5} Particulate Matter with w Diameter of 2.5 Microns or Less
PM₁₀ Particulate Matter with a diameter of 10 Microns or Less

ppm Parts Per Million

PPV Peak Particle Velocity
PRC Public Resources Code



R/P Parks and Recreation

ROG Reactive Organic Gases

RR Rural Residential

RTDM Tuolumne County Regional Travel Demand Model

RWQCB Regional Water Quality Control Board

μg/m³ Micrograms Per Cubic Meter of Air

μPa or rms microPascals

SA Special Animal

SAMP Sub-Area Master Plan

SB Senate Bill

SCAQMD South Coast Air Quality Management District

SE State Endangered

SEL Sound Exposure Levels

SLF Sacred Lands File

SO₂ Sulfur Dioxide

SRA State Responsibility Area

SWPPP Storm Water Pollution Prevention Plan

TAC Toxic Air Contaminants

TCAPCD Tuolumne County Air Pollution Control District

TCFD Tuolumne County Fire Department

TCSD Tuolumne County Sheriff Department

USEPA United States Environmental Protection Agency

USFS United States Forest Service

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

VMT Vehicle Miles Traveled

YARTS Yosemite Area Regional Transportation System



INITIAL STUDY SUMMARY

1. **Project Title:** Highway 120 Lodging Hospitality Project (Project)

2. Lead Agency Name and Address: Tuolumne County Community Development

Department

2 South Green Street Sonora, California 95370

3. Contact Person and Phone Number: Natalie Rizzi, Planner

(209) 533-5936

4. Project Location: Tuolumne County

State Route 120

Between Big Oak Flat and Groveland

Groveland, California

5. Project Sponsor's Name and Address: Preserve Partners

2019 Main Street Salt Lake City, Utah (917) 699-0730

6. General Plan Designation(s): GC – General Commercial

7. Zoning Designation(s): C-1 - General Commercial District

8. Description of Project:

Refer to Project Description below.

9. Surrounding Land Uses and Setting:

Surrounding land uses include Rural Residential (RR), Low Density Residential (LDR), Parks and Recreation (R/P), Open Space (O), Public (P), Heavy Industrial (HI), and Light Industrial (LI).

10. Other Public Agencies Whose Approval is Required:

Refer to Table 1-2 Project Approvals and Permits.

11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Refer to Section 3.5 Cultural Resources.



1.0 INTRODUCTION

Preserve Partners is proposing the Highway 120 Lodging Hospitality Project (Project), a visitor-serving development consisting of 200 guest suite accommodations, lodge, market and bar, pool and pool house, soaking tubs, and an events space located on State Route 120 in the Big Oak Flat area near Groveland, Tuolumne County.

1.1 PROJECT LOCATION

The proposed Project site is approximately 30.59 acres located within Tuolumne County, along State Route 120 between Big Oak Flat and Groveland (refer to Figure 1-1). The Project site is located within the Groveland 7.5-minute United States Geological Survey (USGS) quadrangle and is comprised of ten parcels identified as Assessor's Parcel Number (APN) 066-140-013, 066-140-014, 066-140-015, 066-140-016, 066-140-017, 066-140-018, 066-140-019, 066-140-022, 066-140-031, and 066-140-032. The Project site is currently vacant, with one vacant commercial building and a canopy structure associated with a partially developed gas station facility. The Project site is bounded on the north by State Route 120, on the east by undeveloped forest land, on the south by a cemetery and undeveloped forest land, and on the west by vacant land and a hardware store.

1.2 SITE HISTORY

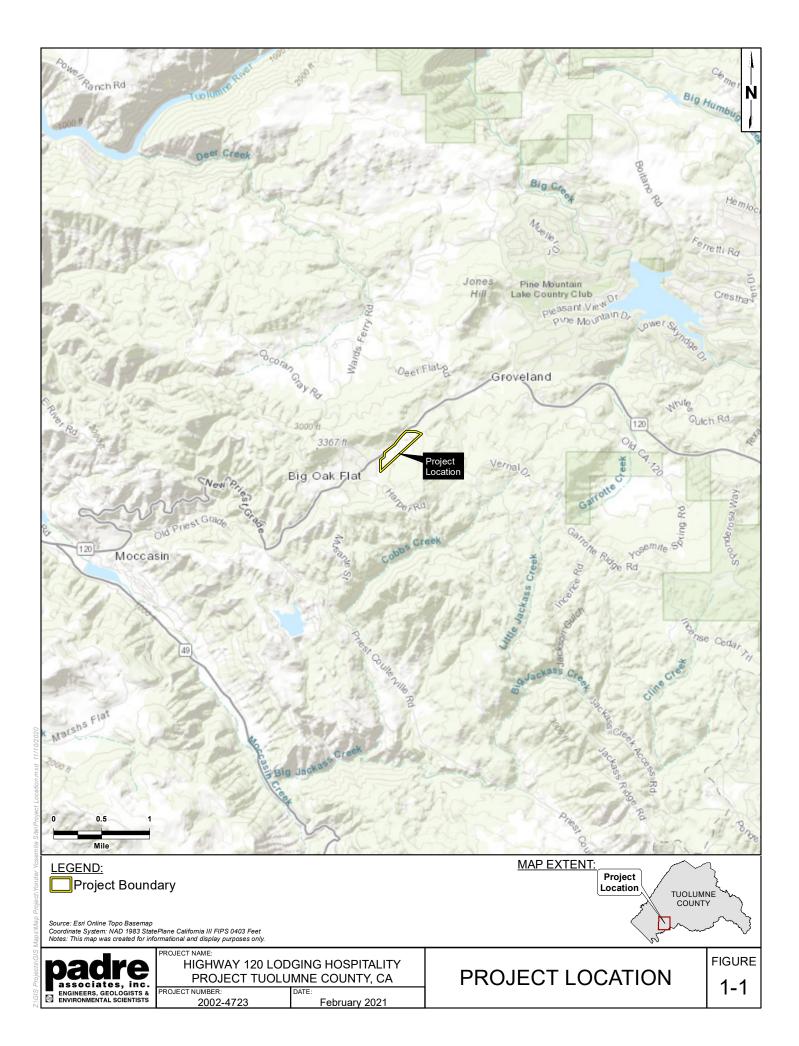
The Project site was initially cleared in the mid-1980s as part of a previous development proposal. The Project site was mass-graded at that time and drainage improvements were partially installed underground. A service station building, canopy, and underground storage tanks were constructed at that time; however, the service station never operated. The service station is currently vacant. The Project site has been vacant since the 1980s and erosion has occurred within onsite drainages due to the lack of erosion control devices and vegetation. The Project site has partially revegetated naturally over the last 30 years.

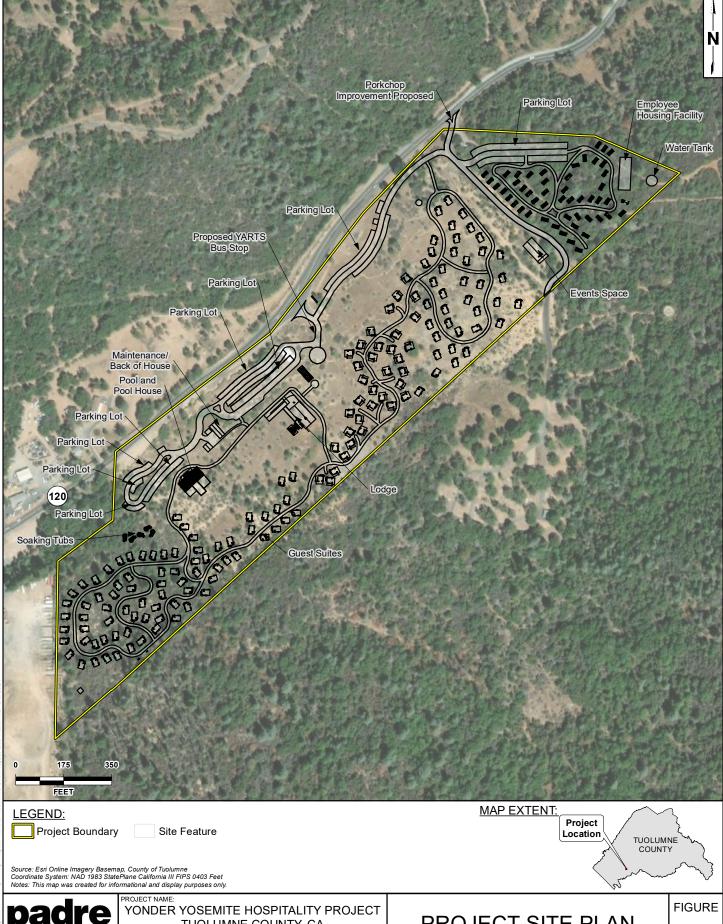
1.3 PROPOSED PROJECT

The Project consists of the following components (refer to Figure 1-2):

1.3.1 Guest Suites

The Project would include 150 new free-standing guest suites ranging in size from 325 to 340 gross square feet. Each guest suite would include a sleeping area, bathroom, covered outdoor shower, propane fireplace, and associated landscape improvements including outdoor seating. The Project would also include 50 new free standing guest suites approximately 240 gross square feet in size, and would include a sleeping area, bathroom, outdoor propane fire pit, and associated landscape improvements.





associates, inc.
ENGINEERS, GEOLOGISTS &
ENVIRONMENTAL SCIENTISTS

TUOLUMNE COUNTY, CA

DATE: PROJECT NUMBER: 2002-4723 June 2021 PROJECT SITE PLAN

1-2



1.3.2 Site Access and Circulation

The Project would be accessed from State Route 120. A full-access, stop-controlled driveway would be located approximately 900 feet south of the existing State Route 120/Memorial Drive intersection (refer to Figure 1-3). Internal traffic and circulation would be achieved by constructed roads, trails, and pedestrian paths. The Project would not direct traffic to use Memorial Drive, but Memorial Drive could be used by guests as a secondary Project access point.

A culvert structure would be constructed for the main entrance off State Route 120, along with 12 creek crossings, and one pedestrian bridge. Guests and employees would be directed to utilize the main entrance to access the guest suites and lodge amenities. In addition, the Project would install a Yosemite Area Regional Transportation System (YARTS) transit stop as part of the Project. Emergency fire access would be provided throughout the Project site.

1.3.3 Lodge and Market

The Project would include a 14,132 gross square foot lodge comprising of a conditioned main common area, market and open dining area, and associated small kitchen, indoor fireplace, indoor bar, office, sundries shop, small mezzanine, and associated restrooms, storage, and mechanical spaces. The lodge would include a new 800 gross square foot uncovered outdoor space comprising of common area centered around outdoor wood-burning fire pit.

1.3.4 Events Pavilion

The Project would include a 4,323 gross square foot Events Pavilion comprising of a catering kitchen, bar, storage, and restrooms. All space is un-conditioned comprising of open seating and a propane fireplace. The Events Pavilion would be used for events including, but not limited to, weddings, parties, conferences, etc. During peak months (May through September), the Events Pavilion would hold two to four events per month, with attendance at events estimated to be between 50 and 100 guests. In many instances, it is expected that guests attending events onsite would also be staying in the guest suites.

1.3.5 Pool and Soaking Tubs

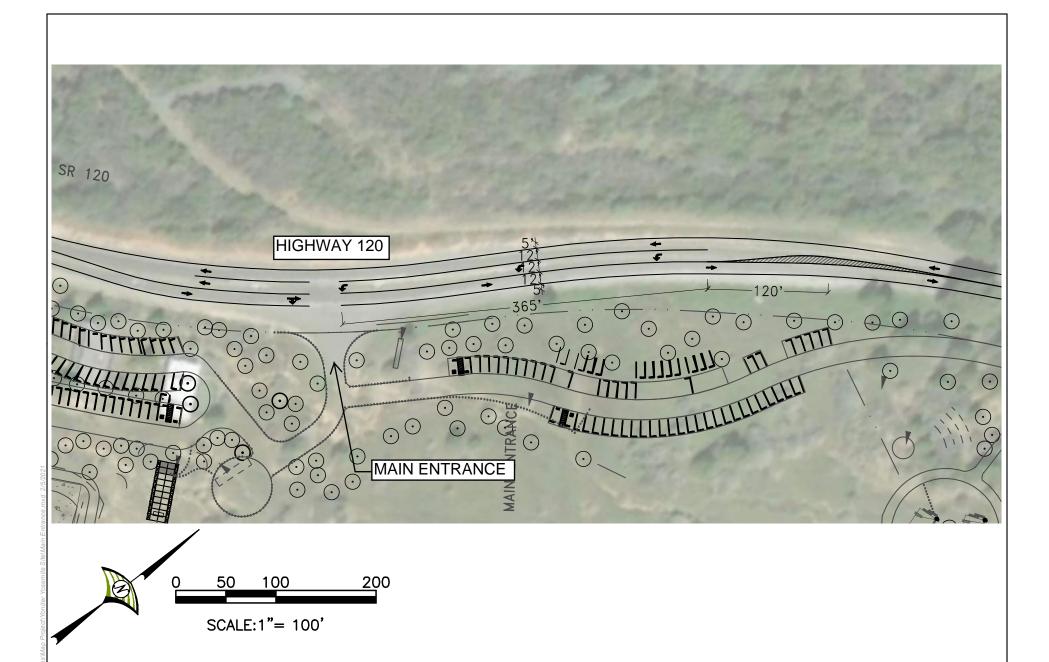
The Project would include a new 7,459 gross square foot pool facility comprising of an unconditioned structure comprising of restrooms, covered hot tub, pool, and partially enclosed bar area. The Project would also include five soaking tubs heated by a propane water heater.

1.3.6 Other Lodge Amenities

The Project would include a reception outpost comprising of a common area and one office, a restroom building comprised of women's and men's restrooms, and a maintenance building.

1.3.7 Parking

The Project would include approximately 275 parking spaces (264 standard plus 11 Americans with Disabilities Act [ADA] compliant) to accommodate lodging guests and employees. There are two parking lots along the northern portion of the property, along State Route 120, and an additional parking lot east of Memorial Drive.



Source: Wood Rodgers January 2021 Notes: This map was created for informational and display purposes only.

associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

HIGHWAY 120 LODGING HOSPITALITY PROJECT TUOLUMNE COUNTY, CA

PROJECT NUMBER: 2002-4723

February 2021

MAIN ENTRANCE

FIGURE

1-3



1.3.8 Site Lighting

All Project lighting would be comprised of Dark Sky Compliant lighting fixtures, with no open fixtures. Pathway lighting would be at levels that are at a minimum pursuant to the California Building Code. Overhead lighting would be positioned only in parking lots and roadways.

1.3.9 Utilities

The Project would be served by Groveland Community Services District (GCSD) for municipal sewer and water. Pacific Gas and Electric (PG&E) would provide electrical power.

The Project would include sanitary sewer forced and gravity mains, a water main, fire hydrants, and an approximate 180,000-gallon water tank.

1.3.10 Fires

Each guest suite would include a propane fire pit or propane fireplace with code compliant chimney spark arrestors. The spark arrestors would be constructed of woven or welded wire screening of 12 USA standard gage wire (0.1046 inch) having openings not exceeding 1/2-inch. The net free area of the spark arrestor would not be less than four times the net free area of the outside of the chimney outlet.

A wood-burning fire pit at the lodge would be managed by lodge staff. The ashes would be removed by lodge staff in metal containers and disposed of in a steel container. When required by the County code official, storage of firewood and combustible material stored in the defensible space would be located a minimum of 20 feet from structures and separated from the crown of trees by a minimum horizontal distance of 15 feet.

Use of fire pits and/or fireplaces would be required to comply with State Minimum Fire Safe Regulations Amended 14 CCR § 1270.00-1276.04.

1.3.11 Employee Housing

The Project would provide an employee housing facility, which would include 24 rooms, laundry, bathrooms, and a lounge area.

1.3.12 Construction Methods and Design

Construction of the Project would utilize currently accepted typical construction methods. The contractor would establish access routes and staging areas for travel within the site and storage of materials and equipment. If needed, dust control would employ a standard water truck equipped with spray nozzles.



1.3.13 Project Schedule and Work Hours

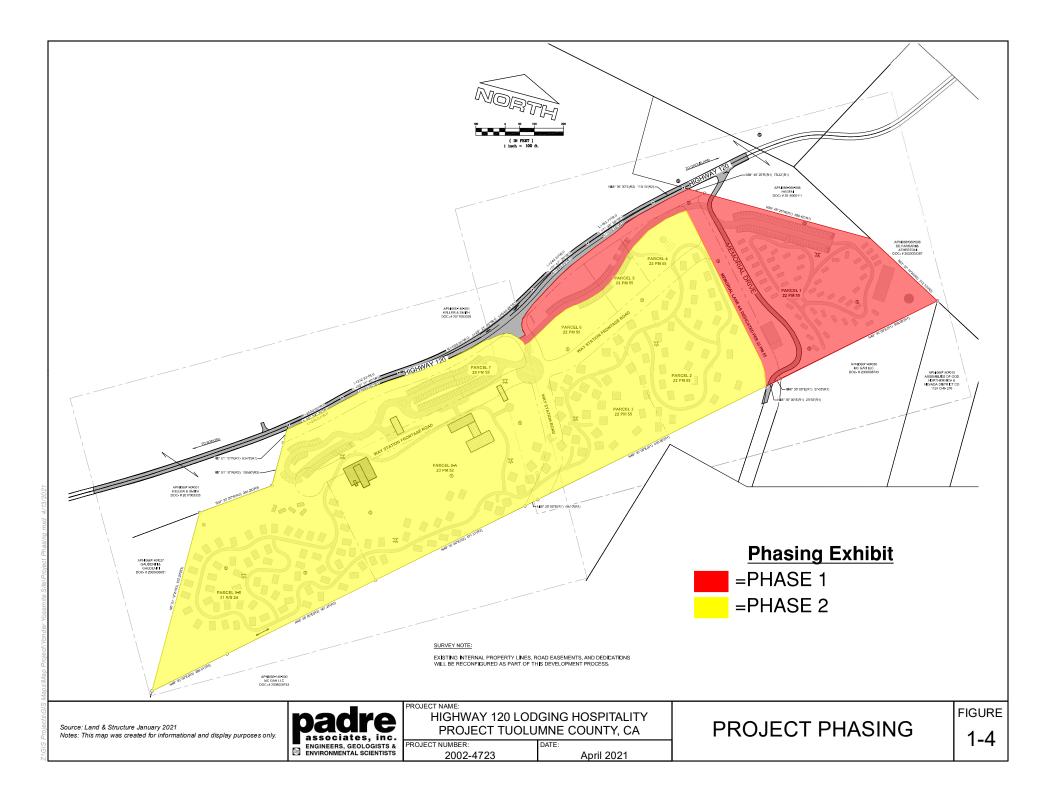
Construction of the project is expected to require approximately one and a half years to complete. Construction activities would generally take place during normal working hours, 7:00 a.m. to 7:00 p.m., Monday through Saturday. Project construction may be broken out into two phases. Phase 1 would include construction east of Memorial Drive, and Phase 2 would include construction west of Memorial Drive (refer to Figure 1-4). Construction of Phase 1 would be able to occur prior to Phase 2, as the area included in Phase 1 would not require permits from regulatory agencies regarding impacts to wetlands and waters (i.e., U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Wildlife).

1.3.14 Equipment

Table 1-1 provides a list of anticipated construction equipment for Project construction. The actual equipment used during construction would be determined by the contractor and the construction schedule.

Table 1-1. Construction Equipment

| Equipment | Construction Purpose |
|-------------------|--|
| Bulldozer | Earthwork construction, clearing, and grubbing |
| Grader | Ground leveling |
| Mini Excavator | Soil manipulation |
| Skid Steer Loader | Soil or gravel manipulation |
| Trencher | Trench digging |
| Water Truck | Dust control and fire protection |





1.4 PROJECT APPROVALS AND PERMITS

Upon project approval, the Tuolumne County Community Resources Agency would adopt the Initial Study/Mitigated Negative Declaration (IS/MND) as the lead agency pursuant to the California Environmental Quality Act (CEQA). Additionally, the following permits, reviews, consultations, and approvals would be required to be completed or approved prior to the commencement of Project construction (refer to Table 1-2).

Table 1-2. Project Approvals and Permits

| Agency | Permit/Approval | | | | |
|--------------------------------------|--|--|--|--|--|
| Federal | | | | | |
| U.S. Army Corps of Engineers | Clean Water Act Section 404 Nationwide Permit | | | | |
| (ACOE) | Authorization | | | | |
| State | | | | | |
| Regional Water Quality Control Board | Clean Water Act Section 401 Water Quality | | | | |
| (RWQCB) | Certification | | | | |
| State Water Resources Control Board | Stormwater Pollution Prevention Plan | | | | |
| California Department of Fish and | California Fish and Game Code Section 1602 Lake or | | | | |
| Wildlife (CDFW) | Streambed Alteration Agreement | | | | |
| California Department of | Encroachment Permit | | | | |
| Transportation (Caltrans) | | | | | |
| Local | | | | | |
| Tuolumne County | Tuolumne County Grading/Demolition Permit and | | | | |
| | Building Permit | | | | |
| Tuolumne County | Site Development Permit (SDP20-005) | | | | |
| Tuolumne County | Events Permit | | | | |



2.0 SUMMARY OF FINDINGS

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This project would potentially affect the environmental issues checked below, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

Table 2-1. Environmental Issues and Potentially Significant Impacts

| | Agriculture and Forest Resources | | | |
|---|---|---|--|--|
| ⊠ Biological Resources | ☐ Cultural Resources | ☐ Energy | | |
| ☐ Geology and Soils | ☐ Greenhouse Gas Emissions | Hazards and Hazardous Materials | | |
| | ☐ Land Use and Planning | ☐ Mineral Resources | | |
| Noise Noise | ☐ Population and Housing | ☐ Public Services | | |
| Recreation | | ☐ Tribal Cultural Resources | | |
| | | | | |
| 2.2 ENVIRONMENTAL DETERM | INATION | | | |
| On the basis of this initial evaluation: | | | | |
| ☐ I find that the proposed proje NEGATIVE DECLARATION v | ct COULD NOT have a significant effe vill be prepared. | ect on the environment, and a | | |
| will not be a significant effect | sed project could have a significant effinithis case because the mitigation menter the project. A MITIGATED NEGA | easures described in Section 4 | | |
| ☐ I find that the proposed pro ENVIRONMENTAL IMPACT | ject MAY have a significant effect REPORT is required. | on the environment, and an | | |
| unless mitigated" impact on analyzed in an earlier docume by mitigation measures base | t MAY have a "potentially significant im the environment, but at least one ei nt pursuant to applicable legal standard ed on the earlier analysis as descri REPORT is required, but it must analy | ffect 1) has been adequately ds, and 2) has been addressed bed on attached sheets. An | | |
| 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. Digitally signed by Quincy Yaley DN: cn=Quincy Yaley, o=Community Development Department, ou=Tuolumne County, email=qyaley@co.tuolumne.ca.us, c=US Date: 2021.07.09 12:59:52 -07:00' July 12, 2021 | | | | |
| Quincy Yaley, Environmental Coordin Tuolumne County Community Develo | | ate | | |



3.0 ENVIRONMENTAL ANALYSIS AND INITIAL STUDY CHECKLIST

The evaluation of environmental impacts provided in this Initial Study is based in part on the impact questions contained in Appendix G of the 2021 State CEQA Guidelines; these questions, which are included in an impact assessment matrix for each environmental category (Aesthetics, Agriculture/Forest Resources, Air Quality, Biological Resources, etc.), are "intended to encourage thoughtful assessment of impacts." Each question is followed by a check-marked box with column headings that are defined below.

- Potentially Significant Impact. This column is checked if there is substantial evidence that a Project-related environmental effect may be significant. If there are one or more "Potentially Significant Impacts," a Project Environmental Impact Report (EIR) would be prepared.
- Less than Significant with Mitigation. This column is checked when the Project may result in a significant environmental impact, but the incorporation of identified Project revisions or mitigation measures would reduce the identified effect(s) to a less than significant level.
- Less than Significant Impact. This column is checked when the Project would not result in any significant effects. The Project's impact is less than significant even without the incorporation of Project-specific mitigation measures.
- No Impact. This column is checked when the Project would not result in any impact in the category or the category does not apply.

Detailed descriptions and analyses of impacts from Project activities and the basis for significance determinations are provided for each environmental factor on the following pages, beginning with Section 4.1, Aesthetics.

3.1 **AESTHETICS**

| AESTHETICS - Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|---------------------------------------|------------------------------------|--------------|
| a) Have a substantial adverse effect on a scenic vista? | | | | \boxtimes |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | | |



| AESTHETICS - Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|---------------------------------------|------------------------------------|--------------|
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | |

3.1.1 Environmental Setting

The Project site is located in a relatively undeveloped area of Tuolumne County and is characterized as vacant land that has been previously cleared for development. Adjacent land uses include undeveloped forest land, vacant land, a cemetery, and a hardware store. The Project site is located at an elevation of approximately 3,000 feet above mean sea level and slopes gently to the west (Padre, 2020a).

3.1.2 Regional/Local Regulatory Setting

3.1.2.1 Tuolumne County General Plan

The following policies and implementation programs from the Tuolumne County General Plan are applicable to the project.

Community Development and Design Element

Policy 1.B.3: Require new commercial development to be designed to minimize the visual impact of parking areas on public roads and on public viewsheds.

Implementation Program 1.B.g: Require proponents of new commercial development to locate parking areas behind buildings or sufficiently screen them from public roads and public viewsheds, or, if locating behind buildings and screening are determined to be infeasible, provide other landscaping or design features to visually enhance the parking areas.

Policy 1.B.5: Preserve the existing nighttime environment by limiting the illumination of areas surrounding new development. New lighting that is part of residential, commercial, industrial, or recreational development shall be oriented away from off-site sensitive uses, and shall be hooded, shielded, and located to direct light downward and prevent glare.

Policy 1.F.4: Encourage commercial development to be designed in an architectural style that reflects the County's indigenous materials or is compatible with the historic Mother Lode design features or is consistent with the architectural guidelines in communities with design review.

Policy 1.G.4: Encourage new industrial development to design parking areas that are sufficiently screened from public roads and surrounding public viewsheds.



3.1.3 Impact Analysis

a. Have a substantial adverse effect on a scenic vista?

No Impact. There are no State or locally designated scenic vistas or notable geographic features identified within the vicinity of the Project site. The County has three vista points officially designated by the California Department of Transportation (Caltrans) in the County. Two of these vista points are located on SR-120 at Don Pedro Lake, approximately 8 miles southwest of the Project site, and the third is located at the Rim of the World vista point, approximately 11 miles east of the Project site on SR-120; therefore, no impact would result (Tuolumne County, 2018).

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. No significant tree stands/groves, rock outcroppings, or historic buildings occur onsite or behind the Project site when viewed from State Route 120. Portions of State Route 49 (near Chinese Camp easterly to Moccasin Creek), approximately 5 miles west of the Project site, are locally designated scenic routes (Caltrans, 2020). Pursuant to the current California Department of Transportation (Caltrans) List of Officially Designated County Scenic Highways, there are no officially designated State scenic highways within the Project vicinity; therefore, no impact would result (Caltrans, 2020).

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact with Mitigation. Construction of the proposed Project would involve minor grading, vegetation removal, and the temporary presence of construction equipment (staging and storage) within the Project site. These impacts would be temporary and would not extend beyond the anticipated construction schedule of 18 months. Due to the short-term construction activities, construction of the Project would result in less than significant impacts.

Long-term operational activities include use of the lodge and associated facilities. However, the visual character of the Project site would be minimally impacted, as the surrounding mountainous terrain and presence of dense trees would obscure direct views from State Route 120 and surrounding roads. In addition, implementation of the Project's Habitat Restoration Plan (MM BIO-7) would create a more natural aesthetic cohesive with the surrounding area. Figures 3.1-1 and 3.1-2 provide two photo simulations depicting the Project from State Route 120. Both simulations show existing conditions and the simulated view post construction after 20 years and how proposed vegetation along State Route 120 would screen the development. The Project would be consistent with County General Plan policies regarding visual screening. Implementation of a Habitat Restoration Plan consistent with MM BIO-7 would result in a less than significant impact.







Figure 3.1-1. Existing and Simulated View from State Route 120 Looking Northeast







Figure 3.1-2. Existing and Simulated View from State Route 120 Looking Southwest



d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact with Mitigation. The Project site is located within a rural setting where lighting is minimal. Scattered rural residential land uses and vehicles generate the primary source of nighttime light and daytime glare in the Project vicinity. The Project includes lighting for the parking lots, buildings, common areas, etc.

The Project must be consistent with applicable Tuolumne County General Plan policies intended to preserve the existing nighttime environment by limiting the illumination of areas surrounding new development. Specifically, Policy 1.B.5 requires that new lighting that is part of residential, commercial, industrial, or recreational development shall be oriented away from off-site areas, and shall be hooded, shielded, and located to direct light downward and prevent glare. Implementation of MM AES-1 would require all light sources to be directed downward to prevent spillover onto adjacent areas. Therefore, resulting in a less than significant impact.

MM AES-1: Lighting Plan. A Lighting Plan shall be prepared and approved by the County prior to construction. The Lighting Plan shall require all light sources to be directed downward to prevent spillover onto adjacent areas.

3.1.4 Mitigation Measures

Implementation of the following mitigation measures would reduce potential Project-related impacts regarding aesthetics to less than significant:

- MM AES-1: Lighting Plan
- MM BIO-7 Habitat Restoration



3.2 AGRICULTURE AND FORESTRY RESOURCES

| AGRICULTURE AND FORESTRY RESOURCES ¹ - Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|---------------------------------------|------------------------------------|--------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to non-agricultural use? | | | | |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | \boxtimes |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220, subd. (g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104, subd. (g))? | | | | |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | \boxtimes | |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | | |

3.2.1 Environmental Setting

The California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP) does not include a map of Tuolumne County. However, based on soil types, there is no Prime Farmland, Unique Farmland, or Farmland of Statewide importance in within the Project vicinity (Padre, 2020a). In addition, the Project site and surrounding parcels are not currently under a Williamson Act contract. The Project site is zoned C-1, General Commercial District Under the Tuolumne County Ordinance Code and designated at GC – General Commercial by the Tuolumne County General Plan. The Project site is not zoned as forestland, timberland, or Timberland Production (Tuolumne County, 2018).

The general habitats occurring within the Project site consist of pine woodland, shrub, grassland, and areas of rock outcrops and ruderal/disturbed areas. Based on species composition and life form the vegetation within these habitats can be classified into vegetation alliances based

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.



on A Manual of California Vegetation, Second Edition including Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine Forest and Woodland), Arctostaphylos viscida Shrubland Alliance (Whiteleaf Manzanita Chaparral), and Annual Grassland Alliance (Sawyer, et. al., 2009). The woodland and shrub alliances occur primarily in the relatively undisturbed southern portion of the Project site, and the grassland alliance is the primary vegetation cover of the level and previously cleared areas (Padre, 2020a).

Areas within the Project site that support minimal to no vegetation include rock outcrops and ruderal/disturbed areas. There are distinct rock outcrops comprised of large boulders in the steeper portions of the Project site. The heavily disturbed areas including abandoned access roads, parking areas, and other abandoned permeable surfaces support minimal ruderal vegetation comprised generally of disturbance adapted non-native annual plant species (Padre, 2020a).

3.2.2 Impact Analysis

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to non-agricultural use?

No Impact. The FMMP does not list the Project site as Prime Farmland, Unique Farmland, or Farmland of Statewide importance. In addition, there is no such lands listed for Tuolumne County; therefore, no impact would result.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is not currently used for agricultural purposes and is not designated as an agricultural land use by the Tuolumne County General Plan or zoned for exclusive agricultural use under Title 17 of the Tuolumne County Ordinance Code. In addition, the Project site and surrounding parcels are not currently under a Williamson Act contract; therefore, no impact would result.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220, subd. (g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104, subd. (g))?

No Impact. The Project site is zoned for C-1, General Commercial District pursuant to the Tuolumne County Ordinance Code and is designated GC – General Commercial by the Tuolumne County General Plan. The General Commercial zoning district includes a variety of establishments to serve both the resident and traveling public. The General Commercial zoning district includes hotel and motel-type lodging as a permitted use (Tuolumne County, Tuolumne County Code of Ordinances, Chapter 17.34 General Commercial District). As the proposed Project is an allowable use and the Project site zoning would not change, there would be no conflict with existing zoning for, or cause for rezoning of, forest land, timberland, or timberland zoned Timberland Production; therefore, no impact would result.



d. Result in the loss of forest land or conversion of forest land to non-forest use?

Less Than Significant Impact. The Project site was initially cleared in the mid 1980's as part of a previous development; therefore, a less-than-significant impact would result to forest land.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The Project site does not include Farmland, nor would it convert Farmland to non-agricultural use or conversion of forest land to non-forest use; therefore, no impact would result.

3.2.3 Mitigation Measures

The Project would not result in significant impacts to agriculture and forestry resources; therefore, no mitigation is required.



3.3 AIR QUALITY

| AIR QUALITY - Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | \boxtimes | |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | | \boxtimes | | |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | | |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | \boxtimes | |

3.3.1 Environmental Setting

The U.S. Environmental Protection Agency (USEPA) has established national ambient air quality standards (NAAQS) to protect public health (primary standards) and welfare (secondary standards). Air basins are classified by the USEPA as in "attainment" or "non-attainment" based on meeting the NAAQS. The state of California Air Pollution Control Board (CARB) has established separate, more stringent California ambient air quality standards (CAAQS), which also requires air basins to be designated as in "attainment" or "non-attainment" based on meeting the CAAQS. NAAQS and CAAQS have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter (e.g., dust) and lead (refer to Table 3.3-1). In addition, California has standards for ethylene, hydrogen sulfide, sulfates and visibility-reducing particles.

The Project site is located within southern Tuolumne County which is currently designated as nonattainment for the 1-hour ozone (O_3) CAAQS, and 8-hour O_3 NAAQS and CAAQS. The Project site is further located within the Mountain Counties Air Basin, which consists of nine counties and is currently designated as nonattainment for the 1-hour and 8-hour ozone (O_3) CAAQS (CARB, 2020a). Due to the lack of available air quality data Tuolumne County is unclassified for CAAQS for particulate matter with a diameter of 10 microns or less (PM_{10}) , particulate matter with a diameter of 2.5 microns or less $(PM_{2.5})$, hydrogen sulfide, and Visibility Reducing Particles (CARB, 2020a).

3.3.2 Regional/Local Regulatory Setting

The Tuolumne County Air Pollution Control District (TCAPCD) shares responsibility with CARB for ensuring that all ambient air quality standards are attained within the County. The TCAPCD has jurisdiction under the California Health and Safety Code to develop emission standards (rules) for the County, issue air pollution permits, and require emission controls for stationary sources in the County. The TCAPCD is also responsible for the attainment of air quality



standards in the County. Tuolumne County is currently designated as nonattainment for the 1-hour O₃ CAAQS, and 8-hour O₃ NAAQS and CAAQS (CARB, 2020a). The County is in attainment or unclassified for all other Federal and State standards. The TCAPCD does not currently have a clean air plan to manage air quality or to specifically address O₃ emissions within the County; however, the TCAPCD has established rules that address visible emissions, nuisance, particular matter, and burning.

In addition to the TCAPCD rules the TCAPCD has established significance thresholds for oxides of nitrogen (NO_X), reactive organic gases (ROGs), PM₁₀ and carbon monoxide (CO) for construction and long-term project (operational) emissions (Table 3.3-1) (TCAPCD, 2020).

Table 3.3-1. TCAPCD Thresholds of Significance (Operational and Construction)

| Pollutant | Threshold (pounds per day / tons per year) | | | |
|------------------|--|--|--|--|
| NO_X | 1,000 / 100 | | | |
| ROGs | 1,000 / 100 | | | |
| PM ₁₀ | 1,000 / 100 | | | |
| CO | 1,000 / 100 | | | |

Source: TCAPCD 2020b

3.3.2.1 Tuolumne County General Plan

The Tuolumne County General Plan has an Air Quality Element that applies to the Project:

Policy 15.A.1: Accurately determine and fairly mitigate the local and regional air quality impacts of land development projects proposed in the county.

Implementation Measure 15.A.a: Coordinate and cooperate with other local, regional and State agencies to develop a consistent and effective approach to air quality planning and management.

Policy 15.A.2: Integrate land use planning, transportation planning, and air quality planning to make the most efficient use of public resources and to create a more livable environment.

Implementation Program 15.A.b: Require an air quality impact evaluation for development projects, as necessary, pursuant to the requirements of the TCAPCD. The air quality impact evaluation shall be the responsibility of the developer or proponent and prepared by a qualified consultant at their expense.

Implementation Program 15.A.c: Require project applicants to identify alternatives or amendments for proposed projects that would reduce emissions of air pollutants, if air pollutant emissions exceed applicable air quality standards. Require all air quality mitigation to be real, feasible, cost effective, and enforceable.

Implementation Program 15.A.d: Require project applicants to implement innovative mitigation measures that include best available control technology and/or best management practices as needed to reduce air quality impacts.



Implementation Program 15.A.e: Require proposed new development projects to analyze their contribution to increased traffic and to implement, as needed, transportation demand management measures or other improvements to reduce vehicle miles traveled, which, in turn, reduces air pollutant and GHG emission.

Implementation Program 15.A.f: Work cooperatively with major local employers to offer incentives and services which decrease auto commuting, such as telecommuting and alternative work schedules.

Policy 15.A.4: Reduce air emissions from project construction.

Implementation Program 15.A.k: Require the following dust-control measures during all project-related site preparation activities (i.e., grading, excavation and associated materials hauling) to reduce air quality impacts:

- Exposed soils shall be watered as needed to control wind borne dust.
- Exposed piles of dirt, sand, gravel, or other construction debris shall be enclosed, covered and/or watered as needed to control wind borne dust.
- Vehicle trackout shall be minimized through the use of rumble strips and wheel washers for all trucks and equipment leaving the site.
- Sweep streets once a day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Onsite vehicle speed shall be limited to 15 miles per hour on unpaved surfaces.
- Loads on all haul/dump trucks shall be covered securely or at least two feet of freeboard shall be maintained on trucks hauling loads.
- Construction equipment shall be maintained and tuned at the interval recommended by the manufacturers to minimize exhaust emissions.
- Equipment idling shall be kept to a minimum when equipment is not in use.
- Construction equipment shall be in compliance with the California Air Resources Board off-road and portable equipment diesel particulate matter regulations.

Alternative construction-related air quality measures may be adopted by the decision-making body after considering a project-specific air quality analysis prepared by a qualified consultant.

Policy 15.C.1: Require development to reduce criteria and toxic air pollutant emissions from the use of wood burning appliances, through low emission technology and maximize the use of energy conservation and clean or renewable energy sources.

Implementation Program 15.C.a: Continue to require the installation of only low-emitting, EPA-certified fireplaces, woodstoves or pellet stoves where such wood-burning devices are desired by the developers and/or future homeowners, except in areas with poor air quality or dispersion, or where otherwise prohibited.



Implementation Program 15.C.b: Develop and implement a wood burning stove and fireplace change-out program to install non-wood burning, or EPA-certified wood burning, stoves and fireplaces.

Policy 15.D.1: Work closely with federal, state and local agencies to minimize the emissions and smoke impacts from fire hazard reduction and forest management burn activities and during wildlife wildfire episodes.

Implementation Programs 15.D.a - Encourage alternative methods of disposal of vegetative matter, including, but not limited to, composting, mulching or transporting the material to biomass facilities that are capable of generating energy and designed to reduce emissions.

Implementation Program 15.D.b - Establish community programs that reduce residential open burning, such as local pick-up and delivery of vegetative matter to biomass facilities or composting projects that do not create a public nuisance. (formerly 12.D.b)

Implementation Program 15.D.c - Provide public information through the media and the Air Pollution Control District Burn Day Phone Recorder regarding best management practices for burning, burn permit requirements, burn hours and local and state fire restrictions (formerly 12.D.c)

Implementation Program 15.D.d - Where feasible and appropriate, require alternative methods of fire hazard reduction on private and public lands, including, but not limited to, selective thinning of timber stands, mastication, and chipping of slash for fuel in biomass facilities. (formerly 12.D.e)

Implementation Program 15.D.e - Coordinate and cooperate with other agencies to plan and monitor prescribed fires to minimize the impact on public health, taking into consideration the size and location of the proposed burn and the expected weather conditions, among other parameters. (formerly 12.D.f)

Implementation Program 15.D.f - Participate in committees and task forces that are established for the purpose of developing and discussing smoke management policies and practices necessary to meet the requirements of the Clean Air Act while effectively managing the resources of California. (formerly 12.D.g)

Implementation Program 15.D.g - Enforce applicable Federal, State and local open burning regulations related to agriculture, wildland vegetation management, forest management, range improvement and fire hazard reduction. (formerly 12.D.h)

Implementation Program 15.D.h - Aggressively identify and utilize State and federal grants for fuel reduction projects. Work with local stake holders, fire agencies, and land managers in providing increased opportunities for burning or to help apply alternatives to burning.



3.3.3 Impact Analysis

- a. Conflict with or obstruct implementation of the applicable air quality plan?
- b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. The TCAPCD does not have an Air Quality Plan that would be conflicted or be obstructed by the Project. However, the TCAPCD has established thresholds of significance which apply to the Project (refer to Table 3.3-2).

Padre conducted emissions modeling to estimate the criteria pollutant emissions for the construction and operational phases of the Project. The emissions were estimated using the most recent emission factors and load factors were obtained from the California Emissions Estimator Model® (CalEEMod) User's Guide, Emission Factors (EMFAC) model and the South Coast Air Quality Management District (SCAQMD). Detailed source information is provided in Appendix A.

Construction and operational equipment emissions were estimated using the engine horsepower, engine emission factors, engine load factors and hours of engine use per day. Onroad vehicle emissions were estimated using the vehicle type (i.e., passenger gasoline-powered vehicle, heavy-duty diesel-powered vehicle), engine emission factors and length of daily round trips. Electricity use and associated emissions were estimated using estimated energy use and emissions factors. Fugitive dust emissions from proposed soil disturbance activities related to the construction phase were calculated using emission factors, volumes of earth material disturbed, and areas of earth material disturbed.

Construction Phase. During the construction phase of the Project criteria pollutant emissions would be generated by construction equipment used for demolition of onsite structures, grading and construction activities. These emissions include NOx and ROG because both are considered ozone precursors and potentially result in atmospheric O₃ formation. In addition, the County is in non-attainment for the 8-hour and 1-hour O₃ CAAQS. Emissions would also include PM_{2.5} and PM₁₀ for which the County is in an unclassified status. The construction activities would include diesel powered equipment such as bulldozers, cranes, excavators, graders, pavers and other similar types of equipment. Implementation of MM AQ-1 would require all equipment used during the Project would have at least Tier 3 and/or compliant engines resulting in a less than significant impact. Worker commute trips, supply/equipment delivery trips, and disposal trips would also contribute to criteria pollutant air quality impacts. Project demolition and construction activities would occur in twelve phases over approximately 462 days.

The estimated emissions for the construction phase of the Project are discussed below. Tabulated Project construction phase criteria pollutant estimates are included in Table 3.3-2, and the air quality and greenhouse gas emission estimates are provided in Appendix A.



Table 3.3-2. Estimated Construction Phase Criteria Pollutant Project Emissions

| EMISSIONS SUMMARY | | ROG | NO _x | PM ₁₀ | СО |
|----------------------|------------|------|-----------------|------------------|-------|
| Peak Pounds/Day | | 4.83 | 51.85 | 8.08 | 76.89 |
| Tons/Year | | 0.23 | 3.90 | 0.86 | 5.76 |
| TCAPCD Thresholds | Pounds/Day | 1000 | 1000 | 1000 | 1000 |
| | Tons/Year | 100 | 100 | 100 | 100 |
| Thresholds Exceeded? | | No | No | No | No |

Notes: PM₁₀ concentrations include fugitive dust from excavation, earth moving equipment and vehicle driving.

Emissions resulting from the construction phase Project equipment would temporarily increase local pollutant concentrations. The peak daily NO_X, CO and PM₁₀ emissions would occur during the 20-day Clearing, Grubbing and Grading phase of the construction phase and peak daily ROG emissions would occur during the paving phase; however, all peak emissions are estimated to be well below the 1,000 pound/day thresholds. The Project total emissions for ROG, NO_X, CO and PM₁₀ were estimated to be well below the 100 ton/year thresholds. The primary criteria pollutants of concern in the County are NO_X and ROG, as discussed in Section 3.3.4. The incremental pollutant increase that the construction phase would contribute to O₃ non-attainment would not be cumulatively considerable, and additionally the Project would adhere to the Tuolumne County General Plan in order to further minimize NO_X, ROG, and dust generation from the Project site. Implementation of AQ-1 would reduce construction emissions, resulting in a less than significant impact.

MM AQ-1: Construction Emissions Management Plan. A Construction Emissions Management Plan shall be prepared and approved by the County prior to construction. The plan shall include the following elements:

- 1. A Dust Control Management Plan that encompasses the following dust control measures:
 - Reduce the amount of disturbed area where possible;
 - Water trucks or sprinkler trucks shall be used during construction to keep all areas of vehicle movement damp enough to prevent dust from leaving the site;
 - Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site; and
 - All fugitive dust mitigation measures shall be show on grading and building plans.
- 2. Implementation of the following Best Available Control Technology (BACT) for diesel-fueled construction equipment. The BACT measures shall include:
 - Use of at least Tier 3 off-road equipment and 2010 on-road compliant engines;
 - Repowering equipment with the cleanest engines available; and
 - Installing California Verified Diesel Emission Control Strategies.



Operational Phase. During the operational phase of the Project criteria pollutant emissions would be generated by operational equipment such as diesel-powered off-road four-wheelers, gasoline and diesel powered on-road vehicles, propane fire pits, propane fireplaces, propane water heaters, and propane fired equipment. These emissions include NOx and ROG because both are considered ozone precursors and potentially result in atmospheric O_3 formation. In addition, the County is in non-attainment for the 8-hour and 1-hour O_3 CAAQS. Emissions would also include $PM_{2.5}$ and PM_{10} for which the County is in an unclassified status. Worker commute trips, supply/equipment delivery trips, and disposal trips would also contribute to criteria pollutant air quality impacts. Operational related activities are primarily assumed to occur for 365 days per year.

The estimated emissions for the operational phase of the Project are discussed below. Project operational phase criteria pollutant estimates are included in Table 3.3-3 and air quality and greenhouse gas emission estimates are provided in Appendix A.

Table 3.3-3. Estimated Operational Phase Criteria Pollutant Project Emissions

| EMISSIONS SUMMARY | | ROG | NOx | PM ₁₀ | со |
|----------------------|------------|-------|-------|------------------|-------|
| Equipment | Pounds/Day | 0.49 | 0.06 | 0.02 | 0.50 |
| | Tons/Year | 0.09 | 0.01 | 0.004 | 0.09 |
| Propane and Wood | Pounds/Day | 0.942 | 0.02 | 0.08 | 0.78 |
| | Tons/Year | 0.11 | 0.03 | 0.011 | 0.11 |
| On-Road | Pounds/Day | 3.91 | 0.624 | 0.09 | 35.54 |
| | Tons/Year | 0.616 | 0.113 | 0.016 | 6.482 |
| Land Use | Pounds/Day | | | | |
| | Tons/Year | | | | |
| Total | Pounds/Day | 5.35 | 0.86 | 0.18 | 36.82 |
| | Tons/Year | 0.815 | 0.151 | 0.030 | 6.680 |
| TCAPCD Thresholds | Pounds/Day | 1,000 | 1,000 | 1,000 | 1,000 |
| | Tons/Year | 100 | 100 | 100 | 100 |
| Thresholds Exceeded? | | No | No | No | No |

Peak day and total NOx, ROG, PM_{10} and CO emissions were estimated to not exceed their respective TCAPCD significance thresholds of 1,000 lb/day and 100 tons per year. The primary source of criteria pollutant emission would be from the on-road vehicles.

Emissions resulting from the operational phase of the Project would not significantly increase local pollutant concentrations. The primary criteria pollutants of concern in the County are NO_X and ROGs, as discussed in the Section 3.3.4. The limited pollutant increase that the operational phase would contribute to O_3 non-attainment would not be cumulatively considerable, and additionally the Project would adhere to the Tuolumne County General Plan in order to further minimize NO_X , ROG, and dust generation from the Project site.

The Project construction and operational phase would not result in a cumulatively considerable net increase of any criteria pollutant; therefore, the impact would be less than significant.



c. Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. There are two sensitive receptors within 1,000 feet of the Project Site, which are two residences located approximately 200 feet northwest of the Project site (northwest property boundary). The Project construction phase activity emissions would be temporary and at a distance from the nearby residences. Operational phase emissions for the Project are well below the TCAPCD significance thresholds. Therefore, the impact would be less than significant.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. The construction phase of the Project generates odors from equipment fuel combustion. The operational phase of the Project would generate odors from recreational fires. However, whether Project odors are considered an adverse impact depends on several variables. These variables include:

- Nature of the odor source
- Frequency of odor generation (e.g., daily, seasonal, activity-specific)
- Intensity of the odor (e.g., concentration)
- Distance from the odor source to sensitive receptors
- Wind direction (e.g., upwind or downwind)
- Sensitivity of the receptor (Tuolumne County, 2018)

The Project site is located along State Route 120 and is located approximately 900 feet northeast of one residential receptor. Construction activities would require the temporary use of some odor-causing construction equipment generating minor odors that would dissipate quickly in the open air. Therefore, the impact from the construction phase of the Project would be less than significant. Wood smoke from recreational campfires in the lodge fire pit in the operation phase of the Project could be a potential emissions odor that could affect nearby sensitive receptors; however, the only sensitive receptor (two residences) is located approximately 200 feet northwest of the Project site (northwest property boundary). Campfires would be limited to one wood burning fire pit at the lodge and all fires would be managed by lodge staff in accordance with the following procedures from the Tuolumne County APCD Rule 304:

- a. Material to be burned shall be arranged so that it will burn with a minimum of smoke.
- b. Except for large trees (diameter of six or more inches), only the amount that can be reasonably expected to be completely burned within the following twenty-four hours shall be ignited in any one day.
- c. All outdoor fires shall be ignited only with approved ignition devices.
- d. Material to be burned shall be ignited as rapidly as practicable within applicable fire control restrictions.
- e. Mitigating measures shall be taken when smoke is drifting into a nearby populated area or creating a public nuisance.



- f. No material shall be burned unless it is free of tires, rubbish, tar paper, plastic, demolition and construction debris; is reasonably free of dirt, soil, and moisture; and is loosely stacked in such a manner to promote drying and insure combustion with a minimum of smoke.
- g. Any other conditions that the Air Pollution Control Officer may deem pertinent.

Therefore, odors from wood smoke would not likely be more significant than odors from the construction phase; in addition, given the distance to the residential receptor the odors would dissipate considerably. Therefore, the impact from the operational phase of the Project would be less than significant.

3.3.4 Mitigation Measures

Implementation of the following mitigation measures would reduce potential Project-related impacts regarding air quality to less than significant:

MM AQ-1: Construction Activity Management Plan



3.4 BIOLOGICAL RESOURCES

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

3.4.1 Environmental Setting

The Project site is located in the foothills on the west slope of the Sierra Nevada mountain range, approximately 20 miles west of Yosemite National Park, at an elevation of approximately 3,000 feet above sea level. The regional topography is generally hilly to mountainous with moderate to steep slopes. The Project site is currently vacant, with one vacant commercial building and a canopy structure associated with a partially developed service station facility. The Project site was initially cleared in the mid-1980s as part of a previous development proposal. The Project site was mass-graded at that time and drainage improvements were partially installed underground. A service station building, canopy, and underground storage tanks were constructed at that time; however, the service station never operated. The service station is currently vacant. The Project site has been vacant since the 1980s and erosion has occurred within onsite drainages due to the lack of erosion control devices and vegetation. The Project site



has partially revegetated naturally over the last 30 years. The surrounding land uses include, transportation, light industrial, commercial, residential, forested open space, and a cemetery adjacent to the southern boundary of the Project site.

Biological resources within the Project site were identified by a Padre Associates, Inc. (Padre) biologists through field surveys conducted in July 2020. On May 10 through 12, 2021, Padre completed additional field surveys focused on special-status plants and an oak tree inventory (Padre, 2021, Appendix B). Prior to the surveys pertinent literature was reviewed and database queries were conducted for the Project site and surrounding area. The surveys were conducted on foot and existing habitat types, plants, and wildlife species within the Project site were recorded. The biological surveys focused on identifying and delineating habitat for special-status plant and wildlife species, although general habitat conditions and common species observations were also recorded. A formal aquatic resources delineation was also conducted (Padre, 2020a).

Field survey methods consisted of walking systematic transects throughout the biological survey area (BSA) and recording wildlife species observed by visual observation using binoculars, indirect signs (e.g., tracks, scat, skeletal remains, and burrows), and/or auditory cues (i.e., calls and songs). Field notes on botanical resources and plant communities were also recorded. Field surveys were conducted relatively late in the growing season of annual grass and herbaceous plant species; however, the timing was within the typical blooming for the majority of potentially occurring special-status species known to occur in the Project region.

In conjunction with the biological resources survey, Padre biologists completed a field survey to identify, document and determine regulatory jurisdiction for all aquatic resources observed within the Project site. All potential wetlands were evaluated for the presence of hydrophytic vegetation, hydric soils, and hydrology. Wetland delineation methods followed guidelines from the Regional Supplement to the U.S. Army Corps of Engineers (ACOE) Wetland Delineation Manual: Arid West Region (Version 2.0) (ACOE, 2008). All data was recorded on ACOE Wetland Determination Data Forms – Arid West Region (Version 2.0). A handheld Global Positioning Systems (GPS) unit was used to record the location of the samples and the wetland boundary (upon determination).

All non-wetland waters were evaluated based on desktop and field verification of presence of bed and bank and field indicators for the ordinary high water mark (OHWM) following the guidelines of *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley, 2008). A GPS unit was used to record representative points at the top of the bank of representative features. Desktop mapping of the feature limits were completed following the field survey.

The primary sources of data referenced for this section include the following:

- United States Fish and Wildlife Service (USFWS) list of Federal Endangered and Threatened Species from Environmental Conservation Online System (ECOS) and Information Planning and Consultation (IPaC) (USFWS, 2021);
- USFWS Critical Habitat for Threatened and Endangered Species (online mapping program) (USFWS, 2020);



- California Natural Diversity Database (CNDDB), Rarefind 5 computer program (v5.2.14) (California Department of Fish and Wildlife [CDFW], 2020a);
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (v8-03) (CNPS, 2018);
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW, 2020b); and
- CDFW Special Animals List (CDFW, 2020c).

3.4.1.1 Plant Communities and Wildlife Habitats

Wildlife habitats are generally described in terms of the plant communities along with the topography, elevation, disturbance regime, and other unique environmental characteristics. The corresponding plant communities support foraging, breeding, nesting and refuge habitats for wildlife within the Project site.

Based on species composition, life form, and community membership rules, the vegetation within the BSA was classified into vegetation types based on treatments described in *A Manual of California Vegetation Second Edition* (MCV2) (Sawyer et al., 2009), and site-specific classifications. All identifiable plant species observed within the BSA were documented. Plant specimens that were not positively identified in the field were further examined using appropriate botanical keys, including *The Jepson Manual Vascular Plants of California* (Baldwin et. al., 2012). A list of plant species identified in the BSA during the July 2020 field survey is provided in Biological Resources Survey Report (Padre, 2020a).

The eight vegetation types observed included *Pinus ponderosa* Forest and Woodland Alliance (Ponderosa Pine forest and woodland), Mixed foothill woodland, *Arctostaphylos viscida* Shrubland Alliance (Whiteleaf manzanita chaparral), *Ceanothus cuneatus* Shrubland Alliance (Buck brush chaparral), *Eriodictyon californicum* Shrubland Alliance (California yerba santa scrub), Riparian Scrub, *Acmispon americanus* (*Lotus unifoliatus*) Provisional Herbaceous Alliance (Spanish clover fields), Ruderal, and land use described as Developed. Approximate acreages and regulatory status of each of each type is listed in Table 3.4-1 – Summary of Habitats and Vegetation within the BSA.

The California Department of Fish and Wildlife (CDFW) has created the List of Vegetation Alliances and Associations (Natural Communities List) (CDFW, 2019), to assist in the identification of which Natural Communities are considered to be a high priority for conservation. The Natural Communities List includes California Natural Diversity Database (CNDDB) Natural Community occurrences (i.e., Holland types) and vegetation types classified according to the current State standard MCV2 nomenclature. All Natural Community occurrences in the CDFW Natural Communities have a corresponding G (global) and S (State) rank, according their degree of imperilment (as measured by rarity, trends, and threats) using the Heritage Methodology with ranking range described as G1 through G5 being globally critically imperiled (G1) to demonstrably secure (G5) and S1 through S5 being State critically imperiled (S1) to demonstrably secure (S5). Alliances and associations with a rarity ranking of 1-3 are considered sensitive and are indicated in the CDFW Natural Communities List.



Table 3.4-1. Plant Community and Habitat Acreage Table

| Vegetation/Habitat Classification | Regulatory Status | Acres within the BSA | Percentage of the Project Site |
|--------------------------------------|-------------------|----------------------|-----------------------------------|
| Ponderosa Pine forest and woodland | G5, S4 | 5.2 | 14% |
| Mixed foothill woodland | NA | 7.5 | 21% |
| White leaf manzanita chaparral | G4, S4 | 6.1 | 17% |
| Buck brush chaparral | G4(?) | 8.4 | 23% |
| California yerba santa scrub | G4, S4 | 1.4 | 4% |
| Riparian Scrub | See Notes | 0.9 | 2% |
| Spanish clover fields | G4(?), S4(?) | 5.2 | 14% |
| Ruderal | NA | 0.4 | 1% |
| Developed | NA | 1.4 | 4% |
| | Total: | 36.5 | 100% |

Notes:

Riparian scrub is a site-specific classification based on observed species composition (CDFW Natural Community); there is no specific State regulatory status rank. However, CDFW typically affords protection to riparian vegetation through California Fish and Game Code section 1600 notification process.

Global and State Ranks (CDFW, 2020b):

- G1 S1 Critically Imperiled Extreme rarity (often 5 or fewer populations)
- G2 S2 Imperiled Very restricted range, very few populations (often 20 or fewer)
- G3 S3 Vulnerable Restricted range, relatively few populations (often 80 or fewer)
- G4 S4 Apparently secure Uncommon but not rare
- G5 S5 Secure Common; widespread and abundant
- (?) A question mark (?) denotes an inexact numeric rank due to insufficient samples over the full expected range of the type, but existing information indicates that designated rank is appropriate.

Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine Forest and Woodland)

Ponderosa pine forest and woodland occurs on all upland topography, floodplains, low-gradient depositions along streams, and raised benches, and is characterized by presence of *Pinus ponderosa* (Ponderosa pine) dominant or co-dominant in the tree canopy with several pine and oak (*Quercus* sp.) species, tree and shrub canopy is open to continuous, and herbaceous layer is sparse, abundant, or grassy (Sawyer et. al., 2009). As observed during the July 2020 survey, this alliance occurred intermittently throughout the BSA, and intergraded with surrounding vegetation types while exhibiting variable tree and canopy density. Within the BSA, Ponderosa pine was the dominant species with sparse to dense, intermittent cover of component species including white-leaved manzanita (*Arctostaphylos viscida*), Manzanita (*Arctostaphylos manzanita*), Buck brush (*Ceanothus cuneatus*), interior live oak (*Quercus wislizeni*), and poison oak (*Toxicodendron diversilobum*), no herbaceous cover was present.



Mixed Foothill Woodland

Mixed foothill woodland is a site-specific classification consisting of an assemblage of mature tree, shrub, and herbaceous species that occurred in dense stands primarily on the eastern and western-most ends of the BSA. Species observed included Ponderosa pine, foothill pine (*Pinus sabiana*), interior live oak, California black oak (*Quercus kelloggii*), white alder (*Alnus rhombifolia*), poison oak, buck brush, white-leaved manzanita, and remnant/dead annual grasses including soft chess (*Bromus hordaceous*) and ripgut grass (*Bromus diandrus*).

Arctostaphylos viscida Shrubland Alliance (Whiteleaf Manzanita Chaparral)

Whiteleaf manzanita chaparral occurs on ridges and upper slopes that may be steep, soils are shallow but weathered clays developed from sandstone, granitic, or ultramafic substrates, and is characterized by presence of white-leaved manzanita dominant in the shrub layer with codominant species including chamise (*Adenostoma fasciculatum*), *Arctostaphylos* spp., *Ceanothus* spp., with emergent trees including *Pinus* spp. at low cover, shrub layer is open to continuous and herbaceous layer is sparse. As observed during the July 2020 survey, this alliance occurred primarily on rocky, gravely moderate to steep slopes intermittently throughout the BSA with a large dense stand in the western portion of the BSA. White-leaved manazanita was dominant to co-dominant with manzanita in the shrub layer, with sparse to intermittent component species including buck brush, California yerba santa, California black oak, and Ponderosa pine.

Ceanothus cuneatus Shrubland Alliance (Buck Brush Chaparral)

Buck brush chaparral occurs on ridges and upper slopes, soils are shallow, rocky, and well drained. Buck brush chaparral is characterized by the presence of buck brush dominant or co-dominant in the shrub canopy with chamise, *Arctostaphylos* spp., deer brush (*Ceanothus integerrimus*), birch leaf mahogany (*Cercocarpus betuloides*), California buckwheat (*Eriogonum fasciculatum*), Fremont's silk tassel (*Garrya fremontii*), toyon (*Heteromeles arbutifolia*), *Quercus* spp., sugar bush (*Rhus ovata*), and Black sage (*Salvia mellifera*), and emergent trees including *Pinus* spp. and *Quercus* spp. may be present at low cover, shrub canopy is intermittent to continuous, and herbaceous layer is sparse to grassy (Sawyer et. al., 2009). As observed during the July 2020 survey, this alliance occurred throughout the BSA on level to moderate slopes. Buck brush was the dominant species with sparse to dense component species including Ponderosa pine, white-leaved manzanita, manzanita, interior live oak, blue oak (*Quercus douglasii*), Spanish clover (*Acmispon americanus*), rattail fescue (*Festuca myuros*), and slender wild oat (*Avena barbata*).

Eriodictyon californicum Shrubland Alliance (California Yerba Santa Scrub)

California yerba santa scrub occurs on lower to middle slopes of serpentine, metavolcanics, and plutonic substrates, soils are loamy, and is characterized by the presence of California yerba santa dominant in the shrub canopy with chamise, buck brush, sticky monkeyflower (*Diplaucus aurantiacus*), chaparral yucca (*Hesperoyucca whipplei*), deerweed (*Acmispon glaber*), silver bush lupine (*Lupinus albifrons*), elderberry (*Sambucas nigra*), and poison oak, and emergent trees including *Pinus* spp. and *Quercus* spp. may be present at low cover, shrub canopy is open to intermittent, and herbaceous layer is open to continuous, and grassy (Sawyer et. al., 2009). As observed during the July 2020 survey, this alliance occurred primarily in the eastern portion of the BSA intergrading with Buck brush scrub on moderate slopes



California yerba santa was the dominant species with sparse component species including buck brush, white-leaved manzanita, and manzanita.

Riparian Scrub

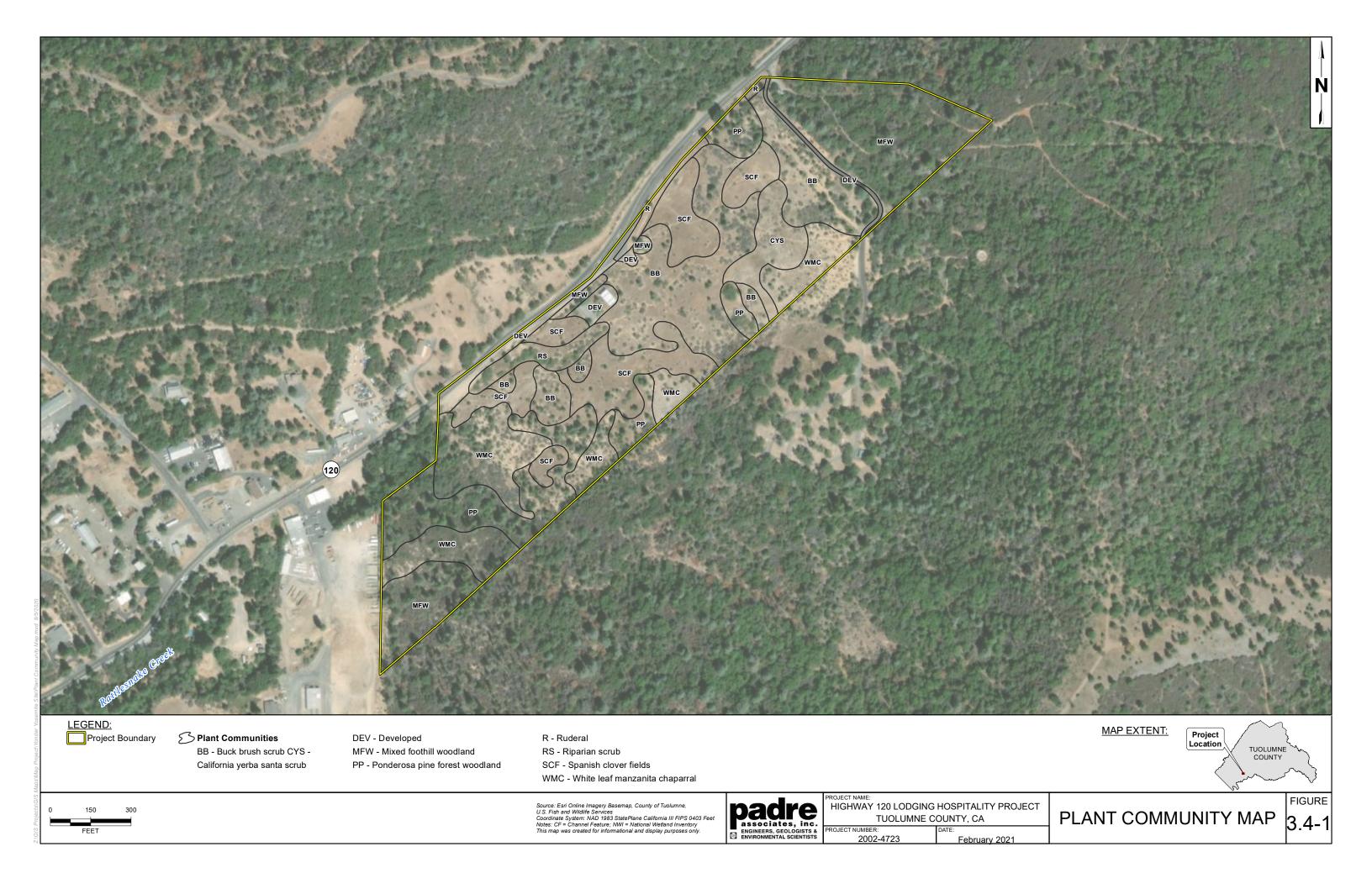
Riparian woodland is a site-specific classification that consisted of an assemblage of tree, shrub, and herbaceous species that occurred primarily within and along the banks of the erosional drainage feature located along the northern perimeter of the BSA. As observed during the July 2020 survey, the dominant species was red willow (*Salix laevigata*) with co-dominant to intermittent, scattered and sparse component species including arroyo willow (*Salix lasiolepis*), interior live oak, Himalayan blackberry (*Rubus aremeniacus*), white alder, lamp rush (*Juncus effusis*), nit grass (*Gastridium phleoides*), creek monkey flower (*Erythranthe guttata*), and annual grasses.

Acmispon americanus (Lotus unifoliatus) Provisional Herbaceous Alliance (Spanish Clover Fields)

Spanish clover fields occurs on seasonally to intermittently flooded alluvial flats, stream terraces, soils are deep loams and alluvial silts, and is characterized by the presence of Spanish lotus (Acmispon americanus) dominant in the herbaceous layer with (Agrostis spp.), sticktight (Bidens frondosa), soft chess (Bromus hordaceus), bindweed (Convulvulus arvensis), turkey mullein (Croton setigerus), willow herb (Epilobium spp.), meadow barley (Hordeum brachyantherum), rush (Juncus sp.), hayfield tarweed (Hemizonia congesta), Italian ryegrass (Festuca perennis), Iupine (Lupinus spp.), Pennyroyal (Mentha pulegium), common lippia (Phyla nodiflora), clover (Trifolium spp.), neckweed (Veronica peregrina), rattail fescue (Festuca myuros), and cocklebur (Xanthium strumarium), herbaceous cover is intermittent to continuous (Sawyer et. al., 2009). A provisional alliance is described when California Native Plant Society (CNPS) has sufficient data to propose the vegetation type, but do not have enough research and regional information to be confident about its status in California's vegetation (CNPS, 2020). As observed during the July 2020 survey, this alliance occurred throughout the BSA primarily intergrading with buck brush scrub on level to minimal slopes. Spanish clover was the dominant species with sparse and intermittent to moderately dense component species including Ponderosa pine, white-leaved manzanita, buck brush, lamp rush, vinegar weed (Trichostema lanceolatum), stinkwort (Dittrichia graveolens), slender wild oat, Italian rye grass (Festuca perennis), and rattail fescue.

Ruderal

Ruderal habitat is a term used to describe those areas that have been disturbed by past land-use practices and/or recent ground disturbance. Ruderal habitat occurred primarily along the State Route 120 road shoulder and in the vicinity of the abandoned gas station structure and building. The vegetation cover consisted of sparse disturbance-adapted weedy species including medusa head (*Elymus caput-medusae*), black mustard (Brassica nigra), remnant non-native annual grasses.





Developed

Within this Report, Developed is a term that describes a land surface that has been modified for commercial, residential, industrial, or infrastructure use such as buildings, parking lots, and paved roads. As observed during the July 2020 field survey, Developed areas included abandoned gas station structure, abandoned building, paved driveway and road (Memorial Road). oil and gas production facilities, structures, pipelines, and paved roads.

3.4.1.2 Aquatic Resources

Wetlands and other waters of the U.S. are considered sensitive natural habitats by the ACOE, RWQCB, and CDFW. Aquatic features observed included seasonal wetlands, an intermittent channel, an ephemeral riparian channel, ephemeral channels, and a man-made pond. The wetland delineation survey completed by Padre in July 2020 identified approximately 2.98 acres of wetlands and waters within the proposed Project site preliminarily determined to be under ACOE and/or CDFW, and RWQCB jurisdiction. Based on the results of the desktop review and field survey, there were no USFWS National Wetlands Inventory (NWI) features within the BSA (USFWS, 2020b). Refer to Figure 3.4-2 – Aquatic Resources.

Seasonal Wetlands

There were ten seasonal wetland features identified during the field survey totaling 0.357 acres (15,564 square feet [ft²]). The vegetation and hydrological indicators were assessed and then a soil test pit was dug for hydric soil assessment, if deemed necessary. If the three wetland parameters required to determine ACOE jurisdiction (hydrophytic vegetation, hydric soil, and hydrology) were present within a sampled feature, a paired upland sample plot was evaluated to determine the extent of the seasonal wetland boundary.

The seasonal wetlands throughout the Project site showed the presence of hydric soils, hydrological indicators, and exhibited strong stands of hydrophytic vegetation within generally open areas within Spanish clover fields and Buck brush scrub plant communities. The dominant vegetation within the seasonal wetland features consisted of lamp rush (*Juncus effusus*) and toad rush (*Juncus bufonius*), with intermittent occurrences of sedge (*Carex densa*) creeping spikerush (*Eleocharis macrostachya*). These species are hydrophytic with an indicator status ranging from facultative wetland species (plants that occur in wetlands and non-wetlands) to obligate (plants that almost always occur in wetlands). Sparse cover of upland species observed within the seasonal wetlands included Spanish clover (*Acmispon americanus*), little quaking grass (*Aira caryophyllea*), and rattail grass (*Festuca myuros*).

Intermittent Channel

An intermittent channel, totaling 0.069 acres (3,004 ft²), was observed along the northwestern boundary of the Project site (western portion of feature CF4) (Padre, 2020a). The intermittent channel was identified based on the presence of shallow, standing water, hydrophytic vegetation, and saturated soils that extended from the eastern culvert to approximately 55 feet downstream. The channel flows offsite to the west and into a culvert that appeared to connect to Rattlesnake Creek. The average dimension of the intermittent channel was approximately ten feet in width and approximately four to ten feet in depth. Hydrophytic vegetation included creek



monkeyflower (*Erythranthe guttata*), lamp rush, tall flatsedge (*Cyperus eragrostis*), nit grass (*Gastridium phleoides*), sedge (*Carex densa*), and curly dock (*Rumex crispus*).

Ephemeral Riparian Channel

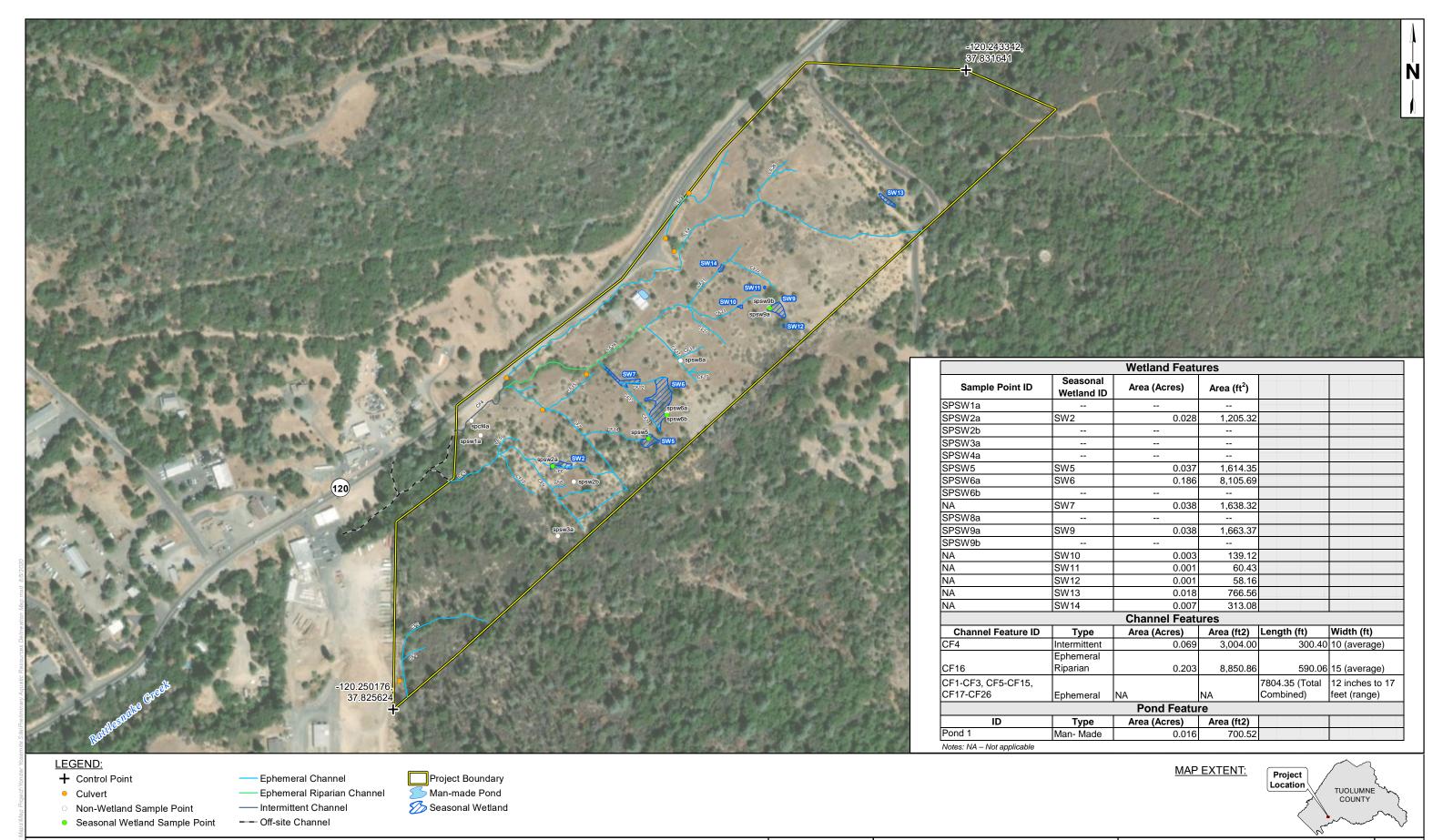
The ephemeral riparian channel was a total of 0.203 acres (8,851 ft²) and supported a distinct stand of riparian scrub vegetation within and outside of the banks, which made it distinctly different from other ephemeral channels on the Project site. The ephemeral riparian channel was dry during the July 2020 survey, but appears to flow in a northeasterly to southwesterly direction and was observed to connect to the intermittent channel. Riparian scrub plant species included red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), interior live oak, Himalayan blackberry (*Rubus aremeniacus*), white alder, lamp rush, and nit grass (*Gastridium phleoides*).

Ephemeral Channel

There were numerous ephemeral channels observed throughout the Project site. The ephemeral channels were not formally delineated during the July 2020 surveys; however, they total approximately 2.33 acres (101,465 ft²) of potential Waters of the State. These features exhibited variable depths, widths, and vegetation cover. The ephemeral channels were approximately four to 22 feet wide (mean width of 13 feet) and 12 inches to 10 feet deep. The majority of the channel bottoms were comprised of sandy, gravely, bare ground, and several supported intermittent to dense cover of upland grasses and forbs including Spanish clover, slender wild oat (*Avena barbata*), and stinkwort (*Dittrichia graveolens*). Several of the ephemeral channels located in rocky, steep, bare areas of the eastern portion of the Project site were highly eroded with no vegetation. All ephemeral channels were dry during the time of the survey and appeared to function as stormwater run-off features.

Man-Made Pond

A man-made pond was observed on the east side of the abandoned gas station structure. The man-made pond is 0.016 acres (700 ft²), eight to ten feet deep, and was dry at the time of the July 2020 survey. The bottom of the pond did not support vegetation; however, there are three buried tanks within the pond and some construction debris and gravel lining the bottom. The upper banks were vegetated with moderate cover of tall nutsedge, turkey mullein (*Croton setiger*), and remnant annual grasses transitioning into surrounding ruderal and scrub habitat.



Source: Esri Online Imagery Basemap, County of Tuolumne, U.S. Fish and Wildlife Services Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet Notes: CP = Channel Feature; NMI = National Wetland Inventory This map was created for informational and display purposes only.



HIGHWAY 120 LODGING HOSPITALITY PROJECT, TUOLUMNE COUNTY, CA

2002-4723 February 2021

FIGURE AQUATIC RESOURCES



3.4.1.3 Wildlife Movement Corridors

Wildlife movement corridors are considered an important ecological resource by various agencies (CDFW and USFWS) and under CEQA. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging, breeding, refuge sites, and/or seasonal migrations to preferred habitat. Movement corridors are essential for wildlife to maintain space for dispersal and to mitigate potential habitat fragmentation which can adversely affect wildlife population by reducing genetic and species diversity.

Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local, such as those between foraging and nesting/denning areas, or they may be regional in nature. Migration corridors are not unidirectional access routes; however, reference is usually made to source and receiver areas in discussions of wildlife movement networks. "Habitat linkages" are migration corridors that contain contiguous strips of native vegetation between source and receiver areas. These natural linkages provide cover and forage sufficient for temporary inhabitation by a variety of ground-dwelling animal species. Wildlife migration corridors are essential to the regional fitness of an area as they provide avenues of genetic exchange and allow animals to access alternative territories as fluctuating dispersal pressures dictate.

The Project region consists of relatively unpopulated areas of forest and woodland habitat in the foothills of the Sierra Nevada mountain range, with highways, roads and scattered residential and commercial development. The swaths of forested areas serve as movement and dispersal corridors for a variety of wildlife species. The Project site could potentially be used by a variety of wildlife species including, several bat species, mule deer, and coyote (*Canis latrans*). However, there are features within and adjacent to the Project site that act as barriers to wildlife dispersal and migration. Specifically, State Route 120 bounds the northern boundary of the Project site creating a significant barrier to dispersal and north/south wildlife movements. In addition, the distinct transition between the intermittent channel to ephemeral channel (upstream of Rattlesnake Creek) acts as a barrier for amphibian dispersal through the Project site.

3.4.1.4 Special-Status Species

Special-status species are legally protected under the State and Federal Endangered Species Acts or other regulations or are species that are considered sufficiently rare by the scientific community to qualify for such listing. These species are classified under the following categories:

- Species listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 Code of Federal and various notices in the Federal Register [FR] [proposed species]); regulations [CFR] 17.12 [listed plants], 17.11 [listed animals];
- Species that are candidates for possible future listing as threatened or endangered under the federal Endangered Species Act (61 FR 40, February 28, 1996);

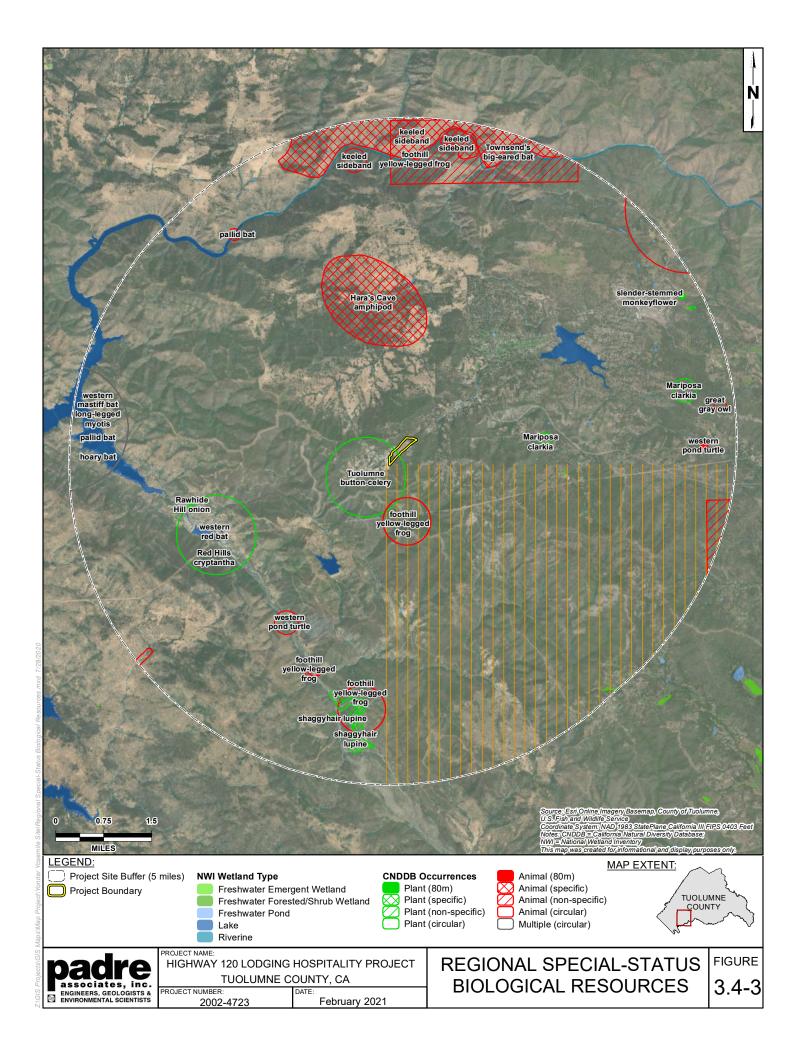


- Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 California Code of Regulations [CCR] 670.5);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.);
- Animal species of special concern to CDFW;
- Animals fully protected under Fish and Game Code (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
- Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if not on one of the official lists (State CEQA Guidelines, Section 15380); and
- Plants considered under the CNPS and CDFW to be "rare, threatened or endangered in California" (California Rare Plant Rank [CRPR] 1A, 1B, and 2 in CNPS, 2018).

A list of special-status species that have the potential to occur within the vicinity of the Project site was compiled based on data contained in the CNDDB (CDFW, 2020a), the USFWS list of Federal Endangered and Threatened Species that Occur in or may be Affected by the proposed Project, and the CNPS Inventory of Rare and Endangered Plants (USFWS, 2020; CNPS, 2020). A list of special-status species, their general habitat requirements, and an assessment of their potential to occur within and adjacent to the Project site is provided below in Tables 3.4-2 and 3.4-3. Refer to Figure 3.4-3 for the general location of special status biological resources located in the vicinity of the Project site.

The "Potential to Occur" categories are defined as follows:

- Unlikely: The Project site does not support suitable habitat for a particular species and/or the Project site is outside of the species known range.
- Low Potential: The Project site only provides limited and low-quality habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- Medium Potential: The Project site and/or immediate project area provides suitable habitat for a particular species.
- High Potential: The Project site and/or immediate project area provide ideal habitat conditions for a particular species and/or known populations occur in the immediate project area or within the Project site.





3.4.1.5 Special-Status Plant Communities and USFWS Critical Habitat

Critical Habitat as defined by the USFWS and CDFW was not documented within the BSA., or within five miles of the BSA (USFWS, 2020a). Sensitive natural communities, as defined by CDFW were not identified on CNDDB within the Project region (CDFW, 2020).

3.4.1.6 Oak Trees

No distinct oak woodland community was observed within the Project site. However, the Mixed foothill woodland vegetation community observed within the Project site consisted of moderate to dense canopy cover of mature trees and shrubs including Ponderosa pine, interior live oak, California black oak, blue oak, and buck brush, with the oak trees occurring as small clusters and/or individual trees. In May 2021, Padre conducted an oak tree inventory survey to identify and map all oak trees within and overlapping to the Project footprint. All sizes and maturity levels of oaks were mapped including saplings (trees less than two inches diameter at breast height [DBH]).

3.4.1.7 Special Status Plants

The Special-status plant species that have been documented within a five-mile radius of the Project site (CDFW, 2020a) and have the highest potential to occur include Rawhide Hill onion (Allium tuolumnense), Mariposa clarkia (Clarkia biloba ssp. australis), Red Hills cryptantha (Cryptantha spithamaea), yellow-lip pansy monkeyflower (Diplacus pulchellus), Tuolumne button-celery (Eryngium pinnatisectum), slender-stemmed monkey flower (Erythranthe filicaulis), Congdon's Iomatium (Lomatium congdonii), shaggy hair Iupine (Lupinus spectabilis), Layne's ragwort (Packera layneae), and Red Hills ragwort (Senecio clevelandii var. heterophyllus). Table 4-2 – Special-Status Plant Species summarizes the regulatory status, blooming period, habitat preferences, and potential occurrence within the Project site for these ten species.

3.4.1.8 Special Status Wildlife

Special-status wildlife species that have been documented within a five-mile radius of the Project site on the CNDDB include keeled sideband snail (*Monadenia circumcarinata*), Hara's Cave amphipod (*Stygobromus harai*), Delta smelt (*Hypomesus transpacificus*), California redlegged frog (*Rana draytonii*), foothill yellow-legged frog (*Rana boylii*), western pond turtle (*Emys marmorata*), great grey owl (*Strix nebulosa*), oak titmouse, bald eagle (*Haliaetus leucocephalus*), Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), long-legged myotis (*Myotis volans*), hoary bat (*Lasiurus cinereus*), Yuma myotis (*Myotis yumanensis*), western red bat (*Lasiurus blossevillii*), and Fisher (*Pekania pennant*). Oak titmouse was the only special-status wildlife species observed at the Project site during the July 2020 field survey. Table 3.4-3 – Special-Status Wildlife Species within the Project Region summarizes the suitable habitat and regional occurrence information for these 18 species.

The following sections discuss the special-status wildlife species that have the potential to occur within the Project site based on regional occurrences and suitable habitat.



Special-Status Invertebrates

Keeled sideband snail and Hara's Cave amphipod are both invertebrates that are considered Special Animals (SA) with the CDFW. These species occupy very specific habitats; the Tuolumne River canyon in association with steep limestone outcrops and talus slopes for the keeled sideband snail, and small lakes or standing water in caves and mine tunnels within central California foothills for Hara's Cave amphipod. Both of these habitats are absent from the Project site.

Special-Status Amphibians

Foothill yellow-legged frogs are considered State Endangered (SE) and a California Species of Special Concern (CSC) with the CDFW. This species generally inhabits shallow streams with a rocky substrate in a variety of habitats including various scrub/shrubland, woodland, and forest habitats. Suitable aquatic habitat for yellow-legged frog is not present within the Project site primarily because of dispersal barriers such as State Route 120, lack of hydrological connection of the main drainage to Rattlesnake Creek, and lack of rocky substrate in the drainages. Although there is a documented occurrence less than one mile from the Project site, there is a lack of suitable habitat; therefore, this species is not expected to occur within the Project site.

California red-legged frogs are listed as federally threatened (FT) under the USFWS. Populations of this species remain in the San Francisco Bay Area, along the California coast, and the western edge of the Central Valley. The California red-legged frog occurs in different habitats depending on their life stage and season. All stages are most likely to be encountered in and around breeding sites, which include coast lagoons, marshes, springs, permanent and semi-permanent natural ponds, ponded and backwater portions of streams, as well as artificial impoundments such as stock ponds, irrigation ponds, and siltation ponds with dense and extensive vegetative cover of emergent and bank vegetation including willow (*Salix* sp.), cattail, and bulrush. The Project site lacks suitable habitat for California red-legged frog, a species which has no documented occurrences in the Project region.

Special-Status Reptiles

Western pond turtle is designated as a CSC with the CDFW and this species inhabits permanent or nearly permanent bodies of water with available basking sites in a variety of habitat types. This species also requires suitable upland habitat near water sources (e.g., sandy banks or open, grassy fields) for egg-laying. Low-quality aquatic habitat for western pond turtle is present within the Project site including the main drainage feature along State Route 120 and the man-made pond within the Project site; therefore, given that the most recent occurrence of pond turtle is approximately 2.5 miles away, there is a low to unlikely potential for this species to occur within the Project site.

The coast horned lizard (*Phrynosoma blainvillii*) is a California species of special concern. It inhabits open areas of sandy soil and low vegetation in valleys and foothills throughout northern California to Baja California. It is found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil, including sandy washes and along dirt roads (Stebbins, 2003). No coast horned lizards were observed within the Project site; however, suitable habitat (sandy soils and extensive ant hills) is present within the Project site.



Special-Status Birds

Oak titmouse is designated as a SA with the CDFW and generally inhabits oak woodlands and open pine or mixed oak-pine forest. Suitable habitat for oak titmouse is present within the Project site and it was the only special-status species observed during the July 2020 survey.

Great gray owl is designated as SE and is a resident of old growth mixed conifer or red fir forest habitat, in or on edge of meadows above 4,500 feet in elevation. Great gray owls are primarily documented along the Tuolumne River and the Merced River in Yosemite Valley, approximately 20 to 30 miles southeast of the Project site. Suitable nesting habitat for great gray owl is not present within the Project site; therefore, there is a low to unlikely potential for this species to occur in the Project site.

No nesting bird activity was observed within the Project site during the field survey; however, vegetation, trees, and other substrates (e.g., man-made structures, areas of open ground, etc.) present within the site provide suitable nesting habitat for a variety of bird species. Nesting birds and their nests/eggs are protected under the Federal Migratory Bird Treaty Act of 1918 and California Fish and Game Code Section 3503, 3503.5, and 3513. However, in 2017, Solicitor of the Department of the Interior issued a legal opinion (M-37050 or M-Opinion) stating that "The Migratory Bird Treaty Act Does Not Prohibit Incidental Take" which in effect revoked take protections under the MBTA. On January 5, 2021, the USFWS published a final rule that defined the scope of the MBTA stating that incidental take of birds resulting from an activity is not prohibited when the underlying purpose of that activity is not to take birds. On May 6, 2021, the USFWS announced a proposed rule to revoke the January 7, 2021 final regulation that limited the scope of the MBTA, in an effort to reinstate federal MBTA protections. The proposed rule is pending as of June 2021. In the interim, migratory birds are protected (for take) through AB 454 California Migratory Bird Protection Act (California Fish and Game Code 3513). Nesting bird season generally occurs between February 1 and August 31.

Special-Status Mammals

Townsend's big-eared bat, pallid bat, western mastiff bat, long-legged myotis, hoary bat, Yuma myotis and western red bat are all considered SAs with the CDFW. These special-status bats occupy a wide-range of different habitats and utilize various types of roosts including but not limited to cliffsides, trees, and man-made structures/buildings. Suitable roosting/foraging habitat for the special-status bats listed above are present throughout the Project site including trees, buildings, and water sources. Based on the presence of suitable roosting habitat and the document occurrences with the species' dispersal ranges, there is a moderate potential for bat species to occur on the Project site.

The fisher is a federally listed endangered species that inhabits old growth forests from northern California to British Columbia. The species is a mustelid (weasel) family, about the size of a housecat. Fisher prey mostly on small and medium-sized mammals, such as rabbits, porcupines, squirrels, and voles, and will also consume birds, carrion, and even fruit on occasion. Most notably, it is a specialized predator of porcupines, which it kills by flipping over to expose the non-quilled belly. Each individual travels over a home range of 50 to 150 square miles, even more in winter when food is scarce. Historically fishers occurred within the Yosemite Valley, 20 miles east of the Project site; however, current distribution of the Sierra Nevada DPS of fisher is



limited to the southern extent of Yosemite National Park, south of the Merced River and Northwestern Sierra National Forest. therefore, due to a lack of habitat and no recent occurrences, it is unlikely the species would occur at the Project site.

The common mountain lion (*Puma concolor*) is not a protected species; however, the subspecies (*Puma concolor brownii*) is considered a Species of Special Concern by CDFW, but its range does not extend into Tuolumne County. Common mountain lion is discussed in this section for informational purposes only. The common species of mountain lion is found throughout California primarily in foothills and mountains wherever deer are found, since deer are this species' main food source. Mountain lions require extensive areas of riparian vegetation and brushy stages of various habitats, with interspersions of irregular terrain, rocky outcrops, and tree/brush edges, and typically use caves or other natural cavities, and thickets for denning. The Project site does not contain suitable habitat for mountain lion primarily due to lack of sufficient prey source (minimal deer presence) and State Route 120 acting as a dispersal barrier. As such, mountain lion is not expected to occur within the Project site.

3.4.1.9 Critical Habitat

Critical Habitat is defined by the Federal Endangered Species Act (FESA) as the specific portions of the geographic area occupied by the species in which physical or biological features essential to the conservation of the species are found and that may require special management or protection. Specific areas outside of the geographic area occupied by the species may also be included in critical habitat designations upon a determination that such areas are essential for the conservation of the species.

Critical habitat has been designated for the California red-legged frog and Delta smelt; however, there is no critical habitat designated within or adjacent to the Project site.



Table 3.4-2 - Special Status Plant Species

| Species Name | Status | Habitat Requirements | Blooming Period | Potential for Occurrence within BSA | Observed within the BSA ¹ |
|--|---------------|---|--------------------|---|--|
| Allium tuolumnense Rawhide Hill onion | CRPR 1B.2, | Foothill woodland, strict serpentine affinity. Elevation: 300-600 m. | March-May | Low. Suitable soil and elevation not present. | No |
| Clarkia biloba ssp. australis Mariposa clarkia | CRPR 1B.2 | Chaparral, cismontane woodland, serpentinite. Elevation: 300-1460 m. | April-July | Low. Suitable soils not present. | No |
| Cryptantha spithamaea Red Hills cryptantha | CRPR 1B.3 | Chaparral, cismontane woodland, serpentinite, sometimes streambeds, sometimes openings. Elevation: 275-460 m. | April-May | Low. Suitable elevation not present. | No |
| Diplacus pulchellus Yellow-lip pansy monkeyflower | CRPR 1B.2 | Yellow pine forest, wetland-riparian, vernally wet depressions or seepage areas. Elevation 600 – 2000 m. | April-June | Moderate. Suitable habitat and documented occurrence approximately 4.8 miles NE of the BSA. | No |
| Eryngium pinnatisectum Tuolumne button-celery | CRPR 1B.2 | Cismontane woodland, lower montane coniferous forest, vernal pools. Elevation: 70-915 m. | May-August | High. Suitable habitat is present and documented occurrence less than one mile from BSA. | No |
| Erythranthe filicaulis Slender-stemmed monkey flower | CRPR 1B.2 | Cismontane woodland, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest, vernally mesic. Elevation: 900-1750 m. | April-August | Moderate. Suitable habitat is present suitable habitat and documented occurrence approximately 5.0 miles NE of the BSA. | No |
| Lomatium congdonii Congdon's lomatium | CRPR 1B.2 | Foothill woodland, chaparral, serpentine. Elevation: 300- 1200 m. | March-June | Low. Suitable soil not present. | No |
| Lupinus spectabilis Shaggy hair lupine | CRPR 1B.2 | Chaparral, cismontane woodland, serpentine. Elevation: 260-825 m. | April-May | Low . Suitable soil and elevation not present. | No |



| Species Name | Status | Habitat Requirements | Blooming Period | Potential for Occurrence within BSA | Observed within the BSA ¹ |
|--|-------------------------|---|--------------------|--|--------------------------------------|
| Packera layneae Layne's ragwort | SR, FT, CRPR 1B.2 | Foothill woodland, chaparral, disturbed areas, openings, serpentine soils. Elevation 300-900 m. | April-August | Low. Suitable soils not present. | No |
| Senecio clevelandii var. heterophyllus Red Hills ragwort | CRPR 1B.2 | Foothill Woodland, wetland-riparian, serpentine soils. Elevation 260-900 m. | June-July | Low. Suitable soils not present. | No |

Notes:

¹Surveys were conducted in July 2020 (Padre), May 10-12, 2021 (Padre), and May 22, 2021 (Tuolumne County).

CNPS Ranking System (CNPS, 2020):

CRPR California Rare Plant Rank

1A Plants presumed extirpated in California and either rare or extinct elsewhere.

1B Plants rare, threatened, or endangered in California and elsewhere.

CRPR Threat Ranks (CNPS, 2020):

0.1 Seriously threatened in California.

0.2 Moderately threatened in California.



Table 3.4-3. Special-Status Wildlife Species

| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|---------|---|-------------------------------|--|
| Invertebrates | | | | |
| Monadenia circumcarinata Keeled sideband snail | SA | Endemic to the Tuolumne River canyon, in association with steep limestone outcrops and talus slopes. Occurs in limestone where fractures or loose talus allow deep, sub-surface sheltering. | A | South of Tuolumne River, approximately .75 mile up the trail from mouth of Indian Creek to Corcoran Flat; approximately 4.5 miles northwest of the Project site (CDFW, 2020a). |
| Stygobromus harai Hara's cave amphipod | SA | Found in small lakes and standing water in caves & mine tunnels within central California foothills. | А | Unnamed spring, 9 miles southeast of Sonora; approximately 1.4 miles north of the Project site (CDFW, 2020a). |
| Amphibians | | | | |
| Rana boylii Foothill yellow-legged frog | SE, CSC | Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats including coastal scrub, chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, and riparian forests and woodlands. | A | Cobbs Creek, about 1 mile southeast of Big Oak Flat, east of Don Pedro Reservoir; approximately 0.6 miles south of the Project site (CDFW, 2020a). |
| Rana draytonii California red-legged frog | FT | Aquatic habitats with quiet water areas and refugia on a minimum of 25 percent of the pool margin and standing water that is retained into late July. | А | Nearest occurrence is from 1941 approximately 21 miles, northeast of the Project site within Yosemite National Park (USFWS, 2020c). |
| Fish | • | | | |
| Hypomesus transpacificus Delta smelt | FT | Low-salinity open water with high turbidity, high oxygen saturation, low in contaminants and supports high densities of calanoid copepods and mysid shrimp. | А | Occur within Sacramento-San Joaquin River Delta. Project site is outside of the species range (USFWS, 2020c). |
| Reptiles | • | | | |



| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|----------|---|-------------------------------|--|
| Emys marmorata Western pond turtle | CSC | Permanent or nearly permanent bodies of water in many habitat types, below 6000 ft. elevation; requires basking site such as logs, vegetation mats or open mud banks. Needs suitable (sandy banks or open, grassy fields) upland habitat near water sources. | | Moccasin Creek, 2.5 miles south of Highway 120 on Highway 49; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |
| Phrynosoma blainvillii Coast horned lizard | CSC, SA | Inhabits open areas of sandy soil and low vegetation in valleys, grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills. | | Known to occur in Tuolumne County. |
| Birds | | | | |
| Aquila chrysaetos Golden Eagle | CFP, BCC | Found in open and semi-open areas of native vegetation primarily in mountains up to 12,000 feet, canyonlands, riverside cliffs, and bluffs. Nest on cliffs in grassland, chaparral, shrubland, and forest habitats. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Baeolophus inornatus Oak titmouse | SA, BCC | Oak woodlands and open pine or mixed oakpine forest. Cavity nester. | Р | Observed/detected within Project site during July 2020 survey. |
| Carduelis lawrencei Lawrence's Goldfinch | BCC | Dry, open oak woodlands with chaparral, weedy fields, and a source of freshwater. Tree nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Chamaea fasciata Wrentit | BCC | Dense shrublands with coyote bush, manzanita, California lilac, and blackberry thickets in foothills and desert regions in California. Nests in shrubs. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |



| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|------------------|--|---|--|
| Geothlypis trichas sinuosa Common Yellowthroat | BCC | Thick tangled vegetation in a variety of habitats from wetlands to prairies across North America. Vegetation including pine forests, palmetto thickets, drainage ditches, hedgerows, orchards, shrub-covered hillsides, and disturbed sites. Most common in wet areas. Shrub nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Haliaeetus leucocephalus Bald Eagle | BEPA, SE, CFP | Found at lakes, reservoirs, river systems, and coastal wetlands. The breeding range is generally in mountainous areas near lake or river margins, where they find large trees (usually conifers) with open branches for nesting. | coastal wetlands. The breeding range is enerally in mountainous areas near lake or ever margins, where they find large trees usually conifers) with open branches for | |
| Melospiza melodia Song Sparrow | BCC | Found in many open habitats including tidal marshes, arctic grasslands, desert scrub, pinyon pine forests, prairies, pacific rain forest, chaparral, agricultural fields, overgrown pastures, marshes and lake edges, and suburbs. Nest is shrubs. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Picoides albolarvatus White Headed Woodpecker | BCC | Found throughout western North America. Associated with old-growth ponderosa and sugar pine in open canopies with limited understory and abundant pine seed crop. Often found in recently burned forests. Need dead trees for nesting. Cavity nester. | | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Picoides nuttallii Nuttall's Woodpecker | BCC | Oak woodlands between 900 to 5,500 feet elevation. Also found in suburban areas and woodlands near streams. Cavity nester. | Р | Observed/detected within Project site during July 2020 survey. |
| Pipilo maculatus clementae Spotted Towhee | BCC | Dry thickets, brushy tangles, forest edges, old fields, shrubby bakcyards, chaparral, canyon bottoms, places with dense shrub cover and sufficient leaf litter. Ground nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |



| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|----------------|---|-------------------------------|--|
| Selasphorus rufus Rufous Hummingbird | BCC | Open, shrubby areas, forest opening, yards and parks, sometimes found in forest, thickets, swamps, and meadows from sea level to approximately 6,000 feet. Tree nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Strix nebulosa Great gray owl | SE | Resident of old growth mixed conifer or red fir forest habitat, in or on edge of meadows above 4,500 ft. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate. | | Shanahan Flat; approximately 4.6 miles east-southeast of the Project site (CDFW, 2020a). |
| Mammals | | | | |
| Antrozous pallidus Pallid bat | CSC, WBWG-H | Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. | Р | Adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of Project site (CDFW, 2020a). |
| Corynorhinus townsendii Townsend's big-eared bat | CSC, WBWG-H | Wide variety of habitats, most common is mesic sites. Roosts in the open (do not tuck themselves into crevices), hang from walls and ceilings, extremely sensitive to human disturbance. | | About 3 miles NNW of Farretti Road at Boitano Road; approximately 3.9 miles north of the Project site (CDFW, 2020a). |
| Eumops perotis californicus Western mastiff bat | CSC, WBWG-H | Open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels. | Р | Southeast of Moccasin, adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |
| Lasiurus blossevillii Western red bat | CSC, WBWG-H | Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. | Р | Southeast of Moccasin, adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |



| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|---------------------|---|-------------------------------|---|
| Lasiurus cinereus Hoary bat | SA, WBWG-M | Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water. | Р | Southeast of Moccasin, adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |
| Myotis Volans Long-legged myotis | SA, WBWG-H | Most common in woodland and forest habitats above 4000 ft. Trees are important day roosts; caves and mines are night roosts. Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings. | Р | Vicinity of Don Pedro Reservoir, near intersection of Highway 120 and Jacksonville Road; approximately 4.1 miles west of the Project site (CDFW, 2020a). |
| <i>Myotis yumanensis</i> Yuma myotis | SA, WBWG- L/M | Optimal habitats are open forests and woodlands with sources of water. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices. | Р | Southeast of Moccasin, adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |
| Pekania pennant Fisher – Southern Sierra Nevada DPS | FE | Dense, mature mixed-conifer and ponderosa pine forests that support many large trees and do not accumulate as much or deep snow. | A | No recent occurrences occur near the Project site. Fisher populations occur within southern Yosemite National Park and Sierra National Forest (Sweitzer et al., 2015, USFWS, 2020c). Historic occurrences (1920's) are approximately 22 miles east of the Project site within Yosemite National Park. |
| Status Codes: CSC California Species of Special Concern (CDFW) SA Special Animal (CDFW) SE State Endangered (CDFW) ST State Threatened (CDFW) A Habitat Absent P Habitat Present WBWG – Western Bat Working Group (WBWG): H – High priority L/M - Low Moderate Priority M - Medium Priority SEP Fully protected under Fish and Game Code (CDFW) WL Watch List (CDFW) FT Federal Threatened (USFWS) FE Federal Endangered (USFWS) Birds of Conservation Concern (USFWS) | | | | ` |



3.4.2 Regional/Local Regulatory Setting

3.4.2.1 Tuolumne County Wildlife Handbook

The Tuolumne County Wildlife Handbook is used by the County to guide decision-making that may affect biological resources (Tuolumne County, 1987). The guide specifies priorities and objectives for wildlife conservation, as well as approaches for developing mitigation measures. The County offers the option to use the handbook when evaluating impacts and potential mitigation measures for biological resources although other options may be used.

3.4.2.2 Tuolumne County General Plan

Biological resources are addressed in the Tuolumne County General Plan Natural Resources Element. Applicable policies from the Tuolumne County General Plan are listed below.

Natural Resources Element

Policy 16.A.6: Encourage the protection of clusters of native trees and vegetation and outstanding individual native and non-native trees which help define the character of Tuolumne County.

Policy 16.B.4: Recognize that wildlife, fish and their habitats provide opportunities for recreational uses and educational pursuits and are a source of revenue to the County.

Policy 16.B.5: Evaluate and mitigate impacts to biological resources in accordance with the requirements of State and Federal law.

Implementation Program 16.B.j: Establish thresholds of significance under the California Environmental Quality Act (CEQA) for the conversion of oak woodlands in Tuolumne County. The following provides the County's recommended standard guidelines for determining whether a project may result in a significant impact to oak woodlands, for purposes of review under the California Environmental Quality Act and Public Resources Code Section 21083.4.

- An oak woodland is defined in the General Plan as a woodland stand with 10% or greater native oak canopy cover. Tree removal from parcels with less than 10% native oak canopy cover is not considered a significant conversion or loss of oak woodland.
- For parcels with 10% or greater native oak canopy cover (i.e., parcels with oak woodland, as defined in the General Plan), a significant impact to oak woodland includes tree removal that reduces the total oak canopy cover onsite to below 10% (i.e., conversion to non-oak woodland), or a loss of 10% or greater of oak canopy woodland stand on the parcel, if the conversion or loss is determined by a trained professional to be substantial in consideration of, but not limited to, the following:
 - Total acres and amount of woodland stand removed or disturbed, and amount retained onsite.
 - o Pattern of development or habitat loss onsite (e.g., clustered vs. dispersed).
 - Existing habitat functions and quality (e.g., intact/high-quality, moderately degraded, or severely degraded).



- o Stand age- or size-class structure.
- o Rarity.
- Landscape position in relation to larger wildlife corridors, stream systems, or other important natural features.
- o Loss of valley oak (Quercus lobata) woodland, which is a sensitive habitat.
- Proximity to other oak woodland patches and connectivity to large blocks of intact habitat.
- Contribution to a cumulative loss, degradation, or fragmentation of oak woodland across the County.
- Removal of valley oaks (Quercus lobata), regardless of woodland stand size or canopy cover, shall require evaluation and determination as set forth above, including consideration of any unique habitat value provided by valley oaks.

Implementation Program 16.B.j.1: When considering discretionary development proposals, the County, through CEQA reviews, will require that project applicants map oak woodland resources on the Project site and, where feasible, establish buffers around existing oak woodland stands to prevent adverse effects. For mapping purposes, project applicants may use the County's existing oak woodland map (developed for the Recirculated Draft EIR) as an initial base map for project-specific ground truthing/field verification. The County will require implementation of BMPs while working near retained oak woodlands to avoid inadvertent damage to oak trees. BMPs will include establishment of no-disturbance buffers around the outer canopy edge to prevent root and crown damage, soil compaction, and standard management practices to reduce introduction and spread of invasive species and other indirect effects. For those impacts on oak woodland that cannot be avoided, the County will require the project applicant to minimize adverse effects. If substantial conversion of oak woodland will occur based on Implementation Program 16.B.j, the County will require one or more of the following mitigation measures be implemented to mitigate the impact from loss of oak woodland habitat pursuant to Public Resources Code Section 21083.4, (which specifies certain projects, including commercial agricultural production, are exempt from the requirements of Section 21083.4):

- Conserve oak woodlands through the purchase of conservation easements.
- Plant acorns and container stock from a local seed source to replace oak woodland removed. The following parameters will be applied:
- Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.
- Maintain trees for seven years after the trees are planted.
- Planting may not account for more than 50 percent of the required mitigation and must occur on lands that are subject to conservation easements, zoned open space, or similarly restricted from development.



- Mitigation through planting may be used to restore former or degraded oak woodlands.
- Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodland conservation easements, the Tuolumne County Oak Woodland Conservation Fund, or other appropriate established oak woodland conservation fund.

Policy 16.B.8: Balance the conservation of biological resources with the need to reduce wildland fire hazards.

Policy 16.B.9: Encourage the eradication of invasive plant species to protect native habitats, conserve agricultural land, support ecological diversity, and reduce the wildland fire hazard.

3.4.2.3 Public Resources Code Section 21083.4

In 2001, the California legislature enacted the Oak Woodlands Conservation Act (Assembly Bill 242), which established requirements for the preservation and protection of oak woodlands and trees, and allocated funding managed by the Wildlife Conservation Board. In order to qualify to use these funds, counties and cities must adopt an oak conservation management plan. In 2004, to expand these conservation efforts, the legislature passed Senate Bill 1334 (Oak Woodlands Conservation: Environmental Quality), which added Section 21083.4 to the Public Resources Code. This statute requires that a county must determine whether a project would result in a significant impact on oak woodlands and, if it is determined that a project may result in a significant impact on oak woodlands, then the County shall require one or more of the following mitigation measures:

- Conserve oak woodlands through the use of conservation easements;
- Plant an appropriate number of trees, including maintenance of plantings and replacement of failed plantings;
- Contribute funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements; or
- Other mitigation measures developed by the county.

3.4.3 Impact Analysis

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation. The Project has the potential to indirectly impact several special-status species based on the analysis in Tables 3.4-2 and 3.4-3. These species include coast horned lizard, various species of bats, migratory and nesting birds, including oak titmouse and Nutall's woodpecker.



Nesting Migratory Birds

Under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3513, migratory bird species, their nests and eggs are protected from injury or death. California Fish and Game Code Subsections 3503, 3503.5, and 3800 prohibit the possession, incidental take, or needless destruction of birds, their nests, and eggs.

The Project site and the immediate vicinity have the potential to support nesting raptors, including golden eagle and migratory birds such as the oak tit mouse. Direct impacts on nesting raptors or migratory birds or their habitat, such as removal of trees or native vegetation, could result in substantial lower reproductive success and habitat loss, thereby potentially adversely affecting local populations. Bird populations could be adversely affected if active nesting, foraging, breeding or roosting sites are removed or exposed to an increase in noise or human presence during Project activities and future site inhabitation. Impacts would be less than significant if construction activities occur during the non-breeding season (i.e., September 1 through January 31). However, construction activities conducted during the breeding season between February 1 and August 31 could negatively impact breeding birds in the Project site and result in a potentially significant impact. Implementation of environmental awareness training, biological monitoring, and nesting bird surveys consistent with MM BIO-1, BIO-2, and BIO-3 would mitigate the impact to less than significant.

Special-Status Reptiles

There is low-quality aquatic habitat for western pond turtle within the Project site including the intermittent drainage feature along State Route 120 and the man-made pond within the Project site; therefore, there is a low to unlikely potential for this species to occur within the Project site. However, because of the slight potential to occur, there is the potential for impacts to this species and as such, is included in this section.

The sandy, rocky washes, patches of loose soil, and grassland, chapparal and woodland habitats within the Project site provides suitable habitat for coast horned lizard. No coast horned lizards were observed within the Project site; however, there is potential for this species to occur. Coast horned lizard could be indirectly impacted due to loss of habitat and/or could be directly impacted by equipment strike during mobilization or ground disturbance. Implementation of environmental awareness training, biological monitoring, and coast horned lizard survey MM BIO-1, BIO-2, and BIO-5 would reduce potential impacts to special-status reptiles to less than significant.

Special-Status Bats

Forest and rocky cliff habitats, as well as abandoned man-made structures, within the Project site provide suitable roosting and foraging habitat for special-status bat species, including pallid bat, western mastiff bat, western red bat, Townsend's big-eared bat, hoary bat, long-legged myotis, and Yuma myotis. Suitable roosting and foraging habitat for the special-status bats listed above are present throughout the Project site including trees, buildings, rocky outcrops, and water sources. These and other bat species could use trees with suitable cavities, crevices, exfoliating bark and/or bark fissures on and near the Project site for roosting. The proposed Project could result in the removal of trees potentially used for roosting by special-status bats or other modifications to bat habitat. In addition, construction-related activities would temporarily elevate



noise levels in areas on and surrounding the construction zone. Special-status bat species may be adversely affected if roosting sites are physically disturbed or are exposed to a substantial increase in noise or human presence during Project activities or future site inhabitation. If construction activities occur during the bat breeding season (April 1 to August 31), disturbance to roosting sites could have a significant effect on special-status bat species if active maternity roosts are present. Because Project implementation could adversely affect these species, this impact would be considered potentially significant. Implementation of pre-construction surveys consistent with MM BIO-1, MM BIO-2, and MM BIO-4 would reduce potential impacts to special-status bats to less than significant.

Special-Status Plants

Suitable habitat for a number of special-status plants occurs on the Project site. Based on surveys conducted on the Project site, a review of available databases and literature, and an onsite habitat suitability assessment, ten special-status plant species were determined to have the potential (low to moderate) potential occur on the Project site (refer to Table 3.4-2). The field surveys conducted for the Project during July 2020 and May 2021 did not observe any special-status plant species.

However, if Project initiation is planned for spring or summer 2022 (or subsequent years), the spring botanical survey should be repeated to ensure that special-status species have not become established within the Project site. If special-status plant species are found, potential impacts include vegetation removal, ground disturbances, construction, and habitat loss. As a contingency measure, implementation of a special-status plants pre-activity survey consistent with MM BIO-7 would either verify the absence of special-status plant species or reduce potential impacts to special-status plants to less than significant.

- **MM BIO-1: Environmental Awareness Training.** A qualified biologist shall provide a Biological Awareness Training to all Project personnel to familiarize workers with surrounding common and special-status species and their habitats, applicable regulatory requirements and permit conditions, and measures that must be implemented to avoid or minimize potential impacts to biological resources.
- **MM BIO-2: Biological Monitoring**. A qualified biologist shall be onsite to monitor for special-status wildlife species during initial ground disturbing and vegetation removal activities. The need for additional monitoring shall be at the discretion of the qualified biologist.
- **MM BIO-3: Nesting Birds.** If the Project is anticipated to take place during nesting bird season (February 1 through August 31), then a qualified biologist shall conduct a nesting bird pre-activity survey within 48 hours of Project start. If an active nest is identified on or within 300 feet of the Project site during the pre-activity survey or any time during Project activities, an appropriate work exclusion buffer of 75+ feet for migratory bird species and 300+ feet for non-listed raptor species, or a distance at the discretion of the biologist based on biological or ecological reasons, shall be established around the nest.

Depending on conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within



the buffer without impacting the breeding effort. In this case (to be determined on a case-by-case basis), the nest(s) shall be monitored by a qualified biologist during construction within the buffer. However, if it is an active raptor nest, the Project proponent shall first notify CDFW for consultation to determine the feasibility of continuing work within the standard 300+ foot buffer. Work shall start within the buffer only after approval from CDFW. In the case of other active nests (non-raptor species), the biologist shall determine whether Project activities within the buffer would impact the nest, and if so, shall immediately inform the construction manager to stop work within the designated buffer. The qualified biologist shall monitor the nest until it is no longer active and/or the young have fledged and shall notify the construction manager and Project proponent that work may start within the buffer.

If construction begins outside of the migratory bird breeding season (February 1 through August 31), then the Project proponent is permitted to continue construction activities throughout the breeding season.

MM BIO-4: Bat Maternity Roosts. If the Project is anticipated to take place during bat maternity season (typically during the summer months in California), then a qualified biologist shall conduct a pre-activity survey for potential roosting sites onsite or within 100 feet of the Project boundaries, and Project activities shall avoid any roosts identified during the survey. However, if any onsite structure demolition is anticipated to take place outside of the typical maternity season, a pre-activity survey shall be conducted to determine bat presence (day roosting). If bats are present within the structure, then bat exclusion methods shall be incorporated into demolition activities.

Pre-activity field surveys shall be conducted early in the breeding season before any construction activities begin, when bats are establishing maternity roosts but before pregnant females give birth (typically late spring to early summer). If no roosting bats are found, then no further mitigation is required. If roosting bats are found, then disturbance of the maternity roosts shall be avoided by halting construction until the end of the breeding season or a qualified bat biologist excludes the roosting bats in consultation with CDFW. If at any time during the maternity roosting season construction stops for a period of two weeks or longer, preconstruction surveys shall be conducted prior to construction resuming.

- MM BIO-5: Coast Horned Lizard Survey. Prior to ground disturbance, a qualitied biologist shall conduct a field survey focused on presence of coast horned lizard. The survey shall be conducted within the central portion of the Project site in areas of loose soils with ant hills. If coast horned lizards are found, they shall be relocated out of the Project area by the qualified biologist.
- **MM BIO-6: Special-Status Plants Pre-activity Survey.** No special-status plant species were observed during the 2020 and 2021 surveys. However, if Project initiation is planned for spring or summer 2022 (or subsequent years), the following is recommended contingent on actual Project start date:



- A follow-up spring botanical survey shall be repeated to ensure that potentially occurring special-status plant species have not become established within the Project site;
- If observed during the follow-up survey, special-status plants shall be mapped
 and incorporated into the Project habitat restoration and mitigation plan.
 Special-status plants shall be avoided if feasible. If impacts are unavoidable,
 the plants may be salvaged, transplanted, or seed may be collected for planting
 and/or seeding elsewhere within the Project site; and
- If on-site restoration is not feasible, may consider off-site mitigation or purchase conservation credits.

MM BIO-7: Habitat Restoration. The applicant shall obtain a Nationwide Permit from ACOE pursuant to Section 404 of the Clean Water Act, a Water Quality Certification from the Central Valley RWQCB pursuant to Section 401 of the Clean Water Act, and a Lake or Streambed Alteration Agreement from the CDFW pursuant to Section 1602 of the Fish and Game Code for any grading or fill activity within drainages and wetlands and trimming/removal of riparian vegetation. As part of the permitting process, the applicant shall be required to provide a compensatory habitat creation/restoration plan (Plan) to mitigate impacts to jurisdictional areas. The Plan shall be written and implemented by a biologist familiar with restoration and mitigation techniques. Compensatory mitigation shall occur on-site using regionally collected native plant material to ensure no net loss of wetlands. The CDFW and RWQCB may require a higher mitigation ratio. The Plan shall include, but not be limited to the following components:

- Description of the project/impact site (i.e., location, responsible parties, jurisdictional areas to be filled/impacted by habitat type);
- Goals of the compensatory mitigation project (types and areas of habitat to be established, restored, enhanced, and/or preserved;
- Compensatory mitigation will ensure that there will be no net loss of wetland/waters, and improved hydrological function of the Project site;
- Description of the proposed compensatory mitigation-site (location, size, ownership status, existing ecological/hydrologic functions and values);
- Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan);
- Maintenance activities during monitoring period (activities, responsible parties, schedule);
- Monitoring plan for the compensatory mitigation-site (performance standards, target functions and values, target hydrological regime, target jurisdictional and non-jurisdictional acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports);



- Completion of compensatory mitigation (notification of completion, agency confirmation);
- Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism); and
- If on-site compensatory mitigation is not feasible, alternative strategies may include off-site mitigation and/or purchase of conservation credits.
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation. The Project site supports protected waters/wetlands and habitat types that are considered to be a sensitive natural community by CDFW, RWQCB and ACOE. The Project would result in 2.68 acres of temporary disturbance and 0.29 acres of permanent impacts to these communities. Table 3.4-4 summarizes the extent of both temporary and permanent impacts to each type of wetland habitat. Temporary impacts include potential disturbance during construction and indirect effects from soil erosion or storm water run-off. Permanent impacts include potential fill and or diversion of ephemeral channels and seasonal wetlands. The wetlands have been previously disturbed and do not provide sufficient flow or hydroperiods, or vegetated cover to serve and breeding habitat for special-status reptiles or amphibians, and there are no fish species that have the potential to occur on the Project site. Avoidance of wetland areas has been incorporated into Project design to the extent feasible. Drainage channel crossings would be necessary in order to access the interior of the Project site. The proposed Project includes the restoration of existing deeply incised and eroded drainage channels to create a more natural channel cross-section and would include revegetation of the restored channels with native riparian vegetation. Implementation of the Project would require a Nationwide Permit Authorization from the ACOE, a Water Quality Certification from the RWQCB, and a Lake or Streambed Alteration Agreement from the CDFW. The Project Habitat Restoration and Mitigation Plan (MM BIO-7) would incorporate mitigation requirements (replacement planting species and quantities, acreages, monitoring, etc.) in compliance with conditions set forth in the approved agency permits. In addition, the work limit setback distance for aquatic features that would be avoided would be based on ACOE, RWQCB, and/or CDFW permit conditions. Implementation of habitat restoration consistent with MM BIO-7 would mitigate for the loss of ephemeral wetlands, restore habitats, and reduce potential impacts to less than significant.



Table 3.4-4. Aquatic Resources Impact Summary Table

| Aquatic Resource | Total wi | thin BSA | Total Impacted within Disturbance Footprint ¹ | | | | |
|--------------------------------|--------------|----------|---|-----------|-------|--------|--|
| Aquatic Nesource | | | Temp | Temporary | | anent | |
| | Acres Sq ft | | Acres | Sq ft | Acres | Sq ft | |
| Seasonal Wetland | 0.357 | 15,564 | 0.336 | 14,625 | 0.022 | 939 | |
| Man-made pond | 0.016 | 700 | 0.013 | 574 | 0.003 | 126 | |
| Intermittent Channel | 0.069 | 3,004 | 0.056 | 2,449 | 0.000 | 0 | |
| Ephemeral Riparian Channel | 0.203 | 8,851 | 0.187 | 8,138 | 0.016 | 706 | |
| Ephemeral Channel ² | 2.33 101,465 | | 2.09 | 90,740 | 0.25 | 10,699 | |
| Totals: | 2.98 | 129,585 | 2.68 | 116,526 | 0.29 | 12,470 | |

Notes:

The Project site does not contain sensitive vegetation communities as defined by CDFW however, it does contain several distinct vegetation alliances ranging from herbaceous plant dominated communities to mature woodland communities (refer to Table 3.4-1 – Plant Communities and Habitat Acreage Summary Table). Table 3.4-5 summarizes the temporary and permanent impact acreages for each plant community identified on the Project site. These habitats provide denning, foraging, and breeding habitat for wildlife within the Project region, as well as provide suitable habitat and soil conditions for potentially occurring special-status plant species. In addition, the open space and lack of substantial development within the Project site provides a wildlife movement corridor allowing wildlife to move between various locations within the Project region. Direct impacts by vegetation removal, ground disturbance, and construction may adversely affect the existing vegetation, potentially occurring special-status plants, and habitat function. Impacts to botanical resources and habitats would be minimized by implementation of avoidance and minimization measures.

Therefore, implementation of habitat restoration, work limit designation and delineation, and vehicle/equipment measures consistent with MM BIO-7, MM BIO-8 and MM BIO-9 would reduce impacts to less than significant.

Temporary impacts from use of staging areas, vegetation clearing, etc. during construction. Permanent impacts from construction of buildings, paved roads, and permanent infrastructure footprints.

Acreages are calculated based on total linear feet of Ephemeral Channel (7,805 ft.) and a mean channel width of 13 feet. Project is proposed to have temporary impacts on 6,980 ft. and permanent impacts on 823 ft of Ephemeral Channel wetlands. Linear foot values represent the combined length of all Ephemeral Channels.



Table 3.4-5. Plant Community and Habitat Impact Summary Table

| Plant Community/Habitat | Acres within the | Impacted Acres ¹ | | |
|------------------------------------|------------------|-----------------------------|-----------|--|
| | BSA | Temporary | Permanent | |
| Ponderosa Pine forest and woodland | 5.2 | 3.95 | 1.29 | |
| Mixed foothill woodland | 7.5 | 5.55 | 1.91 | |
| White leaf manzanita chaparral | 6.1 | 4.36 | 1.74 | |
| Buck brush chaparral | 8.4 | 6.44 | 1.97 | |
| California yerba santa scrub | 1.4 | 0.98 | 0.42 | |
| Riparian Scrub | 0.9 | 0.63 | 0.26 | |
| Spanish clover fields | 5.2 | 3.82 | 1.41 | |
| Ruderal | 0.4 | 0.34 | 0.05 | |
| Developed | 1.4 | 1.12 | 0.31 | |
| Totals: | 36.5 | 27.19 | 9.36 | |

Notes

MM BIO-8: Work Limits. The Project impact area shall be clearly marked or delineated with stakes, flagging, tape, or signage prior to work. A qualified biologist shall provide guidance to fence field crew during installation of delineation materials. Areas outside of work limits, including Project Landscape Plan protected areas (woodland and shrubland stands, oak tree planting areas), and aquatic features to be avoided shall be considered environmentally sensitive and shall not be disturbed. No work shall be conducted outside of the designated work limits to avoid disturbance to vegetation and natural habitats surrounding the Project footprint. The work limit setback distance for aquatic features that shall be avoided will be based on ACOE, RWQCB, and/or CDFW permit conditions.

MM BIO-9: Vehicles and Equipment. All equipment and vehicles shall be checked and maintained daily during construction to prevent spills of fuel, oil, and other hazardous materials. A designated staging area shall be established for vehicle/equipment parking and storage of fuel, lubricants, and solvents. All fueling and maintenance activities shall take place in the staging area.

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant with Mitigation. The Project site was cleared of all vegetation approximately 30 years ago as part of a development project that was abandoned. The topography of the site ranges from steep slopes in the eastern portion adjacent to Memorial Road

¹Permanent impacts from construction of grading, buildings, paved roads, and permanent infrastructure footprints. Temporary impacts from use of staging areas, vegetation clearing, etc. during construction.



and the cemetery transitioning to rolling, moderate to level topography in the central and southwestern portion of the Project site, with an overall westerly slope aspect. Due to the topographical characteristics and lack of vegetation, annual rains caused significant erosion damage over the course of 30 years. Many erosional features including rills, gullies, incised channels, and shallow depressions were formed by storm-water run-off during winter rains flowing from adjacent forested hillsides through the relatively unvegetated open space of the Project site towards Rattlesnake Creek. There has been substantial vegetation re-establishment and natural recruitment of upland herbaceous, shrub, and tree species over the last 30 years. However, there has been relatively minimal riparian and wetland plant species establishment during this time period because of the ephemeral nature of the erosion features that were formed. The existing conditions of the Project site exhibit presence of aquatic features formed as a result of erosion including degraded and eroded deeply incised channels lacking vegetation, and numerous shallow but distinct gullies and rills supporting minimal to no riparian vegetation (ephemeral channels), one eroded and deeply incised ephemeral channel that supports a stand of riparian vegetation (ephemeral riparian channel), one intermittent channel supporting riparian vegetation (intermittent channel), several shallow ephemeral depressional features (seasonal wetlands), and one ephemeral man-made pond created as part of the service station construction that was abandoned many years ago.

Based on aquatic resources delineation surveys completed within the site, The Project site supports Federal wetlands, State wetlands, and other waters of the U.S. subject to ACOE jurisdiction under Section 404 of the Clean Water Act CWA and RWQCB jurisdiction under Section 401 of the CWA. Table 3.4-4 summarizes the extent of both temporary and permanent impacts to each type of wetland habitat. The Project would result in 2.68 acres of temporary disturbance primarily to ephemeral channels, seasonal wetland, and ephemeral riparian channel communities. Temporary impacts would result from use of staging areas, vegetation clearing, etc. during construction. Permanent impacts would result from construction of buildings, paved roads, and permanent infrastructure footprints. The proposed Project is scheduled to occur when the wetlands are dry, so temporary impacts include potential disturbance during initial grading, vegetation removal, and staging areas for construction. It is anticipated that wetlands should not require dewatering or diversion during construction. Temporary indirect effects may occur from soil erosion or storm water run-off.

Permanent impacts include potential fill and or diversion of ephemeral channels and seasonal wetlands. Approximately 0.29 acres of ephemeral channels, seasonal wetland habitat and the man-made pond would be lost during the construction of paved roads and hospitality buildings. The proposed Project includes restoration of degraded drainage channels that exist onsite as a result of the previous grading. Some relocation of existing ephemeral channels would also occur during construction to improve hydrologic function and reduce the likelihood of excessive erosion of stream banks. The drainage channels would be re-graded to reduce areas with deeply incised banks and create riparian corridors planted with native riparian vegetation. The restoration of onsite ephemeral channels would off-set the permanent impacts from the construction of roads within the Project site.

The Project Habitat Restoration and Mitigation Plan (MM BIO-7) would incorporate aquatic feature mitigation requirements in compliance with conditions set forth in the approved agency permits. The Restoration Plan would address temporary and permanent impacts to aquatic



habitats disturbed during Project implementation. The goal of the Restoration Plan would be to restore, create, and enhance aquatic features and riparian vegetation within the proposed Project site to provide functioning habitat amongst the lodging units and infrastructure. The existing aquatic features are highly degraded and formed as a result of erosion damage caused by past grading and vegetation clearing within the Project site. Restoration of these features would provide an ecological uplift (quantifiable ecological benefit) through revegetation and/or realignment, and recontouring of the aquatic features by improving the riparian habitat and hydrological connections within the Project site and the surrounding landscape more natural conditions. Specifically, the Restoration Plan would provide guidelines for restoration and mitigation implementation, monitoring and maintenance, success criteria, reporting and adaptive management methods to ensure habitat function and successful vegetation establishment. Therefore, implementation of habitat restoration, work limits, and vehicle/equipment measures consistent with MM BIO-7, MM BIO-8, and MM BIO-9 would protect, restore and/or replace these habitats and result in no net loss of waters/wetlands, reducing impacts to less than significant.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant with Mitigation. The Project region consists of relatively unpopulated areas of forest and woodland habitat in the foothills of the Sierra Nevada mountain range, with highways, roads and scattered residential and commercial development. The swaths of forested areas serve as movement and dispersal corridors for a variety of wildlife species. The Project site could potentially be used by a variety of wildlife species including, several bat species, mule deer, and coyote. However, there are features within and adjacent to the Project site that act as barriers to wildlife dispersal and migration. Specifically, State Route 120 bounds the northern boundary of the Project site creating a significant barrier to dispersal and north/south wildlife movements. In addition, the distinct transition between the intermittent channel to ephemeral channel (upstream of Rattlesnake Creek) acts as a barrier for amphibian dispersal through the Project site.

Following construction, implementation of the Project's Landscape Plan would incorporate oak tree replacement planting and creation of understory refuge habitat to blend with the Project's natural pine and mixed woodland surroundings and would provide sufficient natural area to encourage continued wildlife migration within the region. The Oak Tree Protection and Replacement Plan (MM BIO-10) would provide details on oak tree mitigation planting requirements including replacement ratios (trees removed: trees replaced), and measures to protect remaining oak trees. Although the Project would impact wetlands and ephemeral channels, they do not provide sufficient flow or hydroperiods, or suitable vegetated cover to serve as breeding habitat for special-status reptiles or amphibians, and there are no fish species that have the potential to occur within the Project site. The Project is not expected to interfere with any large-scale movement corridors or the movement of any wildlife or native resident or migratory fish species through the area. In addition, similar habitat types are abundant in the local area. Implementation of the Oak Tree Protection and Replacement Plan consistent with MM BIO-10 would mitigate oak impacts to less than significant.



- MM BIO-10: Oak Tree Protection and Replacement Plan. Prior to grading permit issuance, an Oak Tree Protection and Replacement Plan shall be prepared and submitted for County approval. Native oak trees with a 5-inch or greater DBH are protected in Tuolumne County (except black oak which is often used as a landscaping tree). There are 100 oak trees (97 interior live oak, and 3 blue oak) with a 5-inch or greater DBH) within the proposed Project footprint. The Oak Tree Protection and Replacement Plan shall address these native oaks where grading, construction, utility installation or other disturbance (including removal) occurs within 1 ½ times the dripline, and shall incorporate the following information:
 - Oak tree replacement applies to interior live oak and blue oak with a five inch or greater DBH that shall be removed and/or impacted during Project activities;
 - High visibility fencing shall be installed around perimeter of oak trees to be retained in accordance with the Oak Tree Replacement and Protection Plan figure and Project grading plans. A qualified biologist shall accompany on-site construction personnel during installation to provide guidance and ensure setback of 1 ½ times the drip line is achieved;
 - For every oak tree (equal to or greater than five inches DBH) removed, the same and/or similar genus (upon approval by the County) as those removed shall be planted at a 2:1 replacement ratio if fifteen-gallon trees are used, and 3:1 replacement if five-gallon trees are used;
 - A qualified biologist may approve replanting to include up to 20% California black oak to be included in native oaks to be replanted;
 - The Project Landscape Plan shall incorporate oak tree replacement planting requirements described in the Oak Tree Protection and Replacement Plan. Content shall include planting methods, oak tree replacement ratio, species planted, and maintenance, monitoring, and reporting methods, and depiction of the designated planting area(s) and planting locations of replacement oak trees. A qualified biologist shall review the Project Landscape Plan prior to submittal to County. The Project Landscape Plan shall be submitted after County approval of the Oak Tree Protection and Replacement Plan, and shall be implemented upon approval by the County prior to Project initiation; and
 - An in-lieu fee may be paid to the County, or other entity approved by the County as an additional mitigation strategy in combination with oak tree replacement planting.
- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation. Mature oak trees are protected in rural Tuolumne County according to the General Plan, Policy 16.B.5/Implementation Programs 16.B.j and 16.B.j.1. California black oak (*Quercus kelloggii*), interior live oak (*Quercus wislizeni*), and blue oak (*Quercus douglasii*) were observed during field surveys at the Project site. Although the site has been previously disturbed, the Project may require the removal of "old growth" trees or woodland canopy. Although removal of mature oak trees (greater than five inches DBH) would



potentially impact habitat or special-status bats and nesting birds, their removal would not conflict with the policies of the General Plan, as the Project site has less than 10 percent native oak canopy cover.

Pursuant to the May 2021 oak tree inventory survey, three mature blue oak, five mature California black oak, and 97 mature interior live oak, for a total of 105 mature oak trees are within the Project footprint. However, not all 105 oak trees (97 interior live oak, 3 blue oak, and 5 California black oak) would be removed, as some would be avoided/protected or trimmed based on final Project footprint, final Project design (infrastructure and lodging unit location) and resulting required setback distance from protected oak trees, and site topography. The Oak Tree Protection and Replacement Plan would provide specific details on required setbacks and oak tree replacement ratios for trees to be removed or trimmed. Note that California black oaks are not protected in Tuolumne County but are included here for informational purposes. In the event construction is planned to impact protected trees or woodland habitat, implementation of the wildlife and plant protections in MM BIO-2, MM BIO-3, MM BIO-4, in addition to MM BIO-10 and MM BIO-11 and woodland habitat restoration within MM BIO-7 would be put into place to reduce the impact to less than significant.

- MM BIO-11: Woodland and Shrubland Protection. Habitat that shall remain during construction (including stands and individuals of oak trees, Ponderosa pine, and manzanita) shall be clearly marked or delineated with stakes, flagging, tape, or signage prior to work to avoid disturbance during construction activities. A qualified biologist shall provide guidance to fence field crew during installation of delineation materials. The Project Landscape Plan and/or grading plans shall depict protected woodland and shrubland protected areas. Exact locations of these protected areas shall be determined during the development of the Project Landscape Plan and shall be based on the location, density, species composition of existing stands of woodland and shrubland within and adjacent to the proposed Project footprint.
- f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No Impact. The Project is not located within an adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional, or State Habitat Conservation Plan; therefore, no impact would result.

3.4.4 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding biological resources to less than significant:

- MM BIO-1: Environmental Awareness Training
- MM BIO -2: Biological Monitoring
- MM BIO-3: Nesting Birds
- MM BIO-4: Bat Maternity Roosts
- MM BIO-5: Coast Horned Lizard



- MM BIO-6: Special-Status Plants Pre-activity Survey
- MM BIO-7: Habitat Restoration
- MM BIO-8: Work Limits
- MM BIO-9: Vehicles and Equipment
- MM BIO-10: Oak Tree Protection and Replacement Plan
- MM BIO-11: Woodland and Shrubland Protection



3.5 CULTURAL RESOURCES

| CULTURAL RESOURCES - Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5? | | | | |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | | | | |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | | | | |

3.5.1 Environmental Setting

The following discussion is based on the Cultural Resources Inventory Report prepared for the Project site by ECORP Consulting, Inc. (ECORP) to determine the potential for cultural resources within the Project site.

3.5.1.1 Background Research

ECORP requested a records search for the Project site from the Central California Information Center (CCIC) of the California Historical Resources Information System (CHRIS) at California State University, Stanislaus on July 9, 2020 (File No. 11450-O). The purpose of the records search was to determine the extent of previous surveys within the Project site and whether previously documented cultural resources exist within the Project site.

In addition to the official records and maps for archaeological sites and surveys in Tuolumne County, the following historic references were also reviewed: Historic Property Data File for Tuolumne County (OHP, 2012); The National Register Information System (National Park Service [NPS] 2020); Office of Historic Preservation, California Historical Landmarks (OHP 2020); California Historical Landmarks (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Directory of Properties in the Historical Resources Inventory (1999); Caltrans Local Bridge Survey (Caltrans, 2019); Caltrans State Bridge Survey (Caltrans, 2018); and Historic Spots in California (Kyle, 2002).

Other references examined include a RealQuest Property Search, historical General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2020), and historical maps and aerial photography. The Tuolumne County Monuments and Plaques list compiled by the Tuolumne County Historical Society was also reviewed.

The CCIC records indicate that three previously recorded historic-period cultural resources are located within the Project site. Site P-55-005093 is California Historic Landmark No. 406, the town of Big Oak Flat. Site P-55-006985 consists of mining related features and tailings, and site P-55-007725 consists of ground sluice mining channels and tailings piles. Additionally, CCIC records indicate that nine previous cultural resource investigations, covering approximately 10 to 15 percent of the Project site, were completed at various times between 1983 and 2019. The previous studies were conducted along the right-of-way of State Route 120 and adjacent properties to the west and south.



The *Handbook of North American Indians* lists the nearest tribal territories as *Pigliku* and *Sala*, located approximately seven miles northeast of Big Oak Flat and the Project site (Levy, 1978).

On August 10, 2020, ECORP contacted the Native American Heritage Commission (NAHC) by email to request a records search of the Sacred Lands File (SLF) and a list of Native American representatives with cultural affiliation to the Project site and vicinity. ECORP received a response from the NAHC on August 13, 2020 stating that the SLF has no record of any resources in the Project site. The reply also included a list of three Native American representatives affiliated with the Project site. ECORP mailed letters to these representatives requesting information about tribal cultural resources. ECORP mailed a letter to the Tuolumne County Historical Society on August 10, 2020 to solicit comments or obtain historical information that the repository might have regarding events, people, or resources of historical significance in the area. Additionally, ECORP mailed letters to the Tuolumne County Historical Society Landmarks Commission and to the Tuolumne Heritage Commission on August 14, 2020.

The County is responsible for conducting outreach to relevant California Native American tribes, pursuant to PRC § 21080.3.1. Both local tribes, the Tuolumne Band of Me-Wuks and the Chicken Ranch Rancheria, were notified during the initial stakeholder notification process in September 2020. Formal Assembly Bill (AB) 52 consultation letters were sent to both tribes in January 2021. No consultation requests have been submitted by either tribe.

3.5.1.2 Cultural Survey

On August 13, 2020, ECORP archaeologists conducted an onsite archaeological survey of the Project site. Intensive onsite survey methods were used, consisting of walking parallel transects spaced 15 meters apart. The ground surface was examined for indications of surface or subsurface cultural resources. The general morphological characteristics of the ground surface were inspected for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances were examined for artifacts or for indications of buried deposits. No subsurface investigations or artifact collections were undertaken during the onsite archaeological survey.

Ground visibility within the majority of the Project site was fair to good (50 to 70 percent). The previously cleared portions of the Project site contained low-laying grasses and shrubs among pine trees, and ground visibility was over 50 percent due to several eroded drainages and exposed surface soils. The northeastern and southwestern ends of the Project site contained a forested area with dense manzanita and was not completely surveyed due to dense vegetation and slopes.

The onsite archaeological survey confirmed that no buildings or features associated with P-55-005093, Big Oak Flat (CHL#406), are located within the Project site. The site boundary, as originally mapped by the CCIC, appears to have been drawn arbitrarily. Because ECORP confirmed that P-55-005093 does not actually extend into the Project site, the site boundary was redrawn and corrected to exclude it.

The August 13, 2020, onsite archaeological survey did confirm the presence of sites P-55-006985 and P-55-007725 within the western end of the Project site. No previously unrecorded



resources were observed within the Project site. On September 25, 2020, ECORP archaeologists revisited the Project site to further document sites P-55-006985 and P-55-007725 for the evaluation of their significance.

P-55-006985 is a historic-period site composed of mining related features and tailings on the banks of a tributary to Rattlesnake Creek. The site was originally recorded in 2003 by Far Western Anthropological Research Group, Inc. At that time, the extent of the site boundary was confined to the right-of-way of State Route 120. In 2008, Roger Werner extended the site boundary into the Project site. ECORP confirmed the presence of P-55-006985 inside the Project site, although the majority of the features are located outside of the Project boundary. Within the Project site, tailings and cut granite blocks were noted within the southwest portion of the Project site. The area also contained moderately dense manzanita and live oak trees, which obscured visibility and recording of additional mining features within this portion of the Project site.

P-55-007725 is a historic-period resource consisting of several worked channels and tailings piles associated with sluice mining present along east/west drainage channels in the western portion of the Project site. The site was originally recorded in 2008 by PAR Environmental Services. The western portion of P-55-007725 (outside of the Project site) has been impacted by the modern concrete and gravel plant located west of the Project site. ECORP confirmed the presence of P-55-00725 within the western portion of the Project soil. Rock and soil tailings (approximately seven feet tall) were present within the Project site along worked drainages. The area contained moderately dense manzanita and live oak trees, which obscured visibility, and hampered recording additional mining features within this portion of the Project site.

3.5.2 Impact Analysis

a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

No Impact. A significant impact would occur if the Project could cause a substantial adverse change to the historical resource, herein defined as a building, structure, or archaeological site listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). A substantial adverse change includes the physical demolition, destruction, relocation, or alteration of the resource.

As discussed above, the CCIC records indicate that three previously recorded historic-period cultural resources are located within the Project site. The onsite archaeological survey confirmed the presence of sites P-55-006985 and P-55-007725 within the western end of the Project site. The onsite archaeological survey also confirmed that no buildings or features associated with P-55-005093, Big Oak Flat (CHL#406), are located within the Project site. On September 25, 2020, ECORP archaeologists revisited the Project site to further document sites P-55-006985 and P-55-007725 for the evaluation of their significance.

ECORP found that sites P-55-006985 and P-55-007725 do not meet the eligibility criteria for inclusion in the CRHR as individual resources. The sites do not appear to be associated with an important event (Criterion 1) or significant person (Criterion 2), nor do they represent a distinctive method or type of construction (Criterion 3) or are they likely to yield data important to history. Furthermore, the lack of integrity of both sites precludes them from eligibility as a potential contributor to any suspected historic district.



Thus, sites P-55-006985 and P-55-007725 do not qualify as historical resources under CEQA and the Project; therefore, no impact on historical resources would result.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant with Mitigation. A significant impact would occur if the Project could cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

As discussed above, the CCIC records indicate that two previously recorded historic-period cultural resources are located within the Project site. The onsite archaeological survey confirmed the presence of sites P-55-006985 and P-55-007725 within the western end of the Project site. ECORP found that sites P-55-006985 and P-55-007725 do not meet the eligibility criteria for inclusion in the CRHR as individual resources, and the lack of integrity of both sites precludes them from eligibility as a potential contributor to any suspected historic district.

Although no significant archaeological resources were identified, no subsurface excavations were conducted and there remains the potential that archaeological resources could be encountered during Project-related ground-disturbing activities. If any such resources were encountered and found to qualify as a historical resource or unique archaeological resource for CEQA purposes, Project-related impacts to the resources could be significant. MM CUL-1, which would be implemented in the event of inadvertent discovery of unidentified archaeological cultural resources, requires work to halt and the resources to be thoroughly documented and treated appropriately. Implementation of this mitigation measure would ensure that impacts on archaeological resources remain at a less-than-significant level.

MM CUL-1: Discovery of Previously Unknown Cultural Resources. If prehistoric or historic-era archaeological resources are encountered, all construction activities within 100 feet of the find shall halt and Tuolumne County (County) shall be notified. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology (qualified archaeologist) shall inspect the findings within 24 hours of discovery. If it is determined that the Project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Public Resources Code (PRC) § 21083.2 and CEQA Guidelines § 15126.4, with a preference for preservation in place.

Consistent with CEQA Guidelines § 15126.4(b)(3), preservation in place may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified



archaeologist shall prepare and implement a detailed treatment plan in consultation with the County. Treatment of unique archaeological resources shall follow the applicable requirements of PRC § 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and State repositories, libraries, and interested professionals.

c. Disturb any human remains, including those interred outside of formal cemeteries?

A significant impact would occur if the Project could disturb any human remains, including those interred outside of formal cemeteries. There is no indication that the Project site has been used for burial purposes in the recent or distant past. While it is unlikely that human remains would be encountered in the Project site, damage to human remains would be a potentially significant impact. Implementation of MM CUL-2 would reduce this potential impact to less-than-significant level by ensuring that if human remains are encountered, the find would be reported to the County Coroner. If the remains are determined to be Native American in origin, the NAHC would be contacted and the remains would be treated appropriately.

MM CUL-2: Unanticipated Discovery of Human Remains. In the event of discovery or recognition of any human remains during construction activities, such activities within 100 feet of the find shall cease until the Tuolumne County Coroner has been contacted to determine that no investigation of the cause of death is required. The County Coroner will contact the NAHC within 24 hours if it is determined that the remains are Native American. The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American (PRC § 5097.98), who in turn would make recommendations to the applicant and County for the appropriate means of treating the human remains and any associated funerary objects [CEQA Guidelines § 15064.5(d)].

3.5.3 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding cultural resources to less than significant:

- MM CUL-1: Discovery of Previously Unknown Cultural Resources
- MM CUL -2: Unanticipated Discovery of Human Remains



3.6 ENERGY

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

3.6.1 Environmental Setting

Tuolumne County is within the Pacific Gas and Electric (PG&E) service area; therefore, the Project would obtain electric power from the PG&E power grid (PG&E, 2020).

3.6.2 Regulatory Setting

3.6.2.1 Tuolumne County General Plan

The 2018 Tuolumne County General Plan (General Plan) has a Climate Change Element that establishes goals, policies and programs to assist in the decision-making process for futures development within the County. The policies outlined in the General Plan that apply directly to the Project are listed below:

Policy 18.A.1 Prepare a Climate Action Plan (CAP), or similar GHG emission reduction plan, that establishes a GHG reduction target consistent with the Senate Bill (SB) 32 goal to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030. The CAP shall identify specific measures to reduce countywide emissions consistent with the established target and will also include adaptation strategies for the County to appropriately adjust to the environmental effects of climate change. Many of the measures in the CAP will overlap with and help implement goals, policies, and implementation programs identified in this General Plan.

Policy 18.A.2 Continue to implement, prior to adoption of the CAP, the Tuolumne County Regional Blueprint Greenhouse Gas Study (January 2012) (including any updates) to reduce GHG emissions to 1990 levels by 2020 pursuant to Assembly Bill 32. The 2012 Greenhouse Gas Study will be considered superseded by the CAP once it is adopted.

Policy 18.A.3 Continue to implement the policies and strategies identified in the 2016 Final Regional Transportation Plan, including the Rural Sustainable Strategies.

Policy 18.A.5 Promote energy efficiency and alternative energy while reducing energy demand.

Policy 18.A.4 Recognize that climate change may affect air quality and water quality creating health and safety hazards.

Policy 18.A.6: Encourage the use of solar power and other innovative energy sources as alternatives to more traditional forms of energy. (formerly 4.H.2).



Policy 18.A.7: Encourage reduced consumption of fossil fuel energy by promoting alternative transportation methods and encouraging pedestrian oriented development to reduce the use of motor vehicles. See the Transportation Element and the Community Development and Design Element for a detailed listing of policies and implementation programs.

At the time of the preparation of this IS/MND the County has not finalized a CAP; therefore, the Project would be evaluated according to the Tuolumne County Regional Blueprint Greenhouse Gas Study (Blueprint). The Blueprint evaluated existing county 2010 GHG emission and projected GHG emissions in 2020, 2030 and 2040. In addition, to GHG emission inventory the document discusses policies and procedures in accordance with AB 32 to reduce GHG emissions. Approximately 782.846 metric tons of carbon dioxide equivalent GHG emissions (MTCO₂e) were emitted within the County primarily within the transportation sector (Rincon, 2012).

3.6.2.2 The Blueprint

New land development projects in Tuolumne County will result in an increase in population, employees and visitors ("referred to as service population"), which will generate additional GHG emissions. GHG emissions reduction can be achieved by ensuring that new land use Project-level GHG emissions meet or be below the yearly threshold of 4.6 MTCO₂e per service population (MTCO₂e/SP). If a Projects GHG emission are estimated to be above the threshold additional mitigation measures are required.

3.6.3 Impact Analysis

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

Less than Significant Impact. The Project involves use of heavy construction equipment powered by petroleum-based fuel sources, which would include bulldozers, graders, mini excavators, skid steer loaders, trenchers, and water trucks. As such, construction activities would result in the consumption of non-renewable fossil fuels (e.g., gas and diesel) for the operation of construction vehicles and equipment. No impacts on electricity supply and infrastructure associated with short-term construction activities would occur. Natural gas is not anticipated to be consumed in any substantial quantities during construction of the Project. These activities would be temporary in nature.

Energy from the PG&E power grid would be required for lodging operations. Table 3.6-1 provides a summary of electricity use per land use (refer to Appendix A).



Table 3.6-1. Electricity Use Per Land Use

| Source | Units (square foot or number of rooms) | Electricity Use (kW/units/yr) | Electricity Lighting Use (kW/units/yr) | Electricity Water Use (kW/yr) |
|-------------------|---|----------------------------------|--|-------------------------------------|
| Hotel | 60,750 | 2.12 | 2.65 | 3.42 |
| Lodge | 14,132 | 4.20 | 4.87 | 2.77 |
| Events Center | 7,459 | 4.20 | 4.87 | 1.46 |
| Parking Lot | 45,000 | 0.00 | 0.88 | 0.00 |
| Exterior Lighting | 500,000 | 0.00 | 0.88 | 0.00 |
| Pool/Spa | 7,459 | 1.66 | 1.85 | 0.43 |
| Employee Housing | 12 | 915 | 810.36 | 0.77 |

Although the development of the lodge would result in an increase in existing sources of energy, the lodge would not increase demand beyond the local power capacity, nor would it require the need for development of new sources of energy; therefore, a less than significant impact would result.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The Project would be consistent with and support the goals of the Tuolumne County General Plan, including encouraging land uses which maximize the efficient use of energy and facilitate the use of renewable energy resources in order to reduce dependence on imported and non-renewable energy supplies. Neither construction nor operation of the project would result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency; therefore, resulting in a less than significant impact.

3.6.4 Mitigation Measures

The Project would not result in significant impacts on energy; therefore, no mitigation is required.



3.7 GEOLOGY AND SOILS

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

3.7.1 Environmental Setting

3.7.1.1 Faults and Seismicity

A fault is defined as a "fracture or fracture zone in the earth's crust along which there has been displacement of the sides relative to one another." For the purpose of planning there are two types of faults, active and inactive. Active faults have experienced displacement in historic time, suggesting that future displacement may be expected. Inactive faults show no evidence of movement in recent geologic time, suggesting that these faults are dormant. Ground-shaking is motion that occurs as a result of energy released during faulting. The damage or collapse of



buildings and other structures caused by ground-shaking is among the most serious seismic hazards.

The Project site lies in the foothills of the western Sierra Nevada Mountains, an area experiencing relatively low seismic activity. No active faults or Earthquake Fault Zones (Special Studies Zones) are located within or adjacent to the Project area (CDC, 2020).

3.7.1.2 Liquefaction Potential

Liquefaction is a type of ground failure most likely to occur in water-saturated silts, sands, and gravels, having low to medium density. When a soil of this type is subjected to vibration, it tends to compact and decrease in volume. If the groundwater is unable to drain during the vibration, the tendency of the soil to decrease in volume results in an increase in pore-water pressure. When the pore-water pressure builds up to the point where it is equal to the over-burden pressure (effective weight of overlying soil), the effective stress becomes zero. In this condition, the soil loses its shear strength and assumes the properties of a heavy liquid. Based on geology of the surrounding area and the lack of shallow groundwater with alluvial soils, the liquefaction potential of the site soils is considered low.

3.7.1.3 Tsunami, Seiche, and Volcanic Hazards

Tsunamis are earthquake-generated waves within enclosed or restricted bodies of water, such as lakes, channels, and reservoirs. Seiches are waves generated by earthquakes, winds, or landslides that set up oscillatory waves in an enclosed basin. The Project site is not located near any enclosed bodies of water; therefore, there is no reasonable danger from tsunamis or seiches at the Project site. There is no significant source of volcanism in proximity to the Project site; therefore, there is no reasonable danger from volcanic eruption hazards at the Project site.

3.7.1.4 Soil Resources

The Soil Survey – Central Sierra Foothills Area, California – Parts of Calaveras and Tuolumne Counties (NRCS, 2020) identifies surficial soils at the Project Site to consist of Musick-Ultic Haploxeralfs complex, 1 to 8 percent slopes, southwest of Memorial Road and Musick-Hotaw complex, 8 to 30 percent slopes, on the northeast side of Memorial Road. The Project Site has been graded with fill material.

The Musick series which is the native material is found in mountains and foothills and consist of colluvium over residuum derived from diorite. In a typical profile, the surface layer is a loam with slightly decomposed plant material to a depth of 6 inches; a loam to 11 inches; clay loam to 23 inches; clay to 46 inches; and clay loam to 67 inches. The material is well drained and exhibit moderately low to moderately high hydraulic conductivity throughout the profile.

The Ultic Haploxeralfs component material is moderately well drained and consists of colluvium and/or slope alluvium over residuum derived from diorite. In a typical profile, the surface layer is a sandy loam with slightly decomposed plant material to a depth of 6 inches; a sandy loam to 17 inches; sandy clay loam to 31 inches; sandy clay to 35 inches; and bedrock to 45 inches.

The Hotaw component material is well drained and consists of colluvium over residuum derived from diorite. In a typical profile, the surface layer is agravelly loam to 4 inches; gravelly



sandy clay loam to 11 inches; very gravelly sandy clay loam to 19 inches; gravelly sandy loam to 22 inches; and bedrock to 32 inches.

3.7.1.5 Subsidence

Subsidence is the gradual settling or sinking of the earth's surface with little or no horizontal motion. Subsidence is caused by groundwater withdrawal, gas withdrawal, hydrocompaction or peat oxidation. Subsidence would not be expected to occur in the bedrock geology that characterizes the Project site.

3.7.1.6 Expansive Soils

Expansive soils are largely comprised of clays, which greatly increase in volume when water is absorbed and shrink when dried. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures and warping of doors and windows. According to the Soil Survey – Central Sierra Foothills Area, California – Parts of Calaveras and Tuolumne Counties (NRCS, 2020), the primary surficial soil material (Musick series) at the Project Site is identified to contain clay from approximate depths of 6 to 46 inches. Depending on the percentage and mineral composition of clay, the shrink-swell potential can range from low to high.

3.7.2 Impact Analysis

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?

Less than Significant Impact. According to the CDC, Division of Mines and Geology, the Project site is not located within a delineated Alquist-Priolo Earthquake Fault Zone or Landslide and Liquefaction Zone (CDC, 2020). The nearest fault zone is the Melones Fault Zone, located approximately two miles southwest of the Project site. The Project is not located in an area considered at high seismic rick; therefore, it is not expected to expose people or structures to earthquake risk, including strong seismic ground shaking, seismic-related ground failure, liquefaction, or landslides. In addition, slopes in the Project area are relatively modest and pose no threat or landslides; therefore, a less than significant impact would result.

b. Result in substantial soil erosion or the loss of topsoil?

Less than Significant with Mitigation. Construction of the Project would require grading which would expose surface soil materials to rainfall, potentially resulting in the removal and transport of these materials to ephemeral drainages within the Project site. The Project area is subject to the Central Valley Regional Water Quality Control Board (CVRWQCB) water quality



standards. To minimize construction related water quality impacts, a Storm Water Construction General Permit (General Permit 2009-009-DWQ) would be required from the CVRWQCB, which requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared for the site in accordance with National Pollutant Discharge Elimination System (NPDES) requirements (refer to MM HYDRO-1). The construction contractor would be required to protect surface water quality by preventing eroded material or contaminants from entering waterways during construction through the use of best management practices (BMPs). The SWPPP would list potential sources of impacts to surface waters and BMPs that are being used to minimize the likelihood of those impacts. Conformance with these erosion control measures in addition to implementation of the SWPPP consistent with MM HYDRO-1 and HYDRO-2 (refer to Section 3.10 Hydrology and Water Quality) and Tuolumne County's Grading Ordinance (Chapter 12.20) would reduce potential impacts to a less-than significant level.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. As previously stated, the Project site is not located within a delineated Alquist-Priolo Earthquake Fault Zone. A Geologic Hazards Report was prepared by a California-licensed Professional Geologist and a California-licensed Geotechnical Engineer for the proposed Project (Padre, 2020a). Padre concluded that the potential for seismically-induced settlement or liquefaction is low for the proposed Project. With adherence to all applicable codes and regulations, geologic hazard impacts associated with on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be minimized, resulting in a less than significant impact.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risk to life or property?

Less than Significant Impact. Although no subsurface exploration has been conducted to confirm the relative absence or presence of expansive soil materials, the soils types found onsite would be expected to contain higher clay content than that of the surface. Expansive soil materials are encountered throughout the State and are generally addressed through standardized foundation engineering practices (Padre, 2020). Compliance with state standards and practices, as well as application of the existing regulations identified in the Uniform Building Code would minimize the risk associated with development of the proposed project, therefore, resulting in a less than significant impact.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project plans to utilize municipal utilities, including sewer and wastewater. A septic system is not proposed for the Project; therefore, no impact would result.



f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. The Project site is underlain by alluvial and colluvial deposits derived from dioritic rock, an intrusive igneous rock with no potential to contain fossils. Diorite can contain quartz, oligoclase, andesine, pyroxene. These minerals are common to the vicinity of the Project site and they are not considered to be a unique geologic feature. The Project site is not located on soils identified to contain unique paleontological resources or unique geologic features; therefore, no impact would result.

3.7.3 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding geology and soils to less than significant:

- MM HYDRO-1: Preparation of a Stormwater Pollution Prevention Plan
- MM HYDRO -2: Erosion Control Measures



3.8 GREENHOUSE GAS EMISSIONS

| GREENHOUSE GAS EMISSIONS -Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | \boxtimes | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | | |

3.8.1 Environmental Setting

Greenhouse Gases (GHGs), defined as any gas that absorbs infrared radiation in the atmosphere, include, but are not limited to, water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorocarbons. These GHGs trap and build up heat in the atmosphere near the earth's surface, commonly known as the Greenhouse Effect. The atmosphere and the oceans are reaching their capacity to absorb CO_2 and other GHGs, leading to significant global climate change in the future. Unlike criteria pollutants and TACs, which are pollutants of regional and local concern, GHGs and climate change are a local, regional, and global issue. There is widespread international scientific consensus that human-caused increases in GHGs have and will continue to contribute to climate change, although there is uncertainty concerning the magnitude and rate of the warming.

Climate change is having and will continue to have widespread impacts on California's environment, water supply, energy consumption, public health and economy. Many impacts already occur, including increased fires, floods, severe storms, and heat waves (California Governor's Office of Planning and Research [CGOPR], 2018). Documented effects of climate change in California include increased average, maximum, and minimum temperatures; decreased spring runoff to the Sacramento River; shrinking glaciers in the Sierra Nevada; sealevel rise at the Golden Gate Bridge; warmer temperatures in Lake Tahoe, Mono Lake, and other major lakes; and plant and animal species found at changed elevations (CGOPR, 2018).

According to the Intergovernmental Panel on Climate Change (IPCC), the concentration of CO₂, the primary GHG, has increased from approximately 280 parts per million (ppm) in preindustrial times to well over 380 ppm today. CO₂ concentrations are currently increasing about 1.9 ppm/year; present CO₂ concentrations are higher than any time in at least the last 650,000 years. CO₂ is also used as a reference gas for climate change. To account for different GHG warming potentials, emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, if the CO₂ warming potential is set at a reference value of 1, CH₄ has a warming potential of 25 (i.e., 1 ton of methane has the same warming potential as 25 tons of CO₂ [IPCC, 2014]), while nitrous oxide has a warming potential of 298.

To meet both the statewide 2020 GHG reduction target that requires California to reduce its total statewide GHG emissions to 1990 levels (Health & Saf. Code, § 38550), and the 2050 goal of 80 percent below 1990 levels (Executive Order S-3-05), not only must projects contribute to slowing the increase in GHG emissions, but projects should contribute to reducing the State's



GHG output. In order to reach California's GHG reduction targets, per capita emissions would need to be reduced by slightly less than five percent each year from 2020 to 2030, with continued reductions through 2050.

3.8.2 Regulatory Setting

Various entities address this issue area at the state and regional levels. For example, California's 2017 Climate Change Scoping Plan (CARB, 2017) establishes GHG reduction strategies and goals for California's future, focusing on large contributors to state GHG emissions (e.g., power generation and transportation).

AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a statewide GHG emissions cap. It requires that statewide GHG emissions be reduced to 1990 levels by 2020. In 2008 and 2014, CARB approved the Scoping Plan and the first update to the Scoping Plan, respectively. In 2016, the California Legislature passed Senate Bill (SB) 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In response to SB 32 and the companion legislation of AB 197, CARB approved the 2017 Scoping Plan Update: The Strategy for Achieving California's 2030 GHG Target in November 2017. The 2017 Scoping Plan draws from the previous plans to present strategies to reaching California's 2030 GHG reduction target.

3.8.2.1 TCAPCD

At the local level, the TCAPCD is the agency primarily responsible for air quality standards attainment as established by CARB and USEPA. However, the TCAPCD has not approved a GHG significance threshold for construction or operational emissions.

3.8.2.2 Tuolumne County General Plan

The 2018 Tuolumne County General Plan (General Plan) has a Climate Change Element that establishes goals, policies and programs to assist in the decision-making process for futures development within the County. The policies outlined in the General Plan that apply directly to the Project are listed below:

Policy 18.A.1 Prepare a Climate Action Plan (CAP), or similar GHG emission reduction plan, that establishes a GHG reduction target consistent with the Senate Bill (SB) 32 goal to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030. The CAP shall identify specific measures to reduce countywide emissions consistent with the established target and will also include adaptation strategies for the County to appropriately adjust to the environmental effects of climate change. Many of the measures in the CAP will overlap with and help implement goals, policies, and implementation programs identified in this General Plan.

Policy 18.A.2 Continue to implement, prior to adoption of the CAP, the Tuolumne County Regional Blueprint Greenhouse Gas Study (January 2012) (including any updates) to reduce GHG emissions to 1990 levels by 2020 pursuant to Assembly Bill 32. The 2012 Greenhouse Gas Study will be considered superseded by the CAP once it is adopted.

Policy 18.A.3 Continue to implement the policies and strategies identified in the 2016 Final Regional Transportation Plan, including the Rural Sustainable Strategies.



Policy 18.A.5 Promote energy efficiency and alternative energy while reducing energy demand.

Policy 18.A.4 Recognize that climate change may affect air quality and water quality creating health and safety hazards.

Policy 18.A.6: Encourage the use of solar power and other innovative energy sources as alternatives to more traditional forms of energy. (formerly 4.H.2).

Policy 18.A.7: Encourage reduced consumption of fossil fuel energy by promoting alternative transportation methods and encouraging pedestrian oriented development to reduce the use of motor vehicles. See the Transportation Element and the Community Development and Design Element for a detailed listing of policies and implementation programs.

At the time of the preparation of this IS/MND the County has not finalized a CAP; therefore, the Project would be evaluated according to the Tuolumne County Regional Blueprint Greenhouse Gas Study (Blueprint). The Blueprint evaluated existing county 2010 GHG emission and projected GHG emissions in 2020, 2030 and 2040. In addition, to GHG emission inventory the document discusses policies and procedures in accordance with AB 32 to reduce GHG emissions. Approximately 782.846 metric tons of carbon dioxide equivalent GHG emissions (MTCO₂e) were emitted within the County primarily within the transportation sector (Rincon, 2012).

3.8.2.3 The Blueprint

New land development projects in Tuolumne County will result in an increase in population, employees and visitors ("referred to as service population"), which will generate additional GHG emissions. GHG emissions reduction can be achieved by ensuring that new land use Project-level GHG emissions meet or be below the yearly threshold of 4.6 MTCO₂e per service population (MTCO₂e/SP). If a Projects GHG emission are estimated to be above the threshold additional mitigation measures are required.

3.8.3 Impact Analysis

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. Padre conducted emissions modeling to estimate the GHG emissions for the construction and operational phases of the Project (Appendix A). The emissions were estimated using the most recent emission factors, load factors and electricity use were obtained from the CalEEMod User's Guide, EMFAC model and EPA Emission Factors for Greenhouse Gas.

Construction and operational equipment emissions were estimated using the engine horsepower, engine emission factors, engine load factors and hours of engine use per day. Onroad vehicle emissions were estimated using the vehicle type (i.e., passenger gasoline-powered vehicle, heavy-duty diesel-powered vehicle), engine emission factors and length of daily round



trips. Electricity use and resulting emissions were estimated using estimated energy use and emissions factors.

Table 3.8-1. Estimated GHG Construction Phase Project Emissions

| Phase | CO ₂ (MT/Year) | N ₂ O (MT/Year) | CH₄ (MT/Year) | MTCO ₂ e (MT/Year) |
|-------------------------------------|------------------------------|-------------------------------|------------------|----------------------------------|
| | | Year 1 | | |
| Total | 717 | 0.01 | 0.19 | 659 |
| | | Service | e Population | 202 |
| 0 | GHG Emissio | n per Service | e Population | 3.3 |
| Threshold | | | 4.6 | |
| | | Threshold | Exceeded? | No |
| | | Year 2 | | |
| Total | 538 | 0.02 | 0.32 | 496 |
| Service Population | | | | 202 |
| GHG Emission per Service Population | | | 2.45 | |
| Threshold | | | | 4.6 |
| | | Threshold | Exceeded? | No |

Construction Phase. The total (21 months) construction Project emissions estimate indicated GHG emissions with a MTCO₂e/SP of 5.7, which exceeds the Blueprint GHG threshold of 4.6 MTCO₂e/SP (refer to Table 3.8-1); however, the Blueprint GHG threshold is a yearly threshold; therefore, Project Emissions would not exceed the threshold on an annual basis. The primary sources of GHG are from the temporary use of construction equipment. Since these emissions are temporary construction emissions the Blueprint GHG thresholds do not apply and the emissions impact would be less than significant.

Operational Phase. The yearly Project emissions estimate indicated GHG emissions with a MTCO₂e/SP of 4.52, which is below the Blueprint GHG threshold of 4.6 MTCO₂e/SP (refer to Table 3.8-2). The primary sources of GHG are on-road sources, electricity use and heating. Since the GHG operational emission estimates do not exceed the Blueprint GHG threshold the Project's impact would be less than significant.



Table 3.8-2. Estimated GHG Operational Phase Project Emissions

| Source | CO ₂ (MT/Year) | N₂O (MT/Year) | CH₄ (MT/Year) | MTCO ₂ e (MT/Year) |
|-------------------------------------|------------------------------|------------------|------------------|----------------------------------|
| Equipment | 11.6 | 0.0001 | 0.004 | ' |
| Propane and Wood | 83 | 0.006 | 0.021 | ' |
| On-Road | 1,921 | 0.06 | 0.02 | ' |
| Land Use | 243 | 0.002 | 1.83 | ' |
| Total | 2,259 | 0.07 | 1.87 | 2,517 |
| | 557 | | | |
| GHG Emission per Service Population | | | | 4.52 |
| Threshold | | | 4.60 | |
| Threshold Exceeded? | | | No | |

3.8.4 Mitigation Measures

The Project would not result in significant impacts to greenhouse gas emissions; therefore, no mitigation is required.



3.9 HAZARDS AND HAZARDOUS MATERIALS

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

3.9.1 Environmental Setting

The following discussion is based on the Phase I Environmental Site Assessment (ESA) prepared for the Project site by Padre Associates, Inc. to determine the potential for hazardous materials contamination on the property (Padre Associates, Inc., 2020c, Appendix C). The Phase I ESA included a review of readily available geologic and hydrogeologic literature; historical research including a review of available historical aerial photographs, Sanborn Fire Insurance Maps, historical city directories, and historical topographic maps relating to the Project site; a site reconnaissance of the Project site and adjacent areas / properties; interviews/site questionnaires with knowledgeable persons of the Project site; public agency records review; and an environmental database search. The results of the Phase I ESA are included in the discussion below (Padre, 2020a).

The Project site is currently vacant, with one vacant commercial building and a canopy structure associated with a partially developed gas station facility. The Project site is bounded to



the north by State Route 120, on the east by undeveloped forest land, on the south by a cemetery and undeveloped forest land, and to the west by vacant land and a hardware store.

Three underground storage tanks (USTs) associated with a former service station are present at the Project Site; however, the USTs were never in-service as the gas station was never operational. The USTs are partially exposed on the ground surface within a bermed area that is seasonally flooded following rain events. No evidence of dumping, pits, spills, and/or or leaks of chemicals in the form of stained soil or stressed vegetation was observed at the Project site (Padre, 2020b).

Based on a review of readily available historical information, the Project site was undeveloped prior to the mid-1980s when the Project site was graded, and the former service station facility was constructed. The Project site appears to have been abandoned since the mid-1980s and it is unclear whether the service station ever operated. The onsite structures have the potential to contain asbestos-containing building materials and lead-based painted surfaces (Padre, 2020b).

3.9.2 Impact Analysis

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant with Mitigation. Project activities would utilize potentially hazardous materials associated with construction and operation of vehicles and construction equipment during Project implementation including diesel, gasoline, solvents, hydraulic fluid, grease, and oil. These materials are similar to those routinely used for other types of construction projects throughout Tuolumne County and are not anticipated to pose a significant impact at the Project Site due to potential spills or fires.

The Phase I ESA recommended that the USTs be removed as part of the re-development of the Project Site. MM HAZ-1 has been included to ensure that the USTs are properly removed under supervision of the Tuolumne County Environmental Health Services UST oversight staff. The removal of USTs consistent with MM HAZ-1 would reduce potential impacts to less than significant.

Asbestos and lead-based paint were commonly used during the 1970's in building construction; however, asbestos has been mostly discontinued since the late 1970s. According to the aerial photographs reviewed during preparation of the ESA, the two structures onsite were constructed between 1984 and 1998; therefore, it is possible that the structures could contain asbestos and/or painted with lead-based paint (Padre, 2020b). Therefore, implementation of an asbestos and lead based survey consistent with MM HAZ-2 and HAZ-3 would reduce potential asbestos and lead based paint impacts to less than significant. Caltrans staff have indicated that the portion of the State Route 120 right-of-way that may be affected by Project activities (e.g., drainage and intersection improvements) should be assessed for the potential presence of elevated lead concentrations in shallow soils due to historical use of lead gasoline as a fuel in



automobiles. Implementation of MM HAZ-4 would reduce the potential risks due to the aerially-deposited lead (ADL) in shallow soils to a less-than-significant level.

- MM HAZ-1: Remove Underground Tanks. The existing underground storage tanks shall be properly decommissioned and removed as part of site construction activities. The Applicant will obtain approval from Tuolumne County Environmental Health Division for the removal of the tanks. The tank removal activities will be conducted by a properly licensed tank removal contractor. If required by Environmental Health, soil samples shall be collected and chemically analyzed from the resulting excavation to determine whether any release of petroleum products has occurred from the prior use of the tanks.
- **MM-HAZ-2:** Asbestos Containing Materials Survey. Completion of an asbestos survey of the onsite structures shall be completed prior to any renovation or demolition activities. If asbestos containing materials be identified, the materials shall be properly abated by a licensed asbestos abatement contractor.
- **MM HAZ-3: Lead Based Paint Survey.** Completion of a lead-based paint survey of the onsite structures shall be completed prior to any renovation or demolition activities. Should lead-based paint be identified, they shall be removed by a properly trained and licensed contractor.
- MM HAZ-4: Aerially Deposited Lead. Completion of an ADL assessment shall be completed as part of the Caltrans encroachment permit application to determine whether unacceptable concentrations of lead are present in surface and shallow subsurface soils along the portion of the State Route 120 right-of-way that would be affected by Project construction activities. If elevated lead concentrations are identified, a Lead Compliance Plan will be prepared and implemented to protect construction workers, and properly manage and properly dispose of lead-containing soil disturbed during the course of Project construction activities.

Federal, State, and local laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials. Construction of the proposed Project would involve the use of off-road diesel fuel-powered construction equipment. This equipment would be periodically refueled from either a mobile fuel truck or a temporary portable aboveground fuel tank. The proposed Project would include the routine use of limited quantities of hazardous materials, such as cleaners, solvents, lubricating oils, motor vehicle fuel, and propane. The proposed Project would not generate significant quantities of hazardous waste. Therefore, the routine use of hazardous materials during construction or operation of the proposed Project would not result in a significant impact to the Project Site or surrounding areas.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The Project would not emit hazardous emissions or require handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The closest school to the Project site is Tenaya Elementary School located approximately two miles northeast from the Project site; therefore, no impact would result.



d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Phase I ESA prepared for the Project determined that the Project site is not included on a list of hazardous materials sites pursuant to Government Code Section 6592.5. There would be no significant hazard to the public or environment related to hazardous materials sites; therefore, no impact would result.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project site is not located within two miles or in the vicinity of a public airport or private airstrip. The nearest airport to the Project site is the Pine Mountain Lake Airport, approximately 4.3 miles to the northeast. In addition, the private Hermitage Landing Strip is located approximately 4.7 miles to the northeast of the Project site; therefore, no impact would result.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The Project site would be accessed from State Route 120, which is a two-lane roadway. The Project site does not contain any emergency facilities. State Route 120 would remain open during Project construction. The Project would be required to comply with the California Fire Code and California Building Code, which would ensure that building and life safety measures are incorporated into the Project and would facilitate implementation of emergency response plans. Future development plans would include fire and emergency access through all phase of construction and operation. During construction, the Project would comply with all applicable provisions of the California Fire Code to ensure safety during the construction phase. During operation of the Project, emergency vehicles would be able to access the Project site, and maneuver within the lodge property. The Project would not result in a substantial alteration to the design or capacity of any public road and nor would it impair or interfere with evacuation procedures.

The County has prepared an Emergency Operations Plan that identifies and allocates resources in response to emergencies, from preparation through recovery. The Emergency Operations Plan identifies the County's emergency planning, organizational, and response policies and procedures and how they would be coordinated with emergency responses from other levels of government. The Project would not involve physical components that would interfere with the ability of the County, and emergency response service providers, to implement emergency response activities within the Project site or vicinity. Furthermore, Tuolumne County maintains a Hazard Mitigation Plan with the goal of implementing mitigation measures to minimize vulnerability to identified hazards and reducing both human and financial losses subsequent to a disaster.

The Project would not interfere with an adopted emergency response plan or emergency evacuation plan; therefore, resulting in a less than significant impact.



g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than Significant with Mitigation. Pursuant to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones in State Responsibility Area (SRA), the Project site is located in a very high fire hazard severity zone (CAL FIRE, 2007). Construction activities, which include spark-producing equipment, could present a significant risk to igniting wildfires. Implementation of MM HAZ-5 would reduce the risk of wildland fire during construction to a less than significant level and ensure the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Operation of the Project could present a significant risk to igniting wildfires. The operation of the Project would incorporate one outdoor wood-burning fire pit at the lodge. Implementation of spark reduction measures consistent with MM HAZ-6 would reduce the risk of wildland fire during operation to a less than significant level and ensure the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

MM HAZ-5: Spark Producing Equipment. During construction, staging areas or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles and heavy equipment. In addition, the Contractor will be required to enforce a Fire Plan, which requires adherence to the United States Forest Service (USFS) Project Activity Level minimum requirements and restrictions for construction activity during wildfire season.

MM HAZ-6: Emergency Evacuation Plan. Preserve Partners will prepare an Emergency Evacuation Plan to be submitted to the Tuolumne County Fire Marshall's office for approval prior to construction. The Emergency Evacuation Plan shall detail actions to be taken in the event of a fire and will include, but not be limited to, a fire evacuation strategy, fire prevention measures, employee training, and onsite equipment.

3.9.3 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding hazards and hazardous materials to less than significant:

- MM HAZ-1: Remove Underground Storage Tanks
- MM-HAZ-2: Asbestos Containing Materials Survey
- MM HAZ-3: Lead Based Paint Survey
- MM HAZ-4: Aerially Deposited Lead
- MM HAZ-5: Spark Producing Equipment
- MM HAZ -6: Emergency Evacuation Plan



3.10 HYDROLOGY AND WATER QUALITY

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

3.10.1 Environmental Setting

The Project site includes seasonal wetland, intermittent, and ephemeral drainages (Padre, 2020a). The main drainage on the Project site is located along State Route 120 and is a tributary to Rattlesnake Creek, which is southwest of the Project site. The watershed area for the drainages crossing the Project site is approximately 150 acres. The main drainage channel extending across the northern portion of the Project site near State Route 120 is characterized as a deeply incised arroyo, with near vertical banks comprised of erosive soils. Other ephemeral drainages cross the interior of the Project site, flowing generally from south to north, and are generally associated with the grading that historically occurred at the Project site in the mid-1980s. Several wetland areas have been identified within the interior of the Project site. The Project site is not located within a 100-year floodplain.



Dam failure, which is the collapse or failure of an impoundment that causes significant downstream flooding, is not a concern for the Project area. Although Tuolumne County has multiple large and small dams, only the O'Shaughnessy Dam poses a risk for significant flooding; however, the dam is located on the Middle Fork of the Tuolumne River and the proposed Project is located near a tributary to Rattlesnake Creek, which is a tributary to the Tuolumne River.

3.10.2 Impact Analysis

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i.Result in a substantial erosion or siltation of on- or off-site?
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
 - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources or polluted runoff?

iv.Impede or redirect flood flows?

Less than Significant with Mitigation. Exposed slopes and graded contours could be subject to rainfall and erosion and could cause temporary discharges of sediment and other contaminants in stormwater runoff to surrounding areas. Soils within the Project site are characterized as having a high erosion potential, and sediments and other pollutants could result in degradation of receiving water quality in downstream creeks at levels above applicable water quality standards. The proposed project would be subject to the requirements of the state's National Pollutant Discharge Elimination System (NPDES) Construction General Permit (Construction General Permit, Order No. 2009-009-DWQ), enforced by the Central Valley Regional Water Quality Control Board (CVRWQCB), prior to initiating earth disturbing activities. Among other things, the conditions of the Construction General Permit include mandatory implementation of best management practices (BMPs) concerning erosion control and preparation of a Storm Water Pollution Prevention Plan (SWPPP). Conformance with these water quality standards, in addition to implementation of a SWPPP and Erosion Control Plan consistent with MM HYDRO-1 and HYDRO-2, would reduce water quality impacts to a less-than-significant level and ensure that the Project would not generate substantial additional sources of polluted runoff.

The proposed Project would result in changes to the existing drainage pattern of the Project site. The proposed Project would re-contour the existing eroded drainage channels to reduce the angle of the banks and to stabilize the channels to reduce the potential for future erosion. The Applicant proposes to re-create natural channels that are stabilized as needed with rock and riparian vegetation. The restored channels would be incorporated into Project site design as onsite natural amenities. Also, storm water detention basins would be constructed throughout the Project site to capture and detain/retain storm run-off to promote infiltration and evaporation so that post-construction runoff peak flows do not exceed pre-project conditions. As



discussed below in MM HYDRO-3, the proposed Project would include implementation of a Drainage Plan for stabilizing existing drainages, enhancing habitat value, and disposing of runoff in such a manner as to protect adjacent property. General drainage patterns have been reviewed and locations for potential stormwater treatment areas (consisting of grass buffers and detention ponds) would be incorporated into Project plans. In addition, in order to minimize erosion or siltation on- or off-site post-construction, the proposed project shall implement MM HYDRO-3. Through implementation of a drainage pattern and plan and MM HYDRO-3, drainage would be contained onsite and erosion would be minimized. Therefore, this impact would be less than significant.

MM HYDRO-1: Prepare and Implement a SWPPP. Subject to requirements of Section 402 of the Federal Clean Water Act, and the NPDES permitting process, all construction projects that disturb more than one acre of land are required to prepare and implement a stormwater pollution prevention plan (SWPPP). A SWPPP shall be submitted to the Engineering Development Division of the Department of Public Works of Tuolumne County for review and approval prior to construction. The SWPPP shall be incorporated into all project plans and specifications. The restoration construction contractor(s) shall be required to post a copy of the SWPPP at the Project location, file a notice of intent to discharge stormwater with the CVRWQCB, and implement all measures required by the SWPPP. A Qualified SWPPP Practitioner (QSP) shall be responsible for construction monitoring to ensure that the provisions of the SWPPP are effectively enforced. In the event of noncompliance, the QSP shall have the authority to shut down the construction-site or fine the responsible party or parties.

- The SWPPP shall include the following information and Best Management Practices (BMPs).
- A description of site characteristics, including runoff and drainage characteristics and soil erosion hazard.
- A description of proposed construction procedures and construction-site housekeeping BMPs, including prohibitions on discharging or washing potentially harmful materials into roads, drainages, or the creek.
- A description of BMPs that will be implemented for erosion and sediment control, including requirements to:
 - Conduct major construction activities involving excavation and spoils haulage during the dry season, to the extent possible.
 - Conduct all construction work in accordance with site-specific construction plans that minimize the potential for increased sediment inputs to\surface waters.
 - Grade and stabilize spoils sites to minimize erosion and sediment input to surface waters and generation of airborne particulate matter.
 - Implement erosion control measures as appropriate to prevent sediment from entering surface waters to the extent feasible, including the use of silt fencing or fiber rolls to trap sediments.



- MM HYDRO-2: Prepare and Implement an Erosion Control Plan. Contractors shall prepare an Erosion Control Plan for implementation for any construction to occur between October 15 and May 15 of any year. In the absence of such an approved plan, all construction shall cease on or before October 15, except that necessary to implement erosion control measures. If necessary, the plan shall be submitted to the Engineering Development Division of the Department of Public Works of Tuolumne County for review and approval prior to construction.
- MM HYDRO-3: Prepare and Implement a Drainage Plan. A Drainage Plan for the Project site shall be prepared that specifies how runoff on the site will be managed in order to protect water quality and surrounding property. The plans will be developed with detailed runoff calculations to appropriately size culverts, bridges, detention/retention ponds/areas, and roadside ditches to meet the drainage requirements of the project site. The purpose of the plan will be to prevent the creation of localized on- or off-site flooding and to prevent any negative water quality effects off-site. As envisioned, stormwater would be collected through grass buffers and detention ponds, where it would settle, then be metered out to the groundwater of the onsite ephemeral drainages. If necessary, the plan shall be submitted to the Engineering Development Division of the Department of Public Works of Tuolumne County for review and approval prior to construction.
- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The proposed Project would utilize water supplied by Groveland Community Services District and would not utilize local groundwater at the Project Site. The project site is 30.59 acres in total. The proposed development's total impervious footprint, including roads, cabins, lodge, support facilities, and parking and driveway areas, is approximately 9.33 acres. This leaves approximately 70% of the Project site as pervious open space and available for groundwater recharge. Additionally, detention/retention basins and infiltration swales would be incorporated into site design to increase storm water infiltration. Therefore, the proposed project would result in a less-than-significant impact related to the depletion of groundwater supplies or interference with groundwater recharge.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. The proposed Project is not located within a designated 100-year flood hazard area. As described previously, the Tuolumne County Multi-Jurisdictional Hazard Mitigation Plan lists the Project area as Zone X which is for areas of minimal flood hazard (Flood Zone Panel Number 06109C1225C). There would be no housing constructed in a 100-year flood hazard area as part of the proposed project, nor would there be a change in the 100-year flood hazard area or impediment of flows. The Project site is not within an area subject to potential tsunamis or seiches. Therefore, no impact would occur.



e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The Project site would not result in discharges of pollutants in excess of water quality plan water quality objectives and would not interfere with sustainable groundwater management plan implementation. Therefore, no impact would occur.

3.10.3 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding hydrology and water quality to less than significant:

- MM HYDRO-1: Preparation of a Stormwater Pollution Prevention Plan
- MM HYDRO -2: Erosion Control Measures
- MM HYDRO-3: Drainage Plan



3.11 LAND USE AND PLANNING

| LAND USE AND PLANNING - Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|---------------------------------------|------------------------------------|--------------|
| a) Physically divide an established community? | | | | \boxtimes |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | |

3.11.1 Environmental Setting

The proposed Project site is approximately 30.59 acres located within Tuolumne County, along State Route 120 between Big Oak Flat and Groveland. The Project site is currently vacant, with one vacant commercial building and a canopy structure associated with a partially developed gas station facility. The Project site is bounded on the north by State Route 120, on the east by undeveloped forest land, on the south by a cemetery and undeveloped forest land, and on the west by vacant land and a hardware store.

The Project site is zoned C-1, General Commercial District Under the Tuolumne County Ordinance Code and designated at GC – General Commercial by the Tuolumne County General Plan. The General Commercial District includes hotels and motel type lodging as an allowable land use (Tuolumne County, 2018). Surrounding land uses include Rural Residential (RR), Low Density Residential (LDR), Parks and Recreation (R/P), Open Space (O), Public (P), Heavy Industrial (HI), and Light Industrial (LI).

3.11.2 Regional/Local Regulatory Setting

3.11.2.1 Tuolumne County General Plan

The 2018 Tuolumne County General Plan includes provisions that address tourism land uses and developments within the County. The goals, policies, and implementing programs applicable to tourism land uses and developments are shown in Table 3.11-1.

Table 3.11-1. Project Consistency with General Plan Goals, Policies, and Implementing Programs

| Number | Goal/Policy/Implementing Program | Consistency Discussion |
|----------------|--|--|
| COMMUNITY DEVE | ELOPMENT AND DESIGN | |
| Goal 1B | Minimize conflicts between incompatible land uses. | |
| Policy 1.B.3 | Require new commercial development to be designed to minimize the visual impact of parking areas on public roads and on public viewsheds. Implementing Program 1.B.g: Require proponents of new commercial development to locate parking areas behind buildings or sufficiently screen them from public roads and | Consistent. Project locates parking areas distributed throughout the site along State Route 120, which minimizes views of parking areas from State Route 120. All roadways are designed to be screened where |



| Manual | Occil/Delice/functions | Openint |
|----------------|--|--|
| Number | Goal/Policy/Implementing Program | Consistency Discussion |
| | public viewsheds, or if locating behind buildings and screening are determined to be infeasible, provide other landscaping or design features to visually enhance the parking areas. | possible by natural topography and landscaping. |
| Policy 1.B.5 | Preserve the existing nighttime environment by limiting the illumination of areas surrounding new development. New lighting that is part of residential, commercial, industrial, or recreational development shall be oriented away from off-site sensitive uses, and shall be hooded, shielded, and located to direct light downward and prevent glare. | Consistent. Project would include outdoor lighting for safety and security purposes which would be designed to minimize light spillage. Lighting would be downward positioned, and fully shielded. |
| Goal 1C | Promote a jobs-housing balance in the County and encourage new communities to be designed to provide a jobs-housing balance. | |
| Policy 1.C.2 | Encourage a Countywide jobs-housing balance as some communities in the County are not suited for extensive job-related or residential-related development. Implementing Program 1.C.a: Designate | With County's zoning and General Plan Land Use designations and would not exceed regional growth |
| | adequate land for commercial, recreational, industrial, business park and mixed-use development within and near identified communities that have adequate infrastructure and services. | projections or necessitate additional housing elsewhere. The Project includes housing for up to 48 staff. |
| Goal 1D | Encourage development to build facilities that promote the use of alternative transportation systems. | |
| Policy 1.D.1 | Encourage pedestrian oriented development to reduce the use of motor vehicles. Implementing Program 1.D.c: Encourage building site designs that cater to transit riders, pedestrians and cyclists, as well as those arriving by car. Examples of transit, pedestrian and bicycle friendly building site design | consistent. Project is designed in such a way, which limits automobiles to the parking areas near Hwy 120 only. Access throughout the site, to amenities and to guest units is by foot, bicycle or electric cart only, along |
| | features include, but are not limited to, segregated entrances, pavement markings and warning and directional signage. | the internal trails. The Project also offers a YARTS bus stop. |
| NATURAL RESOUR | | |
| Goal 16A | Balance property rights with the conservation of the environment and rural character of the County, which contributes to the quality of life of residents, encourages tourism and supports economic development. | |
| Policy 16.A.5 | Conserve scenic resources, landmarks and the natural landscape. Implementing Program 16.A.i: Provide flexibility in development standards to facilitate the clustering of new development in order to | Consistent. Section 3.1, Aesthetics, discusses the Project would not conflict with designated landmarks or scenic resources. Project is consistent |



| Number | Goal/Policy/Implementing Program | Consistency Discussion |
|----------------|---|--|
| | encourage the retention of scenic resources, landmarks and the natural landscape. | with zoning and General Plan Land Use designations and would comply with all development standards. |
| Policy 16.A.6 | Encourage the protection of clusters of native trees and vegetation and outstanding individual native and non-native trees which help define the character of Tuolumne County. | Consistent. Project would include tree preservation, where applicable, and include additional planting of native plant species (Landscape Plan and Habitat Restoration Plan). |
| Policy 16.B.5 | Evaluate and mitigate impacts to biological resources in accordance with the requirements of State and Federal law. | Consistent. Section 3.3, Biological Resources, includes evaluation of and proposed mitigation measures for biological resources in accordance with applicable regulation. |
| Policy 16.B.8 | Balance the conservation of biological resources with the need to reduce wildland fire hazards. Implementing Program 16.B.p: Encourage vegetation removal for fire protection purposes or as otherwise required by the Tuolumne County Fire Department in the Open Space zoning district or other areas conserved through zoning, provided such vegetation removal is addressed in a management plan and approved following review under the California Environmental Quality Act. | Consistent. Project would maintain existing native trees, where applicable, as well as include landscaping of native plant species in developed areas of the site (Landscape Plan and Habitat Restoration Plan), which would be reviewed by the Tuolumne County Fire Department. |
| Policy 16.B.10 | Encourage planting of native species or other drought tolerant species. Implementing Program 16.B.10: Encourage the use of native species and other drought tolerant species listed on the Tuolumne County Landscape Guidelines to promote water efficiency and reduce impacts associated with the introduction of exotic species. | Consistent. Project would include replanting of native plant species (Landscape Plan and Habitat Restoration Plan). The proposed Project would recontour the existing eroded drainage channels to reduce the angle of the banks and to stabilize the channels to reduce the potential for future erosion. The Applicant proposes to recreate natural channels that are stabilized as needed with rock and riparian vegetation. The restored channels would be incorporated into Project site design as onsite natural amenities. |



| Number | Goal/Policy/Implementing Program | Consistency Discussion |
|---------------|--|---|
| Policy 16.C.4 | Support educational programs that describe methods of habitat conservation, encourage voluntary efforts to protect and enhance biological resources, provide opportunities for ongoing study by local students, and provide opportunities for recreation and enjoyment by the community. | Consistent. Project would include educational programs to educate staff and guests about sustainability, and methods to increase sustainability onsite. Project would provide recreational amenities onsite such as a pool and spa, outdoor dining areas, outdoor fire pits and fireplaces, among others. |

3.11.2.2 Tuolumne County Ordinance Code

The Tuolumne County Ordinance Code Title 17, Zoning, implements the land use designations by establishing comprehensive zoning rules for the county. Section 17.02.015, Purpose, states that the intention of Title 17 is to enforce the General Plan and is enacted in order to promote the public health, safety, comfort, and general welfare throughout the county.

3.11.3 Impact Analysis

a. Physically divide an established community?

No Impact. The Project site is surrounded by undeveloped land. The closest residences are located approximately 200 feet northwest of the Project site (northwest property boundary). The Project would not divide an established community; therefore, no impact would result.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The purpose of the General Commercial District is to provide a variety of sales establishments which serve both the resident and traveling public. Permitted uses include hotels and motels type lodging (Tuolumne County, 2018). The Project would not result in a change to the existing land use; therefore, no impact would result.

3.11.4 Mitigation Measures

The Project would have no impact to land use and planning; therefore, no mitigation is required.



3.12 MINERAL RESOURCES

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

3.12.1 Environmental Setting

According to the Geologic Energy Management Division (CalGEM), the Project site is not located within an active oil and gas development area. There are no oil and gas development areas within Tuolumne County (CalGEM, 2020).

The Project site is located within a California Department of Conservation Mineral Resource Zone (MRZ) study area MRZ-2b for gold and silver deposits. MRZ-2b areas are defined as underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered mineral deposits that are either inferred reserves as determined by limited sample analysis, exposure, and past mining history or are deposits that presently are sub-economic. Further exploration and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a (CDC, 1997). There are no known mineral resources in the southeastern portion of Tuolumne County; therefore, the proposed project does not include any significant known or inferred mineral resources.

3.12.2 Impact Analysis

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?
- b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant Impact. The Project site is located within a Mineral Resource Zone study area where mineral resources are potentially present, but area not present at economically sufficient quantities. Additionally, the construction of the Project would not result in the loss of availability to a locally important mineral resource recovery site. Therefore, a less than significant impact to mineral resources would occur through implementation of the proposed Project.

3.12.3 Mitigation Measures

The Project would not result in significant impacts on mineral resources; therefore, no mitigation is required.



3.13 NOISE

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

3.13.1 Environmental Setting

The proposed Project site is approximately 30.59 acres located within Tuolumne County, along State Route 120 between Big Oak Flat and Groveland. The Project site is currently vacant, with one vacant commercial building and a canopy structure associated with a partially developed gas station facility. The Project site is bounded on the north by State Route 120, on the east by undeveloped forest land, on the south by a cemetery and undeveloped forest land, and on the west by vacant land and a hardware store.

Surrounding land uses include Rural Residential (RR), Low Density Residential (LDR), Parks and Recreation (R/P), Open Space (O), Public (P), Heavy Industrial (HI), and Light Industrial (LI). The nearest residences to the Project are located 200 feet northwest of the Project site (northwest property boundary). Other than residences, potential noise sensitive land uses near the Project site include the Our Lady of Mount Carmel Catholic Church, which is located approximately less than one half mile from the Project site.

3.13.1.1 General Characteristics of Noise

Noise is generally defined as unwanted or objectionable sound. Measurement of sound involves determining three variables: 1) magnitude, 2) frequency, and 3) duration. Human ears respond to a very wide range of sound pressures producing numbers of awkward size when sound pressures are related on an arithmetic (1, 2, 3...) scale. It is customary to express sound pressure level in decibels (dB), which are logarithmic (1, 10, 100...) ratios comparing sound pressures to a reference pressure. The reference pressure commonly used in noise measurement is 20 microPascals (μ Pa or rms), which is considered to be the quietest sound a normal young adult human ear can hear in the frequency range that the ear is most sensitive to. This sound level is assigned the value 0 dB. Higher intensity sound is perceived as louder. Sound intensity is commonly measured on a weighted scale [dBA or db(A)] to correct for the relative frequency



response of the human ear. The "A-weighted" noise level de-emphasizes low and very high frequencies of sound in a manner similar to the human ear's de-emphasis of these frequencies (OSHA, 2013; AIHA, 2003).

Except under special conditions, a change in sound level of 1 dB cannot be perceived. Outside of the laboratory, a 3 dB change is considered a just-noticeable difference, and a change in level of at least 5 dB is required before any noticeable change in community response would be expected. Some typical sound pressure levels for common sounds are provided in Table 3.13-1.

Table 3.13-1. Common Sound Levels/Sources and Subjective Human Responses

| Sound Level (dBA) | Typical Outdoor Noise Source | Typical Indoor Noise Sources | Typical Human Response/Effects |
|-------------------|--|---------------------------------|-----------------------------------|
| 140 | Carrier Jet takeoff (50 feet) | | Threshold for Pain |
| 130 | Siren (100 feet) Live Rock Band | | Hearing Damage |
| 120 | Jet takeoff (200 feet) Auto horn (3 feet) | | |
| 110 | Chain Saw Snow Mobile | | Deafening |
| 100 | Lawn Mower (3 feet) Motorcycle (50 feet) | | |
| 90 | Heavy Duty Truck (50 feet) | Food Blender (3 feet) | Very Loud |
| 80 | Busy Urban Street, Daytime | Garbage Disposal (3 feet) | |
| 70 | Automobile (50 feet) | Vacuum Cleaner (9 feet) | Loud |
| 60 | Small plane at ¾ mi | Conversation (3 feet) | |
| 50 | Quiet Residential Daytime | Dishwasher Rinse (10 feet) | Moderate |
| 40 | Quiet Residential Nighttime | Quiet Home Indoors | Quiet |
| 30 | Slight Rustling of Leaves | Soft Whisper (15 feet) | Very Quiet |
| 20 | | Broadcasting Studio | |
| 10 | | Breathing | Barely Audible |
| 0 | | | Threshold of Hearing- |

Source: AIHA 2003, and OSHA 2013

When considering how noise could affect nearby sensitive receptors (residential dwellings, transient lodging, hospitals and other long-term care facilities, public or private educational facilities, libraries, churches, and places of public assembly), it is important to understand how sound level diminishes as distance from the source increases. For a "point" source (such as construction within a fixed area) of sound in free space, the rate at which the sound attenuates is inversely proportional to the square of the distance from the source. This means the sound level would drop 6 dB each time the distance from the source is doubled. Decibels, measuring sound energy, combine logarithmically. A doubling of sound energy (for instance, from two identical automobiles passing simultaneously) creates a 3 dB increase (i.e., the resultant sound level is



the sound level from a single passing automobile plus 3 dB). When the difference between two sound levels is greater than about 10 dB, the lesser sound is negligible in terms of affecting the total level (OSHA, 2013).

The duration of noise and the time period at which it occurs are important factors in determining the human response to sound. For example, noise induced hearing loss is directly related to the magnitude, frequency, and duration of exposure. Annoyance due to noise is also associated with how often noise is present and how long it persists. One approach to quantifying time-varying noise levels is to calculate the Energy Equivalent Sound Level (L_{eq}) for the time period of interest. The L_{eq} represents a sound level which, if continuous, would contain the same total acoustical energy as the actual time-varying noise which occurs during the observation period (OSHA, 2013).

In a residential or other noise sensitive environment, noise is more disturbing at night than during the day. Thus, noise indices have been developed to account for the differences in intrusiveness between daytime and nighttime noise. The Community Noise Level Equivalent (CNEL) and the Day-Night Average Sound Level (Ldn) are such indices. CNEL and Ldn values result from the averaging of hourly Leq values for a 24- hour period, with a weighting factor applied to the nighttime Leq values (and the evening values for CNEL). The CNEL penalizes noise levels during the night (10:00 p.m. to 7:00 a.m.) by 10 dB to account for the increased sensitivity of people to noise after dark. Evening noise levels (7:00 p.m. to 10:00 p.m.) are penalized 5 dB by the CNEL. The L_{dn} also penalizes nighttime noise levels by 10 dB but does not penalize evening levels. These two indices are generally equivalent. In general, the CNEL may be thought qualitatively as an accumulation of noise associated with individual events occurring throughout a 24-hour period. The noise of each individual event is accounted for in a separate, discrete measurement that integrates the changing sound level over time as, for example, when an aircraft approaches, flies overhead, then continues off into the distance. These integrated sound levels for individual operations are referred to as sound exposure levels (SELs). The accumulation of the SELs from each individual operation during a 24-hour period determines the CNEL for the day.

3.13.1.2 Ground-borne Vibration

In contrast to airborne noise, ground-borne vibration is not a common environmental problem. Vibration from sources such as buses and trucks is not usually perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment.

Ground-borne vibration can cause detectable building floor movement, window rattling, items shaking on shelves or walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Human annoyance from vibration can often occur and can happen when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance would be well below the damage threshold for normal buildings.



Vibration is an oscillatory motion which can be described in terms of displacement, velocity or acceleration. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. PPV is often used in monitoring of blasting vibration since it is related to the stresses that buildings undergo.

3.13.2 Regional/Local Regulatory Setting

3.13.2.1 Tuolumne County General Plan

The following policies and implementation programs from the Tuolumne County General Plan are applicable to the project.

Noise Element

Policy 5.A.1: Evaluate the need of proponents of new development of noise-sensitive land uses proposed adjacent to existing transportation or other noise sources to incorporate noise reduction techniques so that noise levels at the new development are consistent with the exposure threshold standards shown in [General Plan] Tables 5.A and 5.B.

Implementation Program 5.A.a: Review new public and private development proposals to determine conformance with the policies and programs of this Noise Element. Determine that noise levels from new development will not exceed the noise level standards for specified land uses included in [General Plan] Tables 5.A, 5.B, 5.C, or 5.D.] Determine that new development of noise-sensitive land uses in proximity of existing noise sources or land designated on the General Plan land use diagrams as HI, LI, BP, HC, TPZ or MPZ will not be affected by noise levels exceeding the standards of [General Plan] Table 5.C. For modifications or expansions of existing stationary noise sources that already exceed the standards of Table 8 on lands designated as noise-sensitive uses, Tuolumne County will determine that the new development will not increase the noise level received at the noise-sensitive land uses, or require noise reduction measures, so that the cumulative noise generated from the entire development site is equal to or less than the pre-modification or pre-expansion ambient noise level.

Implementation Program 5.A.b: Require an acoustical analysis where activities associated with proposed development are likely to produce noise levels exceeding those specified in [General Plan Tables 5.A, 5.B, 5.C, or 5.D of this Element. The acoustical analysis shall be conducted early in the review process so that the possible effects of noise and noise mitigation can be considered in the project design. The requirements of an acoustical analysis are listed in Implementation Program 5.A.c.

Policy 5.A.3: Require proponents of proposed development of new stationary noise sources or modifications of existing stationary noise sources to evaluate noise effects on existing nearby noise sensitive land uses. This policy does not apply to noise levels associated with agricultural operations.



Implementation Program 5.A.d: Prepare and adopt a noise ordinance to be used in defining acceptable noise levels received at various land uses and enforcing excessive noise levels have been reported and verified.

Policy 5.A.5: Require that construction activity and temporary construction impacts do not expose existing noise-sensitive land uses to excessive noise levels. Require all new construction activities to implement all feasible noise-reducing measures as necessary to limit construction noise exposure at receiving occupied land uses to within acceptable County noise levels identified in Table 7 (General Plan Table 5.C). Should nighttime construction activities be required (between the hours of 10:00 p.m. and 7:00 a.m.), exterior noise levels shall not exceed 65 dBA Lmax, based on FICON's 65 dBA SEL level for sleep disturbance (but conservatively using Lmax, which is more appropriate for construction activities).

Implementation Program 5.A.e: The County shall ensure that, where residences or other noise sensitive uses are located 1,900 feet of construction sites, appropriate measures shall be implemented to limit noise exposure from construction. Specific techniques may include, but are not limited to, restrictions on construction timing, use of sound blankets on construction equipment, and the use of temporary wall and noise barriers to block and deflect noise.

3.13.3 Impact Analysis

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant with Mitigation. Temporary short-term construction noise would result during Project construction. Construction activities would involve typical construction equipment, such as bulldozers, graders, mini excavators, skid steer loaders, and trenchers. Table 3.13-2 provides default noise emission reference levels for proposed construction equipment.

Table 3.13-2 Construction Equipment Noise Levels

| Equipment | Spec Emission Limits L _{max} @ 50 feet (dBA) | Actual Emission Levels L _{max} @ 50 feet (dBA) |
|--------------------------------------|--|---|
| Bulldozer (Dozer) | 85 | 82 |
| Grader | 85 | N/A |
| Mini Excavator (Excavator) | 85 | 81 |
| Skid Steer Loader (Front End Loader) | 80 | 79 |
| Trencher (Tractor) | 84 | N/A |

Source: FHWA Construction Noise Handbook, Table 9.1 (FHWA, 2021)



The restriction of construction hours consistent with MM N-1 would reduce construction noise to less than significant.

MM N-1: Construction Noise. Construction activities shall be conducted during the hours of 7:00 a.m. to 10:00 p.m. Monday through Saturday. Exterior noise levels shall not exceed 65 dBA Lmax between the hours of 10:00 p.m. and 7:00 a.m. Construction activities shall be prohibited on Sunday and County Holidays.

The Project includes an Events Pavilion that would be used for events including, but not limited to, weddings, parties, conferences, etc. During peak months (May through September), the Events Pavilion would hold two to four events per month, with attendance at events estimated to be between 50 and 100 guests. The Events Pavilion is located approximately 1,700 feet from the nearest residence.

Amplified noise during use of the Events Pavilion could result in noise levels up to 69 dB. For a "point" source (such as music from an outdoor concert) of sound in free space, the rate at which the sound attenuates is inversely proportional to the square of the distance from the source. This means the sound level would drop 6 dB each time the distance from the source is doubled. Therefore, the distance from the noise source (i.e., Events Pavilion) to the sensitive receptor (i.e., residence) would result in a sound attenuation to acceptable daytime noise levels, resulting in a less than significant impact. In addition, restricting use of the Events Pavilion past 10:00 p.m. would result in a less than significant impact.

- **MM N-2: Operational Noise.** Amplified music or other amplified sound at any wedding or event at the Events Pavilion shall be limited to the hours of 5:00 p.m. to 10:00 p.m. Monday through Friday and Sunday; and from the hours of 5:00 p.m. to 11:00 p.m. on Saturdays. All amplified music shall comply with the exterior property boundary noise limits.
- b. Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. No blasting, pile driving, or other special construction methods associated with excessive noise or groundborne vibration are anticipated during Project construction. Therefore, it is anticipated that vibration resulting from construction activities would not affect noise-sensitive uses. Impacts would be less than significant.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project site is not located within two miles or in the vicinity of a public airport or private airstrip. The nearest airport to the Project site is the Pine Mountain Lake Airport, approximately 4.3 miles to the northeast. In addition, the private Hermitage Landing Strip is located approximately 4.7 miles to the northeast of the Project site.



3.13.4 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding noise to less than significant:

• MM N-1: Construction Noise

• MM N-2: Operational Noise



3.14 POPULATION AND HOUSING

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

3.14.1 Environmental Setting

According to the U.S. Census Bureau, Tuolumne County had a population of 53,932 people per the 2010 Census with approximately 22,427 households and 31,487 housing units (U.S. Census Bureau, 2020).

3.14.2 Impact Analysis

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The Project proposes to develop 200 guest suites and associated infrastructure. The Project would also provide an employee housing facility, which would include 24 rooms, laundry and bathrooms. Tourism would increase; however, the Project would not include substantial population growth in the area. Construction of the Project would provide approximately 25 to 50 temporary construction jobs. Local workers would be utilized to the greatest extent practicable; therefore, not impacting population growth. Temporary construction workers may also utilize local hotels and campgrounds while working at the Project site. In addition, the Project would provide approximately 60 permanent jobs during operation, a portion of which, would be housed in the employee housing facility. The Project would not result in the permanent creation of a significant number of new jobs that would induce substantial population growth. The Project would not result in supporting population growth; therefore, resulting in a less than significant impact.

b. Displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project would be constructed on undeveloped land and would not displace existing housing. Therefore, no impact would result.

3.14.3 Mitigation Measures

The Project would not result in significant impacts on population and housing; therefore, no mitigation is required.



3.15 PUBLIC SERVICES

| PUBLIC SERVICES | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 public services: | | | | |
| Fire protection? | | | \boxtimes | |
| Police Protection? | | | \boxtimes | |
| Schools? | | | \boxtimes | |
| Parks? | | | \boxtimes | |
| Other public facilities? | | | \boxtimes | |

3.15.1 Environmental Setting

Project site service providers are listed below in Table 3.15-1.

Table 3.15-1. Summary of Public Service Providers

| Service | Providers |
|-------------------|---|
| Fire Protection | Tuolumne County Fire Department (TCFD)/California Department of Forestry and Fire Protection (CAL FIRE) |
| Police Protection | Tuolumne County Sheriff's Department |
| Schools | Big Oak Flat – Groveland Unified School District |
| Parks | Tuolumne County Parks and Recreation, GCSD |

Source: www.tuolumnecounty.ca.gov

3.15.1.1 Fire Protection

Tuolumne County Fire Department (TCFD) is a cooperative fire department with California Department of Forestry and Fire Protection (CAL FIRE). Within the County, TCFD/ CAL FIRE along with eight fire districts provide life and property emergency response and wildland fire protection. The nearest fire station to the Project site is Groveland Station 78 located approximately two miles northeast of the Project site (Tuolumne County, 2020a).

The Groveland Community Services District (GCSD) also provides fire services. The GCSD currently has a cooperative agreement with CAL FIRE to provide fire protection services for the community.

3.15.1.2 Police Protection

The Tuolumne County Sheriff's Department (TCSD) is responsible for law enforcement in unincorporated areas of Tuolumne County. The nearest Sheriff station to the Project site is located in Sonora, approximately 13 miles northwest of the Project site (Tuolumne County, 2020b).



The California Highway Patrol (CHP) Central Division, also provides traffic enforcement along the State highways and County Roadways. The County's CHP area office is located at 18437 Fifth Avenue, in Jamestown, approximately 13 miles northwest of the Project site. The CHP issues traffic citations for traffic violations and provides other services to support overall safety to the residents of Tuolumne County.

3.15.1.3 Schools

The Big Oak Flat – Groveland Unified School District provides elementary, middle, and high school education in the vicinity of the Project site. The closest school to the Project site is Tenaya Elementary School located approximately 2.0 miles northeast from the Project site.

3.15.1.4 Parks

Impacts to parks are discussed in Section 3.16, Recreation.

3.15.2 Impact Analysis

- a. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 public services?
 - Fire protection?
 - Police protection?
 - Schools?
 - Parks?
 - Other public facilities?

Less than Significant Impact. The TCFD, GCSD, TCSD, and CHP provides fire and law enforcement for all unincorporated areas of Tuolumne County, including the Project site. Construction of the Project may result in accidents, fire, or emergency incidents that would require fire and/or police services; however, construction activities would be short-term and limited in scope. Operation of the Project may result in accidents, fire, or emergency incidents requiring fire and/or police services; however, they are expected to be infrequent and minor in nature. Physical features to reduce the number of incidents include: an overall site layout and design that emphasizes fire prevention and defensible space, including increased building separation, low building heights, and complete perimeter firefighting accessibility; and construction of an appropriately-sized fire water tank onsite to provide adequate fire flow protection during Project operation. The Project would create 60 permanent jobs and there may be a resulting small number of additional students in local schools. Therefore, the Project would result in a less than significant impact on fire and police protection and on school capacity. The Project would result in less than significant impacts to schools and parks because the Project would generate temporary guests, not permanent residents.

Impacts to wildfire are discussed in Section, 3.20, Wildfire



3.15.3 Mitigation Measures

The Project would not result in significant impacts on public services; therefore, no mitigation is required.



3.16 RECREATION

| RECREATION | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------------|---------------------------------------|------------------------------------|--------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | |

3.16.1 Environmental Setting

Recreation within the vicinity of the Project site includes the Yosemite National Park, Stanislaus National Forest, as well as recreational facilities operated by the Bureau of Land Management (BLM), the State of California, Tuolumne County, and Groveland Community Services District. The Project proposes to develop 200 guest suites and associated infrastructure which would expand recreational opportunities in the region.

3.16.2 Impact Analysis

a. Would the project 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?

Less than Significant Impact. The Project would increase the area's tourist population and number of visitors at the Yosemite National Park and Stanislaus National Forest. The Project has been designed to provide visitors with recreational opportunities within the lodge property. The Project would provide onsite amenities for its guests and would not significantly increase the usage or the physical deterioration of surrounding recreational areas or facilities; therefore, resulting in a less than significant impact.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less than Significant Impact. No off-site parks or recreational improvements are proposed or required as part of the Project. The added guests to surrounding national parks and forests are not anticipated to result in a significant impact to recreation resources.

3.16.3 Mitigation Measures

The Project would not result in significant impacts on recreation; therefore, no mitigation is required.



3.17 TRANSPORTATION

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

3.17.1 Environmental Setting

The following discussion is based on the Yonder Yosemite Project Traffic Impact Study prepared for the Project by Wood Rodgers which summarizes the results of an initial, high-level traffic sensitivity analysis (Wood Rodgers, 2021).

The main Project driveway would be located along State Route 120 at approximately the mid-point of the Project site, at a location that has existing paved asphalt tapers/aprons. The Project would include a full access, stop-controlled driveway. The Project would extend westbound left-turn pocket to meet Caltrans standards, which would be accomplished by restriping and shifting lanes to the south. The Project would direct guests and employees to utilize the main Project driveway via signs and messaging. The Project internal roads would connect to the existing Memorial Drive.

The corner sight distance to the east of the Memorial Drive/State Route 120 intersection is less than the Caltrans Highway Design Manual minimum requirement due to a bend in State Route 120 as well as vegetation and rocks that obstruct line of sight to approaching westbound traffic. The Project would not direct traffic to use Memorial Drive, but Memorial Drive could be used by guests as a secondary Project access point. The low corner sight distance east of Memorial Drive would be addressed by restricting all left-turns at the Memorial Drive/State Route 120 intersection via a raised "pork chop" island and associated signing and striping (Wood Rodgers, 2021).

Two parking lots would be located directly adjacent to State Route 120 west of the main Project driveway, and one parking lot east of Memorial Drive (Wood Rodgers, 2021).

The Project would provide a total of 275 parking spaces (264 standard and 11 ADA compliant). The guest suites would be spread throughout the 30-acre property and connected by cart and pedestrian pathways.

The Yonder Yosemite Project Traffic Impact Study estimated trip characteristics of the Project under summer Saturday (i.e., worst-case or highest trips) conditions. It was assumed that



all units would be occupied under summer Saturday conditions. As a result, the Project would generate approximately 1,351 new net daily trips once operational (Wood Rodgers, 2021).

The Project would install a YARTS bus stop, which would be available to lodging guests to travel to Yosemite National Park, resulting in less overall vehicle trips.

3.17.2 Impact Analysis

a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. The Project would not increase the number of travel lanes on State Route 120 or Memorial Drive, and would not result in a substantial long-term increase in traffic levels. The Project would not conflict with any plan or policy established for measuring the performance of the circulation system.

The proposed Project is conservatively anticipated to generate a total of 1,351 net new daily trips and 116 peak hour trips (67 inbound, 49 outbound) under summer Saturday conditions (Wood Rodgers, 2021). Three study roadway segments and four study intersections at and near the Project were analyzed under existing and cumulative summer Saturday traffic conditions under existing conditions, existing plus Project, cumulative, and cumulative plus Project using the latest available baseline traffic data.

All study roadway segments are projected to operate at acceptable LOS conditions during "Existing Plus Project" summer Saturday daily conditions; therefore, resulting in a less than significant impact (Wood Rodgers, 2021).

Three study intersections near the Project were analyzed under existing and existing plus project summer Saturday conditions with and without the Project using latest available traffic data. The State Route 120/Ferretti Road intersection is projected to operate at unacceptable Level of Service (LOS) E under "Existing Plus Project" summer Saturday peak hour conditions. All other study intersections are project to operate at acceptable LOS D or better under "Existing Plus Project" summer Saturday peak hour conditions (Wood Rodgers, 2021).

The State Route 120/Ferretti Road intersection is not anticipated to operate at unacceptable LOS nor meet California Manual on Uniform Traffic Control Devices peak hour signal warrants under typical weekday peak hour conditions, and so the unacceptable LOS would not occur on a regular basis or under average conditions. In addition, the Project would not add vehicles to the critical movement at the State Route 120/Ferretti Road intersection. Therefore, the Project use of the State Route 120/Ferretti Road intersection would result in a less than significant impact.

The corner sight distance to the east of the Memorial Drive/State Route 120 intersection is less than the Caltrans Highway Design Manual minimum requirement due to a bend in State Route 120 as well as vegetation and rocks that obstruct line of sight to approaching westbound traffic. The Project would not direct traffic to use Memorial Drive, but Memorial Drive could be used by guests as a secondary Project access point. The low corner sight distance east of Memorial Drive would be addressed by restricting all left-turns at the Memorial Drive/State Route 120 intersection via a raised "pork chop" island and associated signing and striping. If all left-turns at the Memorial Drive/State Route 120 intersection were restricted, any vehicles wishing to make



a northbound left-turn onto State Route 120, or a westbound left-turn onto Memorial Drive, would utilize the Main Project Driveway/State Route 120 intersection instead, resulting in a less than significant impact.

b. Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less than Significant Impact. CEQA Guidelines section 15064.3(b) indicates that vehicle miles traveled (VMT) is the most appropriate measure for transportation impacts. The latest version of the Tuolumne County Regional Travel Demand Model (RTDM) and corresponding out-of-county VMT post processing tools, which were recently developed as part of the Tuolumne County SB 743 VMT Study, were used to analyze VMT generated by the Project. A VMT reduction was applied to the Project to account for the effects of the proposed new YARTS bus stop (Wood Rodgers, 2021).

An efficiency-based VMT metric, VMT per room, was estimated for the lodge/cabins portion of the Project using data from the Baseline Year 2015 With Project RTDM run. Project VMT per room was estimated by dividing total lodge/cabins Project VMT from the RTDM by the 200 total Project rooms. A YARTS transit VMT reduction was applied to Project VMT based on average ridership at existing YARTS stops. The final Project VMT was estimated to be 88.3 VMT per room (Wood Rodgers, 2021).

The Tuolumne County VMT Thresholds Memo recommends a threshold of: "less than or equal to the Groveland Subarea baseline hotel VMT per room" for evaluating potential impacts of hotel Projects in the Groveland area. The existing average hotel VMT per room in the Groveland subarea is identified in the Tuolumne County VMT Thresholds Memo as 89.1 VMT per room. Therefore, the Project VMT per room is projected to be approximately 0.9 percent below the threshold. The Project is projected to be below the threshold because of its proximity to State Route 120, proximity to tourist destinations, proposed YARTS bus stop, and the internal trip match provided by the employee housing and onsite market. Since the Project VMT is below the threshold, and an efficiency-based threshold was used, Project VMT impacts are projected to be "less than significant" under "Existing Plus Project" and "Cumulative (i.e., long term future) Plus Project" conditions, consistent with methodologies in the OPR Technical Advisory (Wood Rodgers, 2021). Therefore, the Project would result in a less than significant impact regarding VMT.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. The Project would not involve redesign or reconfigure existing roadways, and there would be no incompatible types of vehicles introduced. In addition, the creek crossings and cart and pedestrian pathways would be designed to avoid potential hazards. Therefore, the project would result in a less than significant impact.

d. Result in inadequate emergency access?

Less than Significant Impact. The Project would not alter the physical configuration of the existing roadway network serving the Project area, and would have no effect on access to local streets or adjacent uses (including access for emergency vehicles). Internal roadways (i.e., cart and pedestrian pathways) would meet CAL FIRE requirements for vehicle access.



Emergency fire access would be provided throughout the Project site and emergency responders would have access to each cabin and lodge features; therefore, the Project would result in a less than significant impact.

3.17.3 Mitigation Measures

The Project would not result in significant impacts regarding transportation; therefore, no mitigation is required.



3.18 TRIBAL CULTURAL RESOURCES

| TRIBAL CULTURAL RESOURCES | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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: | | \boxtimes | | |
| i) Listed or eligible for listing in the California Register of historical resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | | \boxtimes | | |
| ii) 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | | | | |

3.18.1 Environmental Setting

The following discussion is based on the Cultural Resources Inventory Report prepared for the Project site by ECORP and Native American consultation completed by the County.

ECORP requested a records search for the Project site from the CCIC of the CHRIS at California State University, Stanislaus on July 9, 2020 (File No. 11450-O). The purpose of the records search was to determine the extent of previous surveys within the Project site and whether previously documented cultural resources exist within the Project site.

The Handbook of North American Indians (Levy, 1978) lists the nearest tribal territories as *Pigliku* and *Sala*, located approximately seven miles northeast of Big Oak Flat and the Project site.

On August 10, 2020, ECORP contacted the NAHC by email to request a records search of the SLF and a list of Native American representatives with cultural affiliation to the Project site and vicinity. ECORP received a response from the NAHC on August 13, 2020 stating that the SLF has no record of any resources in the Project site. The reply also included a list of three Native American representatives affiliated with the Project site. ECORP mailed letters to these



representatives requesting information about tribal cultural resources. To date, ECORP has not received a response.

The County is the lead in conducting outreach to relevant California Native American tribes, pursuant to PRC § 21080.3.1. Both local tribes, the Tuolumne Band of Me-Wuks and the Chicken Ranch Rancheria, were notified during the initial stakeholder notification process in September 2020. Formal AB 52 consultation letters were sent to both tribes in January 2021. No consultation requests have been submitted by either Tribe.

3.18.2 Impact Analysis

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i. Listed or eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in Public Resources Code section 5020.1, subdivision (k), or
 - ii. 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.

Less than Significant with Mitigation. A significant impact would occur if the Project could cause a substantial adverse change to a tribal cultural resource through physical demolition, destruction, relocation, or alteration or the resource.

As discussed above, the CCIC records indicate that three previously recorded historic-period cultural resources are located within the Project site. The onsite archaeological survey confirmed the presence of sites P-55-006985 and P-55-007725 within the western end of the Project site. The onsite archaeological survey also confirmed that no buildings or features associated with P-55-005093, Big Oak Flat (CHL#406), are located within the Project site. None of these resources are considered a tribal cultural resource as defined by CEQA, and no tribal cultural resources were identified in the Project site during the onsite archaeological survey.

None of the ethnographic literature reviewed for this study described or depicted any ethnographic place names in or in close proximity to the Project site.

The study concludes that no known tribal cultural resources are present in the Project site and does not anticipate that the Project would impact tribal cultural resources.

Although no tribal cultural resources were identified during the study, no subsurface investigations were conducted and there remains the potential that tribal cultural resources could be encountered during Project-related ground-disturbing activities. If any such resources were encountered and found to qualify as a historical resource or unique archaeological resource for CEQA purposes, Project-related impacts to the resources could be significant. MM CUL-1, which would be implemented in the event of inadvertent discovery of unidentified tribal cultural



resources, requires work to halt and the resources to be thoroughly documented and appropriately treated. Implementation of this mitigation measure would ensure that impacts on tribal cultural resources remain at a less-than-significant level.

3.18.3 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding tribal cultural resources to less than significant:

• MM CUL-1: Discovery of Previously Unknown Cultural Resources



3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Environmental Setting

The Project proposes to develop 200 guest suites and associated infrastructure and would be served by municipal utilities that serve the Project area. The Groveland Community Services District (GCSD) provides water and wastewater services to the populated areas of Big Oak Flat, Groveland, and Pine Mountain Lake. The GCSD water supply and distribution system includes three water treatment plants, five storage reservoirs, and approximately 70 miles of distribution piping. The District provides a treated water supply to approximately 3,500 customers. The GCSD also owns and operates the regional wastewater collection, treatment, and regional recycled water system, which provides sewer service to approximately 1,500 customers within the GCSD's service area. (GCSD, 2020). Utilities would ultimately be provided to the Project site by GCSD following an approved formation of a Community Facilities District.

3.19.2 Impact Analysis

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The Project would be serviced by established municipal utilities. The Project would develop a lodge on a currently vacant site. Installation of the water and wastewater lines and connections, including the sanitary sewer forced and gravity main,



water main, and fire hydrants, are considered part of Project construction and would occur during site grading activities. GCSD would be able to accommodate the lodge development for water and wastewater services; therefore, resulting in a less than significant impact. As stated in Section 3.6, the Project is within PG&E's service area; therefore, the Project would obtain electrical power and natural gas from the PG&E power grid (PG&E, 2020).

Installation of the utility infrastructure required for the Project would occur during site grading activities; therefore, resulting in a less than significant impact.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant with Mitigation. GCSD would provide water for the lodge and associated facilities. The proposed Project's water demand is estimated to be approximately 29,472 gallons per day (Land and Structure, 2020, Appendix D). The existing GCSD water supply and distribution system includes three water treatment plants, five storage reservoirs, and approximately 70 miles of distribution piping. GCSD has the capacity to serve the Project development (GCSD, 2020). Pursuant to MM UTIL-1, the applicant will receive a Will Serve Letter from the GCSD. Implementation of the Will Serve Letter and GCSD rules and regulations will result in a less than significant impact.

MM UTIL-1: Will Serve Letter. Prior to construction, the applicant will obtain a Will Serve Letter from the Groveland Community Services District for the Project. The applicant will abide by all GCSD rules and regulations applicable to the Project and its development.

c. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. The Project would be serviced by GCSD. The proposed Project's sewer demand is estimated to be approximately 20,370 gallons per day (Land and Structure, 2020). GCSD has the capacity to service the Project development; therefore, resulting in a less than significant impact.

d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. The Project would generate solid waste from excavation activities, roadway materials, and general waste. All solid waste collected at the Project site would be brought to the transfer stations in Groveland or East Sonora, before being transferred by Cal Sierra Disposal to the Highway 59 Disposal Site, located at 7040 N. Highway 59 in Merced (Tuolumne County, 2018). The Highway 59 Disposal Site is well below its maximum permitted capacity of 30,012,352 cubic yards, with 28,025,334 cubic yards remaining capacity (CalRecycle, 2020a).

Construction waste generated by the Project is not anticipated to cause the disposal site to exceed its maximum permitted disposal volume. Based on CalRecycle's estimated solid waste generation rates, a waste generation factor of 2.0 pounds per room per day, the lodge would generate approximately 360 pounds (0.18 tons) per day or 131,400 pounds (65.7 tons) per year



(CalRecycle, 2020b). The Highway 59 Disposal Site has a permitted disposal capacity of 1,500 tons per day and is estimated to reach capacity in 2030. The Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacity at the Highway 59 Disposal Site; therefore, the landfill would have sufficient capacity to accept solid waste generated by the project resulting in a less than significant impact.

e. Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. Construction and operation of the Project would comply with all Federal, State, and local statutes and regulations related to solid waste; therefore, no impact would result.

3.19.3 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding utilities and service systems to less than significant:

• MM UTIL-1: Will Serve Letter



3.20 WILDFIRE

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

3.20.1 Environmental Setting

The wildfire hazard in the County has been analyzed using the methodology of the California Department of Forestry and Fire Protection's (CAL FIRE) Fire and Resource Assessment Program (FRAP) (2007) and ranges from moderate to very high in severity classification. Pursuant to the CAL FIRE Fire Hazard Severity Zones in State Responsibility Area (SRA), the Project site is located in a very high fire hazard severity zone (CAL FIRE, 2007). CAL FIRE is responsible for wildland fires on SRA.

3.20.2 Regional/Local Regulatory Setting

3.20.2.1 Tuolumne County General Plan

Wildfire is addressed in the Public Safety Element and the Natural Hazards Element of the Tuolumne County General Plan. Applicable policies and implementation programs from each of these elements are listed below.

Public Safety Element

Policy 9.A.1: Actively involve fire protection agencies within Tuolumne County in land use planning decisions.

Policy 9.E.1: Evaluate the circulation system to identify areas causing delay of emergency vehicle response and evacuation due to traffic congestion.

Implementation Program 9.E.b: Require that new development be provided with access roads that allow for safe and efficient response by emergency apparatus and the safe evacuation of residents in the event of structural or wildland fire.



Policy 9.E.2: Maintain adopted levels of fire protection service.

Policy 9.E.3: Require new development to be consistent with State and County regulations and policies regarding fire protection.

Policy 9.G.1: Maintain County fire protection regulations that are consistent with Section 4290 or the equivalent of the California Public Resources Code and other applicable fire protection regulations.

Natural Hazards Element

Policy 17.E.1: Reduce the exposure to risk from wildland fire to an acceptable level by only allowing development in high or very high fire hazard areas if it can be made safe by planning, construction, or other fire safety measures.

Implementation Program 17.E.a: Utilize the CAL FIRE Forest and Resource Assessment Program "Fire Hazard Severity Zone Map," including revisions thereto, as a basis for determining the significance of fire hazards when reviewing development applications.

Implementation Program 17.E.b: Recognize that new development, including urban or clustered development, is acceptable in moderate, high and very high fire hazard zones, provided that project design meets California Building and Fire Codes including Wildland-Urban Interface Building Codes. Such developments may be required to provide and maintain additional off-site fire defense improvements.

Implementation Program 17.E.c: Require new development to mitigate wildland fire hazards in such a manner that it minimizes the chance of wildland fire originating outside the development from entering the development and minimizes the chance of fire originating within the development escaping to adjoining property and adjacent wildland.

Implementation Program 17.E.d: Require developers to incorporate fire protection improvements into project designs where determined necessary by the Tuolumne County Fire Department and require maintenance of these improvements. Fuelbreaks, green belts, long-term comprehensive fuel management programs, access to developed water sources, strategic helispots (with water supply), and perimeter road systems can all serve to reduce the fire hazard on project sites as well as adjacent property.

Implementation Program 17.E.e: Require new development in areas subject to wildland fire to provide safe ingress and egress in accordance with Chapter 11.12 of the Tuolumne County Ordinance Code. Encourage new development that complies with Chapter 11.12 to provide multiple access routes, especially in very high fire hazard severity zones or where one access route is susceptible to closure by landslide, loss of a bridge or other cause.

Implementation Program 17.E.f: Support the efforts of the Tuolumne County Fire Department to prevent loss of life, property and resources. Refer land development applications which would permit structures in areas subject to wildland fire to the Tuolumne County Fire Department/CAL FIRE for review and identification of measures necessary to mitigate the fire hazard.



Implementation Program 17.E.g: Consult the U.S. Forest Service, National Park Service and other federal land management agencies regarding applications for development on privately owned lands located adjacent to or within these agencies' boundaries to obtain comments regarding the impact of the project on the wildland fire protection mission of that agency.

Implementation Program 17.E.h: Revise and enforce County fire protection regulations such that new development in areas subject to wildland fire provides for clearing adjacent to access roads in order to reduce radiant heat received by vehicles on the roadway and thereby facilitate safe evacuation of residents and response by emergency vehicles in the event of wildland fire.

Policy 17.E.2: Require the maintenance of defensible space setbacks in areas proposed for development if wildland fire hazards exist on adjacent properties.

Policy 17.E.3: Require new development to have adequate fire protection and to include, where necessary, design and maintenance features that contribute to the protection of the County from the losses associated with wildland fire.

Policy 17.E.7: Protect natural resources from the effects of wildland fire.

Policy 17.E.8: Require property owners to maintain wildlands in a fire resistant manner consistent with Section 4291 of the Public Resources Code. Assist fire protection agencies in their efforts to enforce Section 4291.

3.20.2.2 Tuolumne County Emergency Operations Plan

The Tuolumne County Emergency Operations Plan delineates the County's procedures and policies in response to a significant disaster, including extreme weather, flood or dam failure, earthquakes, hazardous materials, terrorism or civil disturbance, transportation accidents, and wildland fires. The Emergency Services Plan assists with emergency response through: (1) establishing emergency response policy; (2) identifying authorities and assigns responsibilities for planning and response activities; (3) identifying the scope of potential hazards; (4) identifying other jurisdictions and organizations to coordinate planning with; (5) determining emergency organization structure; (6) establishing policies for providing emergency information to the public; (7) outlining preplanned response actions, describes the resources available to support response activities; (8) outlining actions to return County operations to normal; (9) guiding area governments through recovery; (10) establishing responsibilities within the County for the maintenance of the overall emergency preparedness program; (11) outlining the process for ordering and rendering mutual aid; and (12) facilitating the continuity of governments.

3.20.2.3 Tuolumne County Community Wildfire Protection Plan

The Tuolumne County Community Wildfire Protection Plan was adopted in 2004. The Wildfire Protection Plan is used to guide wildfire prevention, protection, and suppression planning and includes the County's concept of pre-fire management, a description of the County, a discussion of the stakeholders, fuels, weather, level of service and assets at risk in the County; pre-fire management plans of fire protection agencies, fire safe councils and strategic groups in the County; and a discussion of the institutional issues related to implementation of this plan. The plan also addresses how agencies within the County are trying to mitigate wildfire hazards in the



County. The overall goal of the plan is to reduce costs and losses from wildfire in the County by protecting assets at risk through focused pre-fire management prescriptions, enhancement of strategic fire defense systems and improved initial attack success.

3.20.2.4 Tuolumne County Multi-Jurisdictional Hazard Mitigation Plan

The Tuolumne County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), adopted in December 2017, is a guide to hazard mitigation throughout the County and services as a tool to help decision makers direct hazard mitigation activities and resources. In the context of the MJHMP, mitigation is an action that reduces or eliminates long-term risk to people and property from hazards, including wildfire. The MJHMP contains the hazard mitigation actions to help reduce the risk of damage and injury from wildfire under Goal 5: Minimize the level of damage and loss to people, existing and future critical facilities, and infrastructure due to wildland fires.

3.20.3 Impact Analysis

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant with Mitigation. The Project area and surrounding vicinity are subject to the County's Emergency Operations Plan and Community Wildfire Protection Plan. These plans provide the general framework and standard operating procedures for emergency response agencies to respond to emergencies such as wildfires. The County has an Emergency Services Plan that delineates the County's procedures and policies when responding to a significant disaster, including wildland fire. The County manages emergencies using both the Standard Emergency Management System and the Incident Command System (Tuolumne County, 2012).

The Project would be accessed from State Route 120. The main access would be located approximately 900 feet south of the existing State Route 120/Memorial Drive intersection. Memorial Drive would provide a second access to/from the Project site. The internal roadway providing access to the individual guest suites, would allow full access for emergency vehicles. Pursuant to Implementation Program 9.E.b of the County's General Plan, the Project would be required to provide access roads that allow for safe and efficient response by emergency apparatuses and the safe evacuation of residents in the event of a fire. In addition, GCSD would provide a water main, fire hydrants, and an approximately 1800,000-gallon water tank. Project implementation would not impair the County's Emergency Services Plan; therefore, a less than significant impact would result.

The Project site is located in a very high fire hazard severity zone (CAL FIRE, 2007). In the event of a wildfire, the Project's Emergency Evacuation Plan would be implemented. The following steps would be taken in the event of a fire, whether site specific or area-wide:

Once it has been determined that a wildfire is a threat to the property and/or area-wide, emergency evacuation plans would be initiated. The proximity of the fire would determine the urgency and Tier level of the evacuation. If the danger is imminent, people are asked to vacate the Project's property immediately. If guests do not have a personal vehicle, rented vans and/or buses would be rented and brought to the site, time permitting.



- Staff members would be assigned specific areas of the property to notify guests of the
 emergency and necessary steps. Emergency notification can be made with honking
 horns, bullhorns, PA systems, texting notifications, or knocking on doors. On-duty
 employees will be involved with the notification process, off-duty employees may be
 called to come assist in the emergency evacuation efforts.
- Employees would canvas the property, including the Lodge, Pool House, Events Space, Restroom and Maintenance buildings to send guests back to their units in order to facilitate their timely evacuation. These facilities would be evacuated and locked.
- Propane tanks in the Lodge and Maintenance buildings would be turned off.
 Flammables and explosive tanks would also be removed from buildings.
- Office files, computers, and safe contents might also be loaded up and removed.
- Upon full evacuation of guests, staff would then evacuate. The designated Evacuation Coordinator would monitor the property, until being required to vacate.

If required, evacuation of the Project site would occur during a tiered approach pursuant to the County's two-tiered approach for evacuation already in place: 1) Evacuation Warning – Issued when an Evacuation Order is eminent. It includes the specific geographical area that may be evacuated and procedures that should be followed. Residents/Guests should be prepared to leave at a moment's notice; and 2) Evacuation Order – Issued when there is an immediate threat to life and/or property. Residents/Guests must leave immediately. The tiered approach is to provide neighbors located off of State Route 120 first priority to evacuate and minimize congestion along State Route 120 by requiring guests to evacuate in phases before the community is required to. The lodging staff would follow direction from County Fire and the Sheriff's department.

The following tiers and evacuation policies would be followed in the event of a wildfire:

Tier 1: Evacuation Warning – The lodge would reduce occupancy to a maximum of 50%. Guests may be required to evacuate immediately to avoid traffic congestion for neighbors on State Route 120. All guests should be prepared to leave at a moment's notice or should leave proactively. Staff should follow evacuation protocol. This is when a wildfire threat is in the area, but there is no evacuation notice or order. County Sheriff's Department will contact the lodging staff to notify of evacuation warning/Tier 1.

Tier 2: Evacuation Order – The lodge would immediately evacuate the final 50% of occupants. Staff should follow evacuation protocol. This is when authorities give an order to evacuate within a specific timeframe. The lodging staff would monitor and apply County direction. The urgency of the evacuation may require that guests leave in their personal vehicles or other forms of transportation provided by the lodge (i.e., rented vans/buses or personal vehicles).

Evacuation Route – West: State Route 120 to Chinese Camp or State Route 120 to Highway 49 to Coulterville; East: State Route 120 to Yosemite Valley; South: State Route 120 through Big Oak Flats Road to Highway 140 to Mariposa.

Shelter in Place - If evacuation is not feasible and the County Sheriff or Fire direction is to shelter in place, guests, staff and community members would gather in the centrally located



Lodge building which is the primary designated shelter in place location. The Events Space is the secondary shelter in place location.

Implementation of the Emergency Evacuation Plan consistent with MM HAZ-6 would mitigate wildfire impacts to less than significant.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than Significant with Mitigation. The Project site is located at an elevation of approximately 3,000 feet above mean sea level. The Project site is relatively flat and slopes gently to the west. However, the Project site is surround by mountains and steep terrain comprised of trees and vegetation. Construction activities, which include spark-producing equipment, could present a significant risk to igniting wildfires. Implementation MM HAZ-5 would reduce the risk of wildland fire during construction to a less than significant level and ensure the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Operation of the Project could present a significant risk to igniting wildfires. The operation of the Project would incorporate one wood-burning fire pit at the lodge and either propane fire pits or propane fireplaces within the guest suites. Implementation of spark reduction measures consistent with MM HAZ-5 would reduce the risk of wildland fire during operation to a less than significant level and ensure the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than Significant Impact. The Project would include internal roads, trails, and pedestrian paths. Although, the internal roads would not be open for guest vehicles, they have been designed to accommodate emergency vehicles, including fire trucks. The internal roadway providing access to the individual guest suites, would allow full access for emergency vehicles. Pursuant to Implementation Program 9.E.b of the County's General Plan, the Project would be required to provide access roads that allow for safe and efficient response by emergency apparatuses and the safe evacuation of residents in the event of a fire. The lodge and associated features would be accessible by emergency vehicles in the case of an emergency. No additional roads or infrastructure would be required; therefore, resulting in a less than significant impact.

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant with Mitigation. The Project site is relatively flat; however, it is surrounded by mountains and steep terrain comprised of trees and vegetation. Implementation of the Emergency Evacuation Plan consistent with MM HAZ-6 would reduce the exposure risk of people or structures due to downslope flooding or landslides as a result of runoff or post-fire slope instability.



3.20.4 Mitigation Measures

Implementation of the following mitigation measure would reduce potential Project-related impacts regarding wildfire to less than significant:

- MM HAZ-5: Spark Producing Equipment
- MM HAZ -6: Emergency Evacuation Plan



3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

a. Does the project have the potential to substantially 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?

Less than Significant with Mitigation. As described in the impact sections above, the potential of the proposed Project to substantially degrade the environment is less than significant with incorporation of mitigation measures. Specifically, the Project has potential to impact biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, tribal cultural resources, and wildfire. However, these impacts would be avoided or reduced to a less than significant level with incorporation of mitigation measures discussed in each section.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects.)

Less than Significant Impact. For any Project-related impact to contribute cumulatively to the impacts of past, present, or reasonably foreseeable projects, the other projects would need to result in an impact on the same resource area, occur at the same time, or occur within an area



overlapping the proposed Project. No such project within the vicinity of the Project was identified that would result in a cumulative impact.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. The Project would not result in any substantial adverse effects to human beings, either directly or indirectly, since each potentially significant impact can be reduced to a less than significant level with the implementation of mitigation measures provided in this document. No other substantial adverse effects to human beings are anticipated as a result of this Project.

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APPENDIX A

AIR QUALITY AND GREENHOUSE GAS EMISSIONS ESTIMATES

Table 1 - Peak Onsite Emissions

November 9, 2020

Tuolumne County

Peak Day: ROG Emissions, lbs/day

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.26 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.73 | 0.73 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.45 | 0.45 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 1.69 | 1.69 | 1.69 | 1.69 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.61 | 0.61 | 0.61 | 0.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.61 | 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 |
| Streets and Parking | 8 | 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 | 0.94 | 0.94 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 3.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.87 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.99 | 0.99 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.59 | 0.59 | 0.59 | 0.59 |
| Total | | 0.98 | 0.73 | 0.45 | 2.14 | 1.69 | 1.69 | 2.92 | 0.61 | 0.61 | 0.61 | 1.23 | 1.23 | 0.61 | 1.55 | 0.94 | 4.07 | 0.99 | 1.58 | 0.59 | 0.59 | 0.59 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Tuolumne County Peak Day: NOx Emissions, lbs/day

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 4.85 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 12.14 | 12.14 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 6.74 | 6.74 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 29.58 | 29.58 | 29.58 | 29.58 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.83 | 9.83 | 9.83 | 9.83 | 9.83 | 9.83 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.83 | 9.83 | 9.83 | 9.83 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.83 | 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 |
| Streets and Parking | 8 | 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 | 15.29 | 15.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 9.59 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 14.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 17.51 | 17.51 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 9.77 | 9.77 | 9.77 | 9.77 |
| Total | | 16.99 | 12.14 | 6.74 | 36.32 | 29.58 | 29.58 | 49.24 | 9.83 | 9.83 | 9.83 | 19.66 | 19.66 | 9.83 | 25.13 | 15.29 | 23.75 | 17.51 | 27.28 | 9.77 | 9.77 | 9.77 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.



Table 1 - Peak Onsite Emissions

November 9, 2020

Tuolumne County Peak Day: CO Emissions, lbs/day

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 6.57 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 19.62 | 19.62 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 12.48 | 12.48 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 41.68 | 41.68 | 41.68 | 41.68 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.36 | 16.36 | 16.36 | 16.36 | 16.36 | 16.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.36 | 16.36 | 16.36 | 16.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.36 | 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 |
| Streets and Parking | 8 | 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 | 24.30 | 24.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 14.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 22.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 24.80 | 24.80 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 15.22 | 15.22 | 15.22 | 15.22 |
| Total | | 26.19 | 19.62 | 12.48 | 54.17 | 41.68 | 41.68 | 74.41 | 16.36 | 16.36 | 16.36 | 32.73 | 32.73 | 16.36 | 40.66 | 24.30 | 37.11 | 24.80 | 40.03 | 15.22 | 15.22 | 15.22 |

Tuolumne County Peak Day: PM₁₀ Emissions, lbs/day

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 69,Sched | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.45 | 0.45 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.22 | 0.22 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 1.11 | 1.11 | 1.11 | 1.11 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.34 | 0.34 | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 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 |
| Streets and Parking | 8 | 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 | 0.55 | 0.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.65 | 0.65 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.33 | 0.33 | 0.33 | 0.33 |
| Total | | 0.45 | 0.45 | 0.22 | 1.32 | 1.11 | 1.11 | 1.78 | 0.34 | 0.34 | 0.34 | 0.67 | 0.67 | 0.34 | 0.89 | 0.55 | 0.82 | 0.65 | 0.98 | 0.33 | 0.33 | 0.33 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.





November 9, 2020

Tuolumne County Peak Qrtr: ROG Emissions, tons

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.01 | 0.01 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.01 | 0.01 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 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 |
| Streets and Parking | 8 | 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 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 |
| Total, over 3 months, running | | | | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.06 | 0.05 | 0.02 | 0.14 | 0.25 | 0.36 | 0.36 | 0.25 | 0.18 | 0.07 | 0.07 | 0.03 | 0.03 | 0.02 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Tuolumne County Peak Qrtr: NO_x Emissions, tons

| radianine county | | i can Qit | 140 _x E1 | 1113310113, | 10113 | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-----------|---------------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | | | | | | Month | | | | | | | | | | |
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.05 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.13 | 0.13 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.10 | 0.10 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.34 | 0.34 | 0.34 | 0.34 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 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 |
| Streets and Parking | 8 | 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 | 0.17 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.19 | 0.19 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.11 | 0.11 | 0.11 | 0.11 |
| Total, over 3 months, running | | | | 0.42 | 0.68 | 0.89 | 1.13 | 1.25 | 1.01 | 0.78 | 0.32 | 0.43 | 0.54 | 0.54 | 0.60 | 0.55 | 0.71 | 0.62 | 0.75 | 0.60 | 0.52 | 0.32 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.



Project Number: 2002-4721 Page 3 of 4

Table 1 - Peak Onsite Emissions

November 9, 2020

Tuolumne County Peak Qrtr: CO Emissions, tons

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.07 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.11 | 0.11 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.18 | 0.18 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.46 | 0.46 | 0.46 | 0.46 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.29 | 0.29 | 0.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 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 |
| Streets and Parking | 8 | 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 | 0.27 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.27 | 0.27 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.17 | 0.17 | 0.17 | 0.17 |
| Total, over 3 months, running | | | | 0.46 | 0.92 | 1.27 | 1.55 | 1.74 | 1.46 | 1.18 | 0.54 | 0.83 | 1.12 | 1.22 | 1.31 | 1.11 | 1.23 | 0.95 | 1.12 | 0.88 | 0.78 | 0.50 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Tuolumne County Peak Qrtr: PM₁₀ Emissions in Tons

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 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 |
| Utilities Installation | 5 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Streets and Parking | 8 | 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 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total, over 3 months, running | | | | 0.01 | 0.02 | 0.03 | 0.04 | 0.04 | 0.04 | 0.03 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.01 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

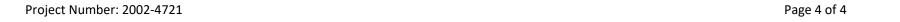




Table 2 - Peak Offsite Emissions

November 9, 2020

Peak Day: ROG Emissions, lbs/day

| | | | , = =: | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | , | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|--------|--------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Tuolumne County | | | | | | | | | | | | Month | | | | | | | | | | |
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.05 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.06 | 0.06 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.09 | 0.09 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 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 |
| Streets and Parking | 8 | 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 | 0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.05 | 0.05 | 0.05 | 0.05 |
| Total Offsite | | 0.11 | 0.06 | 0.09 | 0.15 | 0.06 | 0.06 | 0.15 | 0.06 | 0.06 | 0.06 | 0.11 | 0.11 | 0.05 | 0.25 | 0.20 | 0.76 | 0.04 | 0.09 | 0.05 | 0.05 | 0.05 |
| Total Onsite | | 0.11 | 0.73 | 0.09 | 2.14 | 1.69 | 1.69 | 2.92 | 0.61 | 0.61 | 0.61 | 1.23 | 1.23 | 0.61 | 1.55 | 0.20 | 4.07 | 0.04 | 1.58 | 0.59 | 0.59 | 0.59 |
| TOTAL within SLOC | | 1.10 | 0.79 | 0.43 | 2.29 | 1.75 | 1.75 | 3.07 | 0.67 | 0.67 | 0.67 | 1.34 | 1.34 | 0.66 | 1.81 | 1.14 | 4.83 | 1.03 | 1.67 | 0.64 | 0.64 | 0.64 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Peak Day: NOx Emissions, lbs/day

| | | , | | , | -, , | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Tuolumne County | | | | | | | | | | | | Month | | | | | | | | | | |
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.68 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.98 | 0.98 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 1.88 | 1.88 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.98 | 0.98 | 0.98 | 0.98 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.68 | 0.68 | 0.68 | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.65 | 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 |
| Streets and Parking | 8 | 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 | 6.34 | 6.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 7.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 16.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.95 | 0.95 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 1.25 | 1.25 | 1.25 | 1.25 |
| | | 4.67 | 0.00 | 4.00 | 2.06 | 0.00 | 0.00 | 2.64 | 0.00 | 0.00 | 0.00 | 4.67 | 4.67 | 0.60 | 7.00 | 6.04 | 24.44 | 0.05 | 2.40 | 4.05 | 4.05 | 4.05 |
| Total Offsite | | 1.67 | 0.98 | 1.88 | 2.86 | 0.98 | 0.98 | 2.61 | 0.98 | 0.98 | 0.98 | 1.67 | 1.67 | 0.68 | 7.02 | 6.34 | 24.11 | 0.95 | 2.19 | 1.25 | 1.25 | 1.25 |
| Total Onsite | | 16.99 | 12.14 | 6.74 | 36.32 | 29.58 | 29.58 | 49.24 | 9.83 | 9.83 | 9.83 | 19.66 | 19.66 | 9.83 | 25.13 | 15.29 | 23.75 | 17.51 | 27.28 | 9.77 | 9.77 | 9.77 |
| TOTAL within SLOC | | 18.65 | 13.12 | 8.62 | 39.18 | 30.56 | 30.56 | 51.85 | 10.82 | 10.82 | 10.82 | 21.33 | 21.33 | 10.52 | 32.15 | 21.64 | 47.86 | 18.46 | 29.47 | 11.01 | 11.01 | 11.01 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.





Table 2 - Peak Offsite Emissions

November 9, 2020

Peak Day: CO Emissions, lbs/day

| | | I can bay | · CO Liiii | 3310113, 10 | <i>3</i> , uu y | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|-----------|------------|-------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Tuolumne County | | | | | | | | | | | | Month | | | | | | | | | | |
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.98 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 1.01 | 1.01 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 1.12 | 1.12 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 1.01 | 1.01 | 1.01 | 1.01 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.98 | 0.98 | 0.98 | 0.98 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.45 | 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 |
| Streets and Parking | 8 | 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 | 1.13 | 1.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 1.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 2.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.48 | 0.48 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.52 | 0.52 | 0.52 | 0.52 |
| | | 1.00 | | | 0.11 | 4.04 | 4.04 | 0.10 | | | | 1.00 | 1.00 | 0.00 | 2.11 | | | 2.12 | | 0.50 | 2.50 | 0.70 |
| Total Offsite | | 1.99 | 1.01 | 1.12 | 2.14 | 1.01 | 1.01 | 2.48 | 1.01 | 1.01 | 1.01 | 1.99 | 1.99 | 0.98 | 2.11 | 1.13 | 4.17 | 0.48 | 1.01 | 0.52 | 0.52 | 0.52 |
| Total Onsite | | 26.19 | 19.62 | 12.48 | 54.17 | 41.68 | 41.68 | 74.41 | 16.36 | 16.36 | 16.36 | 32.73 | 32.73 | 16.36 | 40.66 | 24.30 | 37.11 | 24.80 | 40.03 | 15.22 | 15.22 | 15.22 |
| TOTAL within SLOC | | 28.18 | 20.63 | 13.60 | 56.30 | 42.70 | 42.70 | 76.89 | 17.38 | 17.38 | 17.38 | 34.72 | 34.72 | 17.34 | 42.78 | 25.43 | 41.28 | 25.29 | 41.03 | 15.75 | 15.75 | 15.75 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Tuolumne County Peak Day: PM₁₀ Emissions, lbs/day

| Tablanine County | | , | 10 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | ,, | | | | | | | | | | | | | | | | | |
|--------------------------------------|------|--------|--------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | | | | | | Month | | | | | | | | | | |
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.02 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.02 | 0.02 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.04 | 0.04 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 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 |
| Streets and Parking | 8 | 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 | 0.14 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.03 | 0.03 | 0.03 | 0.03 |
| | | | | | | | | | | | | | | | | | | | | | | |
| Total Offsite | | 0.04 | 0.02 | 0.04 | 0.07 | 0.02 | 0.02 | 0.06 | 0.02 | 0.02 | 0.02 | 0.04 | 0.04 | 0.02 | 0.16 | 0.14 | 0.54 | 0.02 | 0.05 | 0.03 | 0.03 | 0.03 |
| Total Onsite | | 0.45 | 0.45 | 0.22 | 1.32 | 1.11 | 1.11 | 1.78 | 0.34 | 0.34 | 0.34 | 0.67 | 0.67 | 0.34 | 0.89 | 0.55 | 0.82 | 0.65 | 0.98 | 0.33 | 0.33 | 0.33 |
| TOTAL | | 0.49 | 0.47 | 0.26 | 1.39 | 1.13 | 1.13 | 1.84 | 0.36 | 0.36 | 0.36 | 0.71 | 0.71 | 0.35 | 1.05 | 0.69 | 1.36 | 0.67 | 1.04 | 0.36 | 0.36 | 0.36 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Project Number: 2002-4721 Page 2 of 4



Table 2 - Peak Offsite EmissionsNovember 9, 2020

Tuolumne County Peak Qrtr: ROG Emissions, tons

| • | _ | - | | | | | | | | | | | | | | | | | | | | |
|--|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | | | | | | Month | | | | | | | | | | |
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Utilities Installation | 5 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Streets and Parking | 8 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total, Offsite, over 3 months, running | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| Total Onsite, over 3 months, running | | | | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.06 | 0.05 | 0.02 | 0.14 | 0.25 | 0.36 | 0.36 | 0.25 | 0.18 | 0.07 | 0.07 | 0.03 | 0.03 | 0.02 |
| TOTAL, over 3 months, running | | | | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.06 | 0.05 | 0.02 | 0.14 | 0.25 | 0.36 | 0.37 | 0.26 | 0.19 | 0.08 | 0.08 | 0.04 | 0.03 | 0.02 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Tuolumne County Peak Qrtr: NOx Emissions, tons

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.01 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.01 | 0.01 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.02 | 0.02 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 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 |
| Streets and Parking | 8 | 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 | 0.06 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 |
| Total, Offsite, over 3 months, running | • | • | | 0.04 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.05 | 0.03 | 0.04 | 0.05 | 0.04 | 0.10 | 0.14 | 0.40 | 0.33 | 0.29 | 0.04 | 0.04 | 0.03 |
| Total Onsite, over 3 months, running | | | | 0.42 | 0.68 | 0.89 | 1.13 | 1.25 | 1.01 | 0.78 | 0.32 | 0.43 | 0.54 | 0.54 | 0.60 | 0.55 | 0.71 | 0.62 | 0.75 | 0.60 | 0.52 | 0.32 |
| TOTAL, over 3 months, running | | | • | 0.46 | 0.73 | 0.94 | 1.17 | 1.29 | 1.06 | 0.82 | 0.36 | 0.47 | 0.59 | 0.58 | 0.70 | 0.69 | 1.10 | 0.96 | 1.04 | 0.64 | 0.55 | 0.35 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.





Table 2 - Peak Offsite EmissionsNovember 9, 2020

Tuolumne County Peak Qrtr: CO Emissions, tons

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 0.01 | 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 0.01 | 0.01 | 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 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 0.00 | 0.00 | 0.01 | 0.01 | 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 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 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 |
| Utilities Installation | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Streets and Parking | 8 | 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 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 |
| Total, Offsite, over 3 months, running | l | | | 0.04 | 0.05 | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 | 0.03 | 0.04 | 0.05 | 0.05 | 0.06 | 0.04 | 0.08 | 0.06 | 0.06 | 0.02 | 0.02 | 0.02 |
| Total Onsite, over 3 months, running | | | | 0.46 | 0.92 | 1.27 | 1.55 | 1.74 | 1.46 | 1.18 | 0.54 | 0.83 | 1.12 | 1.22 | 1.31 | 1.11 | 1.23 | 0.95 | 1.12 | 0.88 | 0.78 | 0.50 |
| TOTAL, over 3 months, running | | | | 0.51 | 0.96 | 1.31 | 1.60 | 1.78 | 1.51 | 1.23 | 0.57 | 0.87 | 1.17 | 1.28 | 1.37 | 1.16 | 1.31 | 1.01 | 1.18 | 0.90 | 0.80 | 0.52 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.

Tuolumne County Peak Qrtr: PM₁₀ Emissions, tons

| | | | | | | | | | | | | Month | | | | | | | | | | |
|--------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Jan-21 | Feb-21 | Mar-21 | Apr-21 | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | May-22 | Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| Activity | Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Mobilization/Staging | 1 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demolition | 2 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Bridge Construction | 3 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Clear/Grub and Rough Grading | 4 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Utilities Installation | 5 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage | 6 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Trenching | 7 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Streets and Parking | 8 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving | 9 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 11 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Building and Tent Cabin Construction | 12 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total, over 3 months, running | | | | 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 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| Total Onsite, over 3 months, running | | • | | 0.01 | 0.02 | 0.03 | 0.04 | 0.04 | 0.04 | 0.03 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.01 |
| TOTAL, over 3 months, running | | | | 0.016 | 0.025 | 0.032 | 0.041 | 0.045 | 0.036 | 0.028 | 0.012 | 0.016 | 0.020 | 0.020 | 0.023 | 0.023 | 0.034 | 0.030 | 0.034 | 0.022 | 0.019 | 0.012 |

Notes:

Green text and green highlighted cells indicate a number greater than zero.





Table 3 - Offsite Emissions Calculations November 9, 2020

| | | | | | | | Emissio | n Factors (lbs | s/mile) | | | | | | | | | Pe | eak Day Emis | ssions, lbs/c | day | | | Pea | ak Quarter E | missions, to | ons | | | | | Total E | missions, | Tons | | | |
|---|----------------------------------|----------|----------------------|----------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|------|-------------------|------------------|--------------------------------|--------------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------|-----|
| | | | | | | | | | | | | | Peak Day Round | Average Round | Length of | | | | | | | | | | | | | | | | | | | | | | |
| A | Source | Activity | Vehicle | ROG | со | NO _x | SO ₂ | PM ₁₀ | PM ₂ s | N2O | CH4 | CO2 | Trips per | Trips per | Round Trip | 1 | ROG | со | NO _x | SO ₂ | DAA | PM _{2.5} | ROG | со | NO _χ | SO ₂ | PM ₁₀ | PM _{2.5} | ROG | со | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | N2O | CH4 | C |
| Activity/Source | Jource | Code | Туре | KOG | CO | NO _X | 302 | PIVI ₁₀ | PIVI _{2.5} | NZO | CH4 | COZ | day | day | (miles) | days | ROG | to | NO _X | 302 | PM ₁₀ | PIVI _{2.5} | ROG | to | NO _X | 302 | FIVI ₁₀ | F1V1 _{2.5} | ROG | to | NOX | 302 | PIVI ₁₀ | PIVI _{2.5} | NZU | СП4 | |
| Concrete - Within Tuolumne County | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobilization/Staging Demolition | Trucks - Heavy Trucks - Heavy | 2 | T7tc-d55 T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 0.00021 | 0.00047 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 30.0 | 20 15 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Bridge Construction | Trucks - Heavy | 3 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 3.0 | 3.0 | 30.0 | 30 | 0.03 | 0.00 | 0.90 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Clear/Grub and Rough Grading | Trucks - Heavy | 4 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 70 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Utilities Installation | Trucks - Heavy | 5 | T7tc-d55 | 0.00030 | 0.00120 | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 1.0 | 1.0 | 30.0 | 120 | 0.01 | 0.04 | 0.30 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5 |
| Drainage Trenching | Trucks - Heavy Trucks - Heavy | 6 7 | T7tc-d55 T7tc-d55 | 0.00030 | 0.00120 | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 30.0 | 70 15 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Streets and Parking | Trucks - Heavy | 8 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 40 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Paving | Trucks - Heavy | 9 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 5 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Curb, Gutter, Sidewalks and Flatwork andscaping | Trucks - Heavy Trucks - Heavy | 10 11 | T7tc-d55 T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 50.0 | 50.0 | 30.0 30.0 | 15 40 | 0.45 | 1.81 0.00 | 14.99 0.00 | 0.04 | 0.33 | 0.32 | 0.01 | 0.05 | 0.45 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | _ |
| Building and Tent Cabin Construction | Trucks - Heavy | 12 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 1.0 | 1.0 | 30.0 | 70 | 0.00 | 0.04 | 0.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - |
| | | | <u> </u> | | | 1 | | | 1 | | ı. | | | Maximum | Within Tuolu | ımne County | 0.45 | 1.81 | 14.99 | 0.04 | 0.33 | 0.32 | 0.01 | 0.05 | 0.45 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 33 |
| | | | | | | | | | | | | | | Total | Within Tuolu | ımne County | / | | | | | | | | | | | | 0.00 | 0.02 | 0.15 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 40 |
| Baserock and Sand - Within Tuolumne | T | 1 | | 1 | T | T | 1 | T | T | | | 1 | l I | Т | T | T | 1 | 1 | 1 | | П | Т | | 1 | | 1 | | 1 1 | 1 | 1 1 | I I | | 1 | Т | T | | |
| County | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobilization/Staging | Trucks - Heavy | 1 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 20 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Demolition | Trucks - Heavy | 2 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 15 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Bridge Construction Clear/Grub and Rough Grading | Trucks - Heavy Trucks - Heavy | 3 | T7tc-d55 T7tc-d55 | 0.00030 | 0.00120 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 30.0 | 30 70 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | + |
| Utilities Installation | Trucks - Heavy | 5 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 120 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| rainage | Trucks - Heavy | 6 | T7tc-d55 | 0.00030 | | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 70 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Frenching | Trucks - Heavy | 7 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 15 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 1 |
| Streets and Parking Paving | Trucks - Heavy Trucks - Heavy | 8 9 | T7tc-d55 T7tc-d55 | 0.00030 | 0.00120 0.00120 | | 0.00003 | 0.00022 | 0.00021 0.00021 | 0.00047 0.00047 | 0.00001 0.00001 | 3.0 | 16.0 0.0 | 16.0 0.0 | 30.0 30.0 | 40 5 | 0.14 | 0.58 | 4.80 0.00 | 0.01 | 0.11 | 0.10 | 0.00 | 0.02 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Curb, Gutter, Sidewalks and Flatwork | Trucks - Heavy | 10 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 2.0 | 2.1 | 30.0 | 15 | 0.02 | 0.07 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| andscaping | Trucks - Heavy | 11 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 40 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | |
| uilding and Tent Cabin Construction | Trucks - Heavy | 12 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 Within Tuolur | 70 | 0.00 : 0.14 | 0.00 0.58 | 0.00 4.80 | 0.00 0.01 | 0.00 0.11 | 0.00 0.10 | 0.00 0.00 | 0.00 0.02 | 0.00 0.14 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 0.01 | 0.00 0.10 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | _ |
| | | | | | | | | | | | | | | | Within Tuolur Within Tuolur | | _ | 0.30 | 4.60 | 0.01 | 0.11 | 0.10 | 0.00 | 0.02 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| sphalt - Within Tuolumne County | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mobilization/Staging | Trucks - Heavy | 1 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 20 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Demolition | Trucks - Heavy | 2 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 15 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | +- |
| Bridge Construction | Trucks - Heavy | 3 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 30 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Clear/Grub and Rough Grading Utilities Installation | Trucks - Heavy Trucks - Heavy | 4 5 | T7tc-d55 T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 30.0 | 70 120 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| rainage | Trucks - Heavy | 6 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 70 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | + |
| renching | Trucks - Heavy | 7 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 15 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| treets and Parking | Trucks - Heavy | 8 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 2.0 | 1.0 | 30.0 | 40 | 0.02 | 0.07 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Paving Curb, Gutter, Sidewalks and Flatwork | Trucks - Heavy Trucks - Heavy | 9 10 | T7tc-d55 T7tc-d55 | 0.00030 | 0.00120 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 0.00021 | 0.00047 0.00047 | 0.00001 | 3.0 | 24.0 0.0 | 23.1 0.0 | 30.0 30.0 | 5 15 | 0.21 | 0.87 | 7.20 0.00 | 0.02 | 0.16 | 0.15 | 0.01 | 0.03 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Landscaping | Trucks - Heavy | 11 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 40 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | C |
| Building and Tent Cabin Construction | Trucks - Heavy | 12 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 0.0 | 0.0 | 30.0 | 70 | 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 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| | | | | | | | | | | | | | | | Nithin Tuolur Nithin Tuolur | | _ | 0.87 | 7.20 | 0.02 | 0.16 | 0.15 | 0.01 | 0.03 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| | | | | | | | | | | | | | | rotari | Within Tuolul | mine County. | • | | | | | | | | | | | | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Ė |
| Equipment and Supplies - Within Tuolumne | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Г |
| County Mobilization/Staging | Trucks - Heavy | 1 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 2.0 | 1.4 | 30.0 | 20 | 0.02 | 0.07 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | + |
| Demolition | Trucks - Heavy | 2 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 3.0 | 2.1 | 30.0 | 20 15 | 0.02 | 0.07 0.11 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Bridge Construction | Trucks - Heavy | 3 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 3.0 | 2.1 | 30.0 | 30 | 0.03 | 0.11 | 0.90 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| Clear/Grub and Rough Grading | Trucks - Heavy | 4 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 3.0 | 2.1 | 30.0 | 70 | 0.03 | 0.11 | 0.90 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | | 0.00 | | 0.00 | 0.00 | _ |
| tilities Installation rainage | Trucks - Heavy Trucks - Heavy | 5 6 | T7tc-d55 T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 0.00047 | 0.00001 | 3.0 | 2.0 | 2.0 | 30.0 30.0 | 120 70 | 0.02 | 0.07 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| renching | Trucks - Heavy | 7 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 2.0 | 2.0 | 30.0 | 15 | 0.02 | 0.07 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| reets and Parking | Trucks - Heavy | 8 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 3.0 | 2.1 | 30.0 | 40 | 0.03 | 0.11 | 0.90 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| aving | Trucks - Heavy | 9 | T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 2.0 | 2.0 | 30.0 | 5 | 0.02 | 0.07 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | 0.00 | _ |
| urb, Gutter, Sidewalks and Flatwork | Trucks - Heavy Trucks - Heavy | 10 11 | T7tc-d55 T7tc-d55 | 0.00030 | | | 0.00003 | 0.00022 | 0.00021 0.00021 | 0.00047 0.00047 | 0.00001 0.00001 | 3.0 | 2.0 3.0 | 2.0 | 30.0 30.0 | 15 40 | 0.02 | 0.07 0.11 | 0.60 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - |
| ilding and Tent Cabin Construction | Trucks - Heavy | 12 | T7tc-d55 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 3.0 | 3.0 | 2.1 | 30.0 | 70 | 0.03 | 0.11 | 0.90 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| | | | | | | | | | | | | | | | Nithin Tuolur | | _ | 0.11 | 0.90 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | | 0.00 | | 0.00 | 0.00 | _ |
| | | | | | | | | | | | | | | Total | Nithin Tuolur | mne County | : [| | | | | | | | | | | | 0.00 | 0.02 | 0.15 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | F |
| uto and Light Truck Within Tuolumne | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | f |
| ounty | <u> </u> | | | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | | | | <u> </u> | <u> </u> | | <u></u> | <u> </u> | <u> </u> | | | | | | | | | | <u> </u> | | <u> </u> | | | | | | | 1 |
| Nobilization/Staging | Trucks - Light | 1 | LDT2-d | 0.00003 | | 0.00021 | 0.00001 | | 0.00001 | 0.00009 | 0.00000 | | 2.0 | 2.0 | 50.0 | 20 | 0.00 | 0.02 | 0.02 | 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 | _ |
| Mobilization/Staging | Autos | 1 | LDA-g | 0.00013 | | | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 5.0 | 5.0 | 50.0 | 20 | 0.03 | 0.88 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | | 0.00 | | 0.00 | 0.00 | _ |
| emolition emolition | Trucks - Light Autos | 2 | LDT2-d LDA-g | 0.00003 | 0.00023 0.00353 | 0.00021 0.00025 | 0.00001 0.00001 | 0.00001 0.00001 | 0.00001 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 5.0 | 2.0 5.0 | 50.0 50.0 | 15 15 | 0.00 | 0.02 0.88 | 0.02 | 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 | 0.00 | - |
| ridge Construction | Trucks - Light | 3 | LDT2-d | 0.00013 | | | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 30 | 0.00 | 0.02 | 0.02 | 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 | _ |
| ridge Construction | Autos | 3 | LDA-g | 0.00013 | | | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 5.0 | 5.0 | 50.0 | 30 | 0.03 | 0.88 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| ear/Grub and Rough Grading | Trucks - Light | 4 | LDT2-d | 0.00003 | 0.00023 | | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 70 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | _ |
| ear/Grub and Rough Grading tilities Installation | Autos Trucks - Light | 4 5 | LDA-g LDT2-d | 0.00013 | 0.00353 | 0.00025 0.00021 | 0.00001 0.00001 | 0.00001 0.00001 | 0.00001 0.00001 | 0.00002 | 0.00003 | 0.99 | 5.0 2.0 | 5.0 2.0 | 50.0 50.0 | 70 120 | 0.03 | 0.88 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | _ |
| anacs installation | Trucks - Light | | LD12-U | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00003 | 0.00000 | 0.50 | 2.0 | 2.0 | 50.0 | 120 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 1 3 |

Project Number: 2002-4721



Table 3 - Offsite Emissions Calculations November 9, 2020

| | | | | | | | Emissio | n Factors (lb | s/mile) | | | | | | | | | Pe | ak Day Emi | ssions, lbs/ | day | | | Pea | ak Quarter I | Emissions, t | ons | | | | | Total | Emissions, | , Tons | | | |
|--------------------------------------|----------------|------------------|-----------------|---------|---------|-----------------|---------|------------------|-------------------|---------|---------|------|---------------------------------------|--------------------------------------|-----------------------------------|-------------|------|------|-----------------|-----------------|------------------|-------------------|------|------|-----------------|-----------------|------------------|-------------------|------|------|-----------------|-----------------|------------------|-------------------|------|------|-------|
| Activity/Source | Source | Activity Code | Vehicle Type | ROG | со | NO _x | SO₂ | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | Peak Day Round Trips per day | Average Round Trips per day | Length of Round Tri (miles) | Duration, | ROG | со | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | ROG | со | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | ROG | со | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 |
| Concrete - Within Tuolumne County | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Utilities Installation | Autos | 5 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 5.0 | 5.0 | 50.0 | 120 | 0.03 | 0.88 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.83 |
| Drainage | Trucks - Light | 6 | LDT2-d | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 70 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 2.04 |
| Drainage | Autos | 6 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 5.0 | 5.0 | 50.0 | 70 | 0.03 | 0.88 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.65 |
| Trenching | Trucks - Light | 7 | LDT2-d | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 15 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 0.44 |
| Trenching | Autos | 7 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 2.0 | 2.0 | 50.0 | 15 | 0.01 | 0.35 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.74 |
| Streets and Parking | Trucks - Light | 8 | LDT2-d | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 40 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 1.17 |
| Streets and Parking | Autos | 8 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 2.0 | 2.0 | 50.0 | 40 | 0.01 | 0.35 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.98 |
| Paving | Trucks - Light | 9 | LDT2-d | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 5 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 0.15 |
| Paving | Autos | 9 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 2.0 | 2.0 | 50.0 | 5 | 0.01 | 0.35 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 |
| Curb, Gutter, Sidewalks and Flatwork | Trucks - Light | 10 | LDT2-d | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 15 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 0.44 |
| Curb, Gutter, Sidewalks and Flatwork | Autos | 10 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 5.0 | 5.0 | 50.0 | 15 | 0.03 | 0.88 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.85 |
| Landscaping | Trucks - Light | 11 | LDT2-d | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 40 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 1.17 |
| Landscaping | Autos | 11 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 2.0 | 2.0 | 50.0 | 40 | 0.01 | 0.35 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.98 |
| Building and Tent Cabin Construction | Trucks - Light | 12 | LDT2-d | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58 | 2.0 | 2.0 | 50.0 | 70 | 0.00 | 0.02 | 0.02 | 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 | 0.00 | 2.04 |
| Building and Tent Cabin Construction | Autos | 12 | LDA-g | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.99 | 2.0 | 2.0 | 50.0 | 70 | 0.01 | 0.35 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.46 |
| | | • | | • | • | • | • | • | • | • | • | | | Maximum I | Nithin Tuolu | mne County: | 0.03 | 0.88 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.83 |
| | | | | | | | | | | | | | | Total I | Nithin Tuolu | mne County: | | | | | | | | | | | | | 0.01 | 0.19 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 65.32 |
| | | | | | | | | | | | | | | Maximum | Nithin Tuoli | mne County: | 0.45 | 1.81 | 14.99 | 0.04 | 0.33 | 0.32 | 0.01 | 0.05 | 0.45 | 0.00 | 0.01 | 0.01 | 0.00 | 0.05 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 33.52 |
| | | | | | | | | | | | | | | | | mne County: | 0.43 | 1.01 | 14.33 | 0.04 | 0.33 | 0.32 | 0.01 | 0.03 | 0.43 | 0.00 | 0.01 | 0.01 | 0.02 | 0.03 | 0.45 | 0.00 | 0.01 | 0.01 | | 0.00 | |

Notes:

1. Length of trip is assumed to be round trip distances within Tuolumne County.

2. CalEEMod Tuolumne County commute distance 25 miles OW 3. Distance to Asphalt Plant 15 miles OW 4. Distance to Sand and Gravel:
5. Distance (Equipment) 15 miles OW 15 miles OW

Project Number: 2002-4721 Page 2 of 2

Table 4 - Construction Equipment Emission Calculations

November 9, 2020

| | | | | | | | | | | | Emission | Factors (g | /bhp-hr) | ** | | | | | Emission | s (lb/day) | | | | | | Tota | al Emission (1 | tons) | | | | Gallons |
|--|--|---|---|---|---|---|---|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|
| | Activity | | Load | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Equipment | Code | ВНР | Factor | Hours per Day* | Number Pea | ak Day 7 | Total Days | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2,5} | N2O | CH4 | CO2 | ROG | со | NO _x | so _x | PM ₁₀ | PM _{2.5} | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2,5} | N2O | CH4 | CO2 | Fuel Use |
| Mobilization/Staging | | | | | | | • | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asphalt Fugitive | 1 | | | 0 | 0 | 1 | 20 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 1 | 75 | 0.37 | 2 | 1 | 1 | 20 | | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.3 | 0.01 | 0.45 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.63 | 56.72 |
| Bulldozer-1 Bulldozer-2 | 1 | 173 440 | 0.43 | 1 | 1 | 1 | 20 20 | 0.120 0.120 | 3.700 2.600 | 2.320 | 0.005 | 0.112 | 0.112 | 0.004 | 0.153 0.154 | 506.0 510.3 | 0.02 0.05 | 1.06 | 0.38 | 0.00 | 0.02 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.83 2.08 | 76.03 188.87 |
| Compactor | 1 | 129 | 0.42 | 4 | | 1 | 20 | | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.134 | 491.9 | 0.06 | 1.24 | 1.11 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.35 | 221.49 |
| Concrete Mixer | 1 | 45 | 0.56 | 0 | 0 | 1 | 20 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 |
| Crane | 1 | 180 | 0.29 | 0 | 0 | 1 | 20 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 507.2 | 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 |
| Excavator | 1 | 204 | 0.38 | 0 | 0 | 1 | 20 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.152 | 504.3 | 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 |
| Hual Truck Paver | 1 | 713 225 | 0.38 | 0 | 0 | 1 | 20 20 | 0.120 | 2.600 | 2.320 0.260 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 0.153 | 508.4 508.1 | 0.07 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.04 0.00 | 276.90 0.00 |
| Road Grader | 1 | 244 | 0.41 | 0 | 0 | 1 | 20 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.7 | 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 |
| Scraper | 1 | 330 | 0.48 | 0 | 0 | 1 | 20 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 506.4 | 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 |
| Skidsteer | 1 | 71 | 0.37 | 6 | t t | 1 | 20 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.76 | 161.09 |
| Slurry Mixer | 1 | 60 200 | 0.56 0.38 | 0 | 1 | 1 | 20 20 | | 0.000 2.200 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 0.153 | 568.3 508.4 | 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 77.67 |
| Water truck Sub Total | 1 | 200 | 0.56 | 1 | | 1 | 20 | 0.060 | 2.200 | 0.260 | 0.003 | 0.008 | 0.008 | 0.004 | 0.155 | 306.4 | 0.01 | 0.37 6.57 | 4.85 | 0.00 | 0.00 | 0.00 0.15 | 0.00 0.00 | 0.00 | 0.05 | 0.00 | 0.00 0.00 | 0.00 | 0.00 | 0.00 | 11.53 | 1,058.76 |
| | 1 | | | | \vdash | | | | | | | | | | | | 3.23 | 3.37 | ,,,,, | 3.01 | 5.15 | 5.13 | 2.00 | 2.07 | 5.05 | 5.00 | 3.00 | 3.00 | 3.00 | 0.00 | | _,030.70 |
| Demolition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asphalt Fugitive | 2 | | | 0 | 0 | 1 | 15 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 2 | 75 | 0.37 | 4 | | 1 | 15 | | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.3 | 0.01 | 0.91 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.94 | 85.08 |
| Bulldozer-1 Bulldozer-2 | 2 | 173 310 | 0.43 | 6 0 | 0 | 1 | 15 15 | | 3.700 2.600 | 2.320 | 0.005 | 0.112 | 0.112 | 0.004 | 0.153 0.154 | 506.0 510.3 | 0.12 | 0.00 | 2.28 0.00 | 0.00 | 0.11 | 0.11 | 0.00 | 0.03 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.73 0.00 | 342.12 0.00 |
| Compactor | 2 | 717 | 0.43 | 0 | - | 1 | 15 | | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.154 | 491.9 | 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 |
| Concrete Mixer | 2 | 45 | 0.56 | 0 | ļ | 1 | 15 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 |
| Crane | 2 | 180 | 0.29 | 0 | 0 | 1 | 15 | | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 507.2 | 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 |
| Excavator | 2 | 204 | 0.38 | 6 | 1 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.152 | 504.3 | 0.06 | 2.26 | 0.27 | 0.01 | 0.01 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.88 | 356.51 |
| Hual Truck | 2 | 713 | 0.38 | 6 | 1 | 1 | 15 | | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 508.4 | 0.43 | 9.32 | 8.31 | 0.02 | 0.32 | 0.32 | 0.00 | 0.07 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.67 | 1,246.05 |
| Paver | 2 | 225 | 0.42 | 0 | 0 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.1 | 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 |
| Road Grader Scraper | 2 | 244 330 | 0.41 | 0 | 0 | 1 | 15 15 | | 2.200 | 0.260 2.320 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 0.153 | 511.7 506.4 | 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 |
| Skidsteer | 2 | 71 | 0.48 | 6 | + | 1 | 15 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.32 | 120.82 |
| Slurry Mixer | 2 | 60 | 0.56 | 0 | 0 | 1 | 15 | | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 |
| Water truck | 2 | 200 | 0.38 | 6 | 1 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.06 | 2.21 | 0.26 | 0.01 | 0.01 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.83 | 349.52 |
| Sub Total | | | | | | | | | | | | | | | | | 0.73 | 19.62 | 12.14 | 0.04 | 0.45 | 0.45 | 0.01 | 0.15 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 27.4 | 2,500.11 |
| Bridge Construction | | | | | \vdash | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asphalt Fugitive | 3 | | | 0 | 0 | 1 | 30 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 3 | 75 | 0.37 | 4 | 1 | 1 | 40 | 0.060 | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.3 | 0.01 | 0.91 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.50 | 226.88 |
| Bulldozer-1 | 3 | 173 | 0.43 | 0 | 0 | 1 | 30 | 0.120 | 0.700 | 0.000 | 0.005 | 0.112 | 0.112 | 0.004 | | EOC O | 0.00 | | | 0.00 | | 0.00 | 0.00 | | | 0.00 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Bulldozer-2 | 3 | 310 | 0.43 | 0 | _ | | | | 3.700 | 2.320 | 0.005 | 0.112 | 0.112 | 0.004 | 0.153 | 506.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | | |
| Compactor | 3 | | | | 0 | 1 | 50 | | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.154 | 510.3 | 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 |
| Crano | 2 | 717 | 0.37 | 1 | 1 | 1 | 50 | 0.120 | 2.600 2.600 | 2.320 2.320 | 0.005 0.005 | 0.088 | 0.088 | 0.004 0.004 | 0.154 0.148 | 510.3 491.9 | 0.00 0.07 | 0.00 1.52 | 0.00 1.36 | 0.00 | 0.00 0.05 | 0.00 0.05 | 0.00 | 0.00 0.04 | 0.00 0.03 | 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 | 0.00 | 7.19 | 677.82 |
| | 3 | 45 | 0.56 | 1 6 | 1 1 | 1 1 | 50 50 | 0.120 0.000 | 2.600 2.600 0.000 | 2.320 2.320 0.000 | 0.005 0.005 0.007 | 0.088 0.088 0.000 | 0.088 0.088 0.000 | 0.004 0.004 0.004 | 0.154 0.148 0.119 | 510.3 491.9 568.3 | 0.00 0.07 0.00 | 0.00 1.52 0.00 | 0.00 1.36 0.00 | 0.00 0.00 0.00 | 0.00 0.05 0.00 | 0.00 0.05 0.00 | 0.00 0.00 0.00 | 0.00 0.04 0.00 | 0.00 0.03 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 | 7.19 4.74 | 677.82 386.32 |
| Crane Excavator | 3 3 3 | 45 180 | 0.56 0.29 | 1 6 4 | 1 1 1 | 1 | 50 | 0.120 0.000 0.120 | 2.600 2.600 0.000 2.600 | 2.320 2.320 0.000 2.320 | 0.005 0.005 0.007 0.005 | 0.088 0.088 0.000 0.088 | 0.088 0.088 0.000 0.088 | 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 | 510.3 491.9 568.3 507.2 | 0.00 0.07 0.00 0.06 | 0.00 1.52 0.00 1.20 | 0.00 1.36 0.00 1.07 | 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 | 0.00 0.05 0.00 0.04 | 0.00 0.00 0.00 0.00 | 0.00 0.04 0.00 0.02 | 0.00 0.03 0.00 0.02 | 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 | 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 | 677.82 386.32 426.79 |
| Excavator Hual Truck | 3 | 45 | 0.56 | 1 6 | 1 1 1 1 | 1 1 1 | 50 50 40 | 0.120 0.000 0.120 0.060 | 2.600 2.600 0.000 | 2.320 2.320 0.000 | 0.005 0.005 0.007 | 0.088 0.088 0.000 | 0.088 0.088 0.000 | 0.004 0.004 0.004 | 0.154 0.148 0.119 | 510.3 491.9 568.3 | 0.00 0.07 0.00 | 0.00 1.52 0.00 | 0.00 1.36 0.00 | 0.00 0.00 0.00 | 0.00 0.05 0.00 | 0.00 0.05 0.00 | 0.00 0.00 0.00 | 0.00 0.04 0.00 | 0.00 0.03 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 | 7.19 4.74 | 677.82 386.32 |
| Excavator | 3 | 45 180 204 | 0.56 0.29 0.38 | 1 6 4 6 | 1 1 1 1 1 | 1 1 1 1 | 50 50 40 40 | 0.120 0.000 0.120 0.060 0.120 | 2.600 2.600 0.000 2.600 2.200 | 2.320 2.320 0.000 2.320 0.260 | 0.005 0.005 0.007 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 | 0.088 0.088 0.000 0.088 0.008 | 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 | 510.3 491.9 568.3 507.2 504.3 | 0.00 0.07 0.00 0.06 0.06 | 0.00 1.52 0.00 1.20 2.26 | 0.00 1.36 0.00 1.07 0.27 | 0.00 0.00 0.00 0.00 0.01 | 0.00 0.05 0.00 0.04 0.01 | 0.00 0.05 0.00 0.04 0.01 | 0.00 0.00 0.00 0.00 0.00 | 0.00 0.04 0.00 0.02 0.05 | 0.00 0.03 0.00 0.02 0.01 | 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 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 | 677.82 386.32 426.79 950.71 |
| Excavator Hual Truck Paver Road Grader | 3 3 3 3 3 | 45 180 204 713 225 244 | 0.56 0.29 0.38 0.38 0.42 0.41 | 1 6 4 6 2 0 | 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 | 1 1 1 1 1 1 1 | 50 50 40 40 40 40 40 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 | 2.600 2.600 0.000 2.600 2.200 2.600 2.200 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.088 0.008 | 0.088 0.000 0.088 0.008 0.008 0.088 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 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 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 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 |
| Excavator Hual Truck Paver Road Grader Scraper | 3 3 3 3 3 3 | 45 180 204 713 225 244 330 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 | 1 6 4 6 2 0 0 | 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 40 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 | 2.600 2.600 0.000 2.600 2.200 2.600 2.200 2.200 2.600 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 | 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 | 0.088 0.000 0.088 0.008 0.008 0.088 0.008 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.154 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 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 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer | 3 3 3 3 3 3 3 | 45 180 204 713 225 244 330 71 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 | 1 6 4 6 2 0 0 0 | 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 | 2.600 2.600 0.000 2.600 2.200 2.600 2.200 2.200 2.200 2.600 3.700 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 2.320 2.740 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 | 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 | 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.154 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 | 0.00 0.07 0.00 0.06 0.14 0.00 0.00 0.00 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 0.00 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.95 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 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 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 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 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 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 0.00 0.00 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 241.63 |
| Excavator Hual Truck Paver Road Grader Scraper | 3 3 3 3 3 3 | 45 180 204 713 225 244 330 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 | 1 6 4 6 2 0 0 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 40 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.120 0.120 | 2.600 2.600 0.000 2.600 2.200 2.600 2.200 2.200 2.600 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 | 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 | 0.088 0.000 0.088 0.008 0.008 0.088 0.008 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.154 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 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 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer | 3 3 3 3 3 3 3 3 | 45 180 204 713 225 244 330 71 60 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 | 1 6 4 6 2 0 0 0 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 40 30 15 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.120 0.120 | 2.600 2.600 0.000 2.600 2.200 2.200 2.200 2.200 2.600 3.700 0.000 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 2.740 0.000 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 0.00 1.29 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.00 0.95 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 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 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.00 0.01 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 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 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 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 0.00 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 241.63 0.00 699.05 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck | 3 3 3 3 3 3 3 3 | 45 180 204 713 225 244 330 71 60 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 | 1 6 4 6 2 0 0 0 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 40 30 15 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.120 0.120 | 2.600 2.600 0.000 2.600 2.200 2.200 2.200 2.200 2.600 3.700 0.000 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 2.740 0.000 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 0.00 0.00 0.04 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 0.00 1.29 0.00 2.21 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.00 0.95 0.00 0.26 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 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 0.00 0.00 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.00 0.01 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 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 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 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 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 0.00 7.67 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 241.63 0.00 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading | 3 3 3 3 3 3 3 3 3 3 | 45 180 204 713 225 244 330 71 60 200 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 | 1 6 4 6 2 0 0 0 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.120 0.120 0.120 0.120 0.000 0.000 | 2.600 2.600 0.000 2.600 2.200 2.200 2.200 2.200 2.600 3.700 0.000 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 0.260 0.260 2.320 0.000 0.260 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.088 0.008 0.008 0.008 0.008 0.008 | 0.088 0.008 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 508.4 | 0.00 0.07 0.00 0.06 0.14 0.00 0.00 0.00 0.00 0.04 0.00 0.06 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 0.00 1.29 0.00 2.21 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.00 0.00 0 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.22 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.01 | 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 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.02 0.03 0.24 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.00 0.01 0.00 0.00 0.01 | 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 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 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 0.0 | 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 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 0.00 7.67 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 241.63 0.00 699.05 4,716.79 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive | 3 3 3 3 3 3 3 3 3 3 3 | 45 180 204 713 225 244 330 71 60 200 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 | 1 6 4 6 2 0 0 0 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.120 0.120 0.000 0.000 0.060 | 2.600 2.600 0.000 2.600 2.200 2.200 2.200 2.200 2.600 3.700 0.000 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 2.740 0.000 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.008 | 0.088 0.088 0.000 0.088 0.008 0.088 0.008 0.008 0.008 0.008 0.000 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 0.153 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 508.3 508.4 | 0.00 0.07 0.00 0.06 0.14 0.00 0.00 0.00 0.00 0.04 0.00 0.06 0.45 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 1.29 1.248 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.00 0.95 0.00 0.26 6.74 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 0.00 0.01 0.22 | 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 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.00 0.02 0.03 0.24 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.01 0.00 0.01 | 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 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 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 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 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 0.00 7.67 51.89 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 241.63 0.00 699.05 4,716.79 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive Backhoe | 3 3 3 3 3 3 3 3 3 3 | 45 180 204 713 225 244 330 71 60 200 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 | 1 6 4 6 2 0 0 0 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 70 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.120 0.000 0.000 0.20 0.000 0.20 0.20 0.20 0.20 0.20 0.000 0.20 | 2.600 2.600 0.000 2.600 2.200 2.600 2.200 2.200 2.200 0.000 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 2.740 0.000 0.260 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.000 0.000 | 0.088 0.088 0.000 0.088 0.008 0.088 0.008 0.008 0.008 0.008 0.000 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 0.153 0.153 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 508.3 508.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 0.00 0.04 0.00 0.06 0.45 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 1.29 1.248 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.95 0.00 0.26 6.74 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 0.01 0.22 | 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 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.02 0.00 0.03 0.24 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.00 0.01 0.00 0.00 0.01 | 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 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 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 0.00 0.0 | 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 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 0.00 7.67 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 0.00 241.63 0.00 699.05 4,716.79 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive | 3 3 3 3 3 3 3 3 3 3 4 4 4 | 45 180 204 713 225 244 330 71 60 200 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 | 1 6 4 6 2 0 0 0 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.060 0.120 0.000 0.000 0.060 0.060 0.060 0.060 0.060 0.060 0.060 | 2.600 2.600 0.000 2.600 2.200 2.200 2.200 2.200 2.600 3.700 0.000 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 2.740 0.000 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.008 | 0.088 0.088 0.000 0.088 0.008 0.088 0.008 0.008 0.008 0.008 0.000 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 0.153 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 508.3 508.4 | 0.00 0.07 0.00 0.06 0.14 0.00 0.00 0.00 0.00 0.04 0.00 0.06 0.45 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 1.29 1.248 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.00 0.95 0.00 0.26 6.74 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.01 0.03 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 0.00 0.01 0.22 | 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 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.00 0.02 0.03 0.24 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.00 0.14 | 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 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 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 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 0.00 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 0.00 7.67 51.89 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 241.63 0.00 699.05 4,716.79 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive Backhoe Bulldozer-1 | 3 3 3 3 3 3 3 3 3 3 4 4 4 4 | 45 180 204 713 225 244 330 71 60 200 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 | 1 6 4 6 2 0 0 0 0 6 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 70 70 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.000 0.000 0.060 0.20 0.060 0.0 | 2.600 2.600 0.000 2.600 2.200 2.200 2.200 2.200 3.700 0.000 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 2.740 0.000 0.260 0.000 0.260 | 0.005 0.005 0.007 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.007 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.00000 0.00000 0 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.154 0.153 0.153 0.119 0.153 0.119 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 508.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 0.04 0.00 0.06 0.45 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 1.29 0.00 2.21 12.48 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.00 0.95 0.00 0.06 6.74 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 0.00 0.00 0.01 0.03 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.22 | 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 0.00 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.02 0.00 0.03 0.24 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.00 0.14 | 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 | 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 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 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 2.64 0.00 7.67 51.89 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 241.63 0.00 699.05 4,716.79 0.00 397.05 1,596.56 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive Backhoe Bulldozer-1 Bulldozer-2 | 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 | 45 180 204 713 225 244 330 71 60 200 75 173 310 717 45 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 0.37 0.43 0.43 0.37 | 1 6 4 6 2 0 0 0 6 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 0 0 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 70 70 70 70 70 | 0.120 0.000 0.120 0.060 0.120 0.060 0.120 0.060 0.120 0.120 0.000 0.600 0.120 0.060 0.120 0.060 0.120 0.060 0.060 0.060 0.060 0.120 0.060 0.060 0.120 0.060 0.060 0.120 0.0000 0.000 0.00000 0.0000 0.0000 0.00000 0.00000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 | 2.600 2.600 2.600 2.600 2.600 2.200 2.600 2.200 2.200 2.600 3.700 0.000 3.700 3.700 2.600 2.600 2.600 0.000 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 2.320 0.000 0.260 0.260 0.260 0.260 2.320 2.740 0.000 0.260 2.320 2.320 2.320 0.260 | 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.000 0.000 0.008 0.000 0.000 0.008 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.000 0.008 0.008 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.153 0.153 0.153 0.119 0.153 0.153 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 508.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 0.00 0.04 0.00 0.06 0.45 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 2.21 12.48 0.00 0.91 3.64 4.58 9.12 0.00 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.95 0.00 0.26 6.74 0.00 0.06 2.28 4.09 8.14 0.00 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.00 0.00 0.03 0.24 0.00 0.03 0.13 0.16 0.32 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 2.64 0.00 7.67 51.89 0.00 4.38 17.43 31.49 60.42 0.00 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 241.63 0.00 699.05 4,716.79 0.00 397.05 1,596.56 2,860.88 5,693.65 0.00 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive Backhoe Bulldozer-1 Bulldozer-2 Compactor Concrete Mixer Crane | 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 | 45 180 204 713 225 244 330 71 60 200 75 173 310 717 45 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 0.37 0.43 0.43 0.37 0.56 0.29 | 1 6 4 6 2 0 0 0 6 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 70 70 70 70 70 70 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.120 0.000 0.000 0.060 0.120 0.060 0.060 0.120 0.060 0.120 | 2.600 2.600 2.600 2.600 2.200 2.600 2.200 2.200 2.600 3.700 0.000 2.200 0.000 3.700 2.600 2.600 2.600 2.600 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 0.260 0.260 0.260 0.260 0.260 2.320 2.740 0.000 0.260 2.320 2.320 2.320 2.320 2.320 2.320 2.320 | 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.008 0.000 0.008 0.000 0.008 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.008 0.112 0.088 0.088 0.008 | 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.153 0.153 0.153 0.119 0.153 0.153 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 508.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.00 0.04 0.00 0.06 0.45 0.00 0.01 0.12 0.21 0.42 0.00 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 2.21 12.48 0.00 0.91 3.64 4.58 9.12 0.00 0.00 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.95 0.00 0.26 6.74 0.00 0.06 2.28 4.09 8.14 0.00 0.00 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.02 0.00 0.00 0.03 0.24 0.00 0.03 0.13 0.16 0.32 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 2.64 0.00 7.67 51.89 0.00 4.38 17.43 31.49 60.42 0.00 0.00 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 241.63 0.00 699.05 4,716.79 0.00 397.05 1,596.56 2,860.88 5,693.65 0.00 0.00 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive Backhoe Bulldozer-1 Bulldozer-2 Compactor Concrete Mixer Crane Excavator | 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 | 45 180 204 713 225 244 330 71 60 200 75 173 310 717 45 180 204 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 0.37 0.43 0.37 0.56 0.29 0.38 | 1 6 4 6 2 0 0 0 6 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 70 70 70 70 70 70 70 70 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.000 0.120 0.000 0.060 0.060 0.120 0.060 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.120 | 2.600 2.600 2.600 2.600 2.200 2.200 2.200 2.200 2.200 3.700 0.000 3.700 3.700 2.200 0.000 2.200 0.000 2.600 0.000 2.600 0.000 2.600 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 0.260 0.260 0.260 0.260 2.320 0.260 2.320 2.740 0.000 0.260 2.320 0.260 0.260 | 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.008 0.000 0.000 0.008 0.000 0.008 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.008 0.008 0.000 0.000 0.008 0. | 0.004 0. | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.153 0.153 0.153 0.119 0.153 0.153 0.153 0.153 0.153 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 508.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.04 0.00 0.06 0.45 0.00 0.01 0.12 0.21 0.42 0.00 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 2.21 12.48 0.00 0.91 3.64 4.58 9.12 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.95 0.00 0.26 6.74 0.00 0.06 2.28 4.09 8.14 0.00 0.00 0.27 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.02 0.00 0.03 0.24 0.00 0.03 0.13 0.16 0.32 0.00 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 2.64 0.00 7.67 51.89 0.00 4.38 17.43 31.49 60.42 0.00 0.00 18.10 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 241.63 0.00 699.05 4,716.79 0.00 397.05 2,860.88 5,693.65 0.00 0.00 1,663.73 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive Backhoe Bulldozer-1 Bulldozer-2 Compactor Concrete Mixer Crane Excavator Hual Truck | 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 | 45 180 204 713 225 244 330 71 60 200 75 173 310 717 45 180 204 713 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 0.37 0.43 0.43 0.37 0.56 0.29 0.38 | 1 6 4 6 2 0 0 0 6 0 6 6 0 6 6 6 6 6 6 6 6 6 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 70 70 70 70 70 70 70 70 70 7 | 0.120 0.000 0.120 0.060 0.120 0.060 0.060 0.120 0.060 0.120 0.000 0.060 0.120 0.060 0.120 0.060 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.120 0.060 0.120 0.000 0.120 0.000 | 2.600 2.600 2.600 2.600 2.200 2.200 2.200 2.200 2.200 3.700 0.000 3.700 3.700 2.200 2.600 2.600 2.600 2.600 2.600 2.600 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 0.260 0.260 0.260 0.260 2.320 2.320 2.320 2.320 2.320 2.320 2.320 2.320 2.320 2.320 2.320 2.320 | 0.005 | 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.112 0.088 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.012 0.008 0.008 0.008 0.008 0.008 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0. | 0.004 | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.153 0.153 0.153 0.119 0.153 0.154 0.154 0.154 0.154 0.154 0.154 0.153 0.154 0.155 0.155 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 508.4 0.000 511.3 506.0 510.3 5491.9 568.3 507.2 504.3 508.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.04 0.00 0.06 0.45 0.00 0.01 0.12 0.21 0.42 0.00 0.00 0.06 0.43 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 2.21 12.48 0.00 0.91 3.64 4.58 9.12 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.95 0.00 0.26 6.74 0.00 0.06 2.28 4.09 8.14 0.00 0.00 0.27 8.31 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.02 0.00 0.03 0.24 0.00 0.03 0.13 0.16 0.32 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 0.00 2.64 0.00 7.67 51.89 0.00 4.38 17.43 31.49 60.42 0.00 0.00 18.10 63.77 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 241.63 0.00 699.05 4,716.79 0.00 397.05 1,596.56 2,860.88 5,693.65 0.00 0.00 1,663.73 5,814.91 |
| Excavator Hual Truck Paver Road Grader Scraper Skidsteer Slurry Mixer Water truck Sub Total Clear/Grub and Rough Grading Asphalt Fugitive Backhoe Bulldozer-1 Bulldozer-2 Compactor Concrete Mixer Crane Excavator | 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 | 45 180 204 713 225 244 330 71 60 200 75 173 310 717 45 180 204 | 0.56 0.29 0.38 0.38 0.42 0.41 0.48 0.37 0.56 0.38 0.37 0.43 0.37 0.56 0.29 0.38 | 1 6 4 6 2 0 0 0 6 0 6 0 6 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 50 50 40 40 40 40 30 15 30 30 30 70 70 70 70 70 70 70 70 | 0.120 0.000 0.120 0.060 0.120 0.060 0.120 0.060 0.120 0.120 0.000 0.060 0.120 0.060 0.120 0.060 0.120 0.120 0.120 0.060 0.120 0.120 0.120 0.120 0.060 0.120 0.000 0.000 0.120 0.120 0.120 0.000 0.120 0.000 0.000 0.120 0.120 0.120 0.000 0.000 0.000 0.120 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0 | 2.600 2.600 2.600 2.600 2.200 2.200 2.200 2.200 2.200 3.700 0.000 3.700 3.700 2.200 0.000 2.200 0.000 2.600 0.000 2.600 0.000 2.600 2.200 | 2.320 2.320 0.000 2.320 0.260 2.320 0.260 0.260 0.260 0.260 0.260 0.260 2.320 0.260 2.320 2.740 0.000 0.260 2.320 0.260 0.260 | 0.005 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.008 0.000 0.000 0.008 0.000 0.008 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00 | 0.088 0.088 0.000 0.088 0.008 0.008 0.008 0.008 0.008 0.000 0.000 0.000 0.000 0.008 0.008 0.000 0.000 0.008 0. | 0.004 0. | 0.154 0.148 0.119 0.153 0.152 0.153 0.153 0.153 0.153 0.153 0.119 0.153 0.153 0.153 0.153 0.153 0.153 0.153 0.153 0.153 | 510.3 491.9 568.3 507.2 504.3 508.4 508.1 511.7 506.4 506.3 568.3 508.4 | 0.00 0.07 0.00 0.06 0.06 0.14 0.00 0.00 0.04 0.00 0.06 0.45 0.00 0.01 0.12 0.21 0.42 0.00 0.00 | 0.00 1.52 0.00 1.20 2.26 3.11 0.00 0.00 1.29 0.00 2.21 12.48 0.00 0.91 3.64 4.58 9.12 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0 | 0.00 1.36 0.00 1.07 0.27 2.77 0.00 0.00 0.00 0.95 0.00 0.26 6.74 0.00 0.06 2.28 4.09 8.14 0.00 0.00 0.27 | 0.00 0.00 0.00 0.00 0.01 0.01 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.05 0.00 0.04 0.01 0.11 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.04 0.00 0.02 0.05 0.06 0.00 0.00 0.02 0.00 0.03 0.24 0.00 0.03 0.13 0.16 0.32 0.00 0.00 0.00 | 0.00 0.03 0.00 0.02 0.01 0.06 0.00 0.00 0.00 0.01 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0 | 7.19 4.74 4.67 10.34 12.15 0.00 0.00 2.64 0.00 7.67 51.89 0.00 4.38 17.43 31.49 60.42 0.00 0.00 18.10 | 677.82 386.32 426.79 950.71 1,107.60 0.00 0.00 241.63 0.00 699.05 4,716.79 0.00 397.05 2,860.88 5,693.65 0.00 0.00 1,663.73 |

Project Number: 2002-4721 Page 1 of 4



Table 4 - Construction Equipment Emission Calculations

November 9, 2020

| | | | | | | | | | | | Emission | Factors (g | g/bhp-hr | ** | | | | | Emission | s (lb/day) | | | | | | Tot | al Emission (| tons) | | | | Gallons |
|-----------------------------|------------------|--|----------------|-----------|--------|----------|------------|--|----------------|--------------------------|------------------------|--|-------------------|-------|-------|--|------|--------------|-----------------|-----------------|------------------|-------------------|------|------|-----------------|--|------------------|-------------------|------|------|--|--------------------|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Faulamont | Activity Code | ВНР | Load Factor | Hours per | Number | Peak Day | Total Dave | ROG | со | NO | 50 | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | ROG | со | NO _x | so | PM ₁₀ | PM _{2.5} | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | Fuel Use |
| Equipment Scraper | 4 | 330 | 0.48 | Day* | 1 | 1 | 70 | 0.120 | 2.600 | NO _x 2.320 | SO _X | 0.088 | 0.088 | 0.004 | 0.153 | 506.4 | 0.25 | 5.45 | 4.86 | SO _x | 0.18 | 0.18 | 0.01 | 0.19 | 0.17 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 37.13 | 3,399.58 |
| Skidsteer | 4 | 71 | 0.37 | 6 | 1 | 1 | 70 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.16 | 563.81 |
| Slurry Mixer | 4 | 60 | 0.56 | 0 | 0 | 1 | 70 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 |
| Water truck | 4 | 200 | 0.38 | 6 | 1 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.06 | 2.21 | 0.26 | 0.01 | 0.01 | 0.01 | 0.00 | 0.08 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 17.89 | 1,631.11 |
| Sub Total | | | | | | | | | | | | | | | | | 1.69 | 41.68 | 29.58 | 0.08 | 1.11 | 1.11 | 0.06 | 1.46 | 1.04 | 0.00 | 0.04 | 0.04 | 0.00 | 0.08 | 280.5 | 25,768.35 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Utilities Installation | _ | | | - | - | | 420 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 | |
| Asphalt Fugitive Backhoe | 5 | 75 | 0.37 | 6 | 0 | 1 | 120 120 | 2.620 0.060 | 0.000 3.700 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 511.3 | 0.00 | 0.00 1.36 | 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 11.26 | 0.00 1,020.98 |
| Bulldozer-1 | 5 | 173 | 0.43 | 0 | 0 | 1 | 120 | 0.120 | 3.700 | 2.320 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.0 | 0.02 | 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 |
| Bulldozer-2 | 5 | 310 | 0.43 | 0 | 0 | 1 | 120 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.154 | 510.3 | 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 |
| Compactor | 5 | 717 | 0.37 | 2 | 1 | 1 | 120 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.148 | 491.9 | 0.14 | 3.04 | 2.71 | 0.01 | 0.10 | 0.10 | 0.01 | 0.18 | 0.16 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 34.52 | 3,253.52 |
| Concrete Mixer | 5 | 45 | 0.56 | 2 | 1 | 1 | 120 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 | 3.79 | 309.05 |
| Crane | 5 | 180 | 0.29 | 0 | 0 | 1 | 120 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 507.2 | 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 |
| Excavator | 5 | 204 | 0.38 | 6 | 1 | 1 | 120 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.152 | 504.3 | 0.06 | 2.26 | 0.27 | 0.01 | 0.01 | 0.01 | 0.00 | 0.14 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 31.03 | 2,852.12 |
| Hual Truck | 5 | 713 | 0.38 | 4 | 1 | 1 | 120 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 508.4 | 0.29 | 6.21 | 5.54 | 0.01 | 0.21 | 0.21 | 0.02 | 0.37 | 0.33 | 0.00 | 0.01 | 0.01 | 0.00 | 0.02 | 72.88 | 6,645.62 |
| Paver | 5 | 225 | 0.42 | 0 | 0 | 1 | 120 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.1 | 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 |
| Road Grader | 5 | 244 330 | 0.41 | 0 | 0 | 1 | 120 120 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.7 506.4 | 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 |
| Scraper Skidsteer | 5 | 71 | 0.48 | 6 | 1 | 1 | 120 | 0.120 0.120 | 3.700 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 506.4 | 0.00 | 1.29 | 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 10.56 | 966.53 |
| Slurry Mixer | 5 | 60 | 0.56 | 2 | 1 | 1 | 120 | 0.000 | 0.000 | 0.000 | 0.003 | 0.008 | 0.000 | 0.004 | 0.133 | 568.3 | 0.04 | 0.00 | 0.93 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.05 | 412.07 |
| Water truck | 5 | 200 | 0.38 | 6 | 1 | 1 | 120 | 0.060 | 2.200 | 0.260 | 0.007 | 0.008 | 0.008 | 0.004 | 0.113 | 508.4 | 0.06 | 2.21 | 0.26 | 0.01 | 0.01 | 0.00 | 0.00 | 0.13 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 30.67 | 2,796.19 |
| Sub Total | 1 | | | | 1 | | | 1 | | | | | | | 1 | | 0.61 | 16.36 | 9.83 | 0.03 | 0.34 | 0.34 | 0.04 | 0.98 | 0.59 | 0.00 | 0.02 | 0.02 | 0.00 | 0.06 | 199.8 | 18,256.07 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drainage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asphalt Fugitive | 6 | | | 0 | 0 | 1 | 70 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 6 | 75 | 0.37 | 6 | 1 | 1 | 70 | 0.060 | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.3 | 0.02 | 1.36 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.57 | 595.57 |
| Bulldozer-1 | 6 | 173 | 0.43 | 0 | 0 | 1 | 70 | 0.120 | 3.700 | 2.320 | 0.005 | 0.112 | 0.112 | 0.004 | 0.153 | 506.0 | 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 |
| Bulldozer-2 Compactor | 6 | 310 717 | 0.43 | 2 | 0 | 1 | 70 70 | 0.120 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.154 | 510.3 491.9 | 0.00 | 0.00 3.04 | 0.00 2.71 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 20.14 | 0.00 1,897.88 |
| Concrete Mixer | 6 | 45 | 0.56 | 2 | 1 | 1 | 70 | 0.000 | 0.000 | 0.000 | 0.003 | 0.000 | 0.000 | 0.004 | 0.148 | 568.3 | 0.14 | 0.00 | 0.00 | 0.01 | 0.10 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.21 | 180.28 |
| Crane | 6 | 180 | 0.29 | 0 | 0 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 507.2 | 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 |
| Excavator | 6 | 204 | 0.38 | 6 | 1 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.152 | 504.3 | 0.06 | 2.26 | 0.27 | 0.01 | 0.01 | 0.01 | 0.00 | 0.08 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 18.10 | 1,663.73 |
| Hual Truck | 6 | 713 | 0.38 | 4 | 1 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 508.4 | 0.29 | 6.21 | 5.54 | 0.01 | 0.21 | 0.21 | 0.01 | 0.22 | 0.19 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 42.51 | 3,876.61 |
| Paver | 6 | 225 | 0.42 | 0 | 0 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.1 | 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 |
| Road Grader | 6 | 244 | 0.41 | 0 | 0 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.7 | 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 |
| Scraper | 6 | 330 | 0.48 | 0 | 0 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 506.4 | 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 |
| Skidsteer | 6 | 71 | 0.37 | 6 | 1 | 1 | 70 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.16 | 563.81 |
| Slurry Mixer Water truck | 6 | 60 200 | 0.56 | 6 | 1 | 1 | 70 70 | 0.000 | 0.000 2.200 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 508.4 | 0.00 | 0.00 2.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.95 17.89 | 240.37 1,631.11 |
| Sub Total | U | 200 | 0.36 | U | 1 | 1 | 70 | 0.000 | 2.200 | 0.200 | 0.003 | 0.008 | 0.008 | 0.004 | 0.133 | 308.4 | 0.61 | 16.36 | 9.83 | 0.03 | 0.34 | 0.01 | 0.02 | 0.57 | 0.34 | 0.00 | 0.01 | 0.01 | 0.00 | 0.03 | 116.52 | 10,649.37 |
| Sub Total | | | | | | | | | | | | | | | | | 0.01 | 10.50 | 5.85 | 0.03 | 0.54 | 0.54 | 0.02 | 0.57 | 0.54 | 0.00 | 0.01 | 0.01 | 0.00 | 0.03 | 110.52 | 10,043.37 |
| Trenching | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Asphalt Fugitive | 7 | | | 0 | 0 | 1 | 15 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 7 | 75 | 0.37 | 6 | 1 | 1 | 15 | 0.060 | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.3 | 0.02 | 1.36 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.41 | 127.62 |
| Bulldozer-1 | 7 | 173 | 0.43 | 0 | 0 | 1 | 15 | 0.120 | 3.700 | 2.320 | 0.005 | 0.112 | 0.112 | 0.004 | 0.153 | 506.0 | 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 |
| Bulldozer-2 | 7 | 310 | 0.43 | 0 | 0 | 1 | 15 | 0.120 | | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.154 | 510.3 | 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 |
| Compactor | 7 | 717 | 0.37 | 2 | 1 | 1 | 15 | 0.120 | | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.148 | 491.9 | 0.14 | 3.04 | 2.71 | 0.01 | 0.10 | 0.10 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.32 | 406.69 |
| Concrete Mixer Crane | 7 | 45 180 | 0.56 | 0 | 0 | 1 | 15 15 | 0.000 0.120 | 0.000 2.600 | 0.000 2.320 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 507.2 | 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 | 0.47 | 38.63 0.00 |
| Excavator | 7 | 204 | 0.29 | 6 | 1 | 1 | 15 | 0.120 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 507.2 | 0.00 | 2.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.88 | 356.51 |
| Hual Truck | 7 | 713 | 0.38 | 4 | 1 | 1 | 15 | | 2.600 | 2.320 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.29 | 6.21 | 5.54 | 0.01 | 0.01 | 0.01 | 0.00 | 0.02 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.11 | 830.70 |
| Paver | 7 | 225 | 0.42 | 0 | 0 | 1 | 15 | | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.1 | 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 |
| Road Grader | 7 | 244 | 0.41 | 0 | 0 | 1 | 15 | 0.060 | | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.7 | 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 |
| Scraper | 7 | 330 | 0.48 | 0 | 0 | 1 | 15 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 506.4 | 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 |
| Skidsteer | 7 | 71 | 0.37 | 6 | 1 | 1 | 15 | 0.120 | | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.32 | 120.82 |
| Slurry Mixer | 7 | 60 | 0.56 | 2 | 1 | 1 | 15 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 | 0.63 | 51.51 |
| Water truck | 7 | 200 | 0.38 | 6 | 1 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.06 | 2.21 | 0.26 | 0.01 | 0.01 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.83 | 349.52 |
| Sub Total | - | | - | 1 | - | | | | | | | | | - | 1 | 1 | 0.61 | 16.36 | 9.83 | 0.03 | 0.34 | 0.34 | 0.00 | 0.12 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 24.97 | 2,282.01 |
| Streets and Parking | | | + | 1 | + | | 1 | | | | | | | - | + | | | | 1 | | <u> </u> | | | | | | <u> </u> | 1 | 1 | | | + |
| Asphalt Fugitive | 8 | | | 0 | 0 | 1 | 40 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 8 | 75 | 0.37 | 0 | 0 | 1 | 40 | 0.060 | | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | | 511.3 | 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 |
| Bulldozer-1 | 8 | 173 | 0.43 | 3 | 1 | 1 | 40 | 0.120 | | 2.320 | 0.005 | 0.112 | 0.112 | | 0.153 | 506.0 | 0.06 | 1.82 | 1.14 | 0.00 | 0.06 | 0.06 | 0.00 | 0.04 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.98 | 456.16 |
| Bulldozer-2 | 8 | 310 | 0.43 | 0 | 0 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.154 | 510.3 | 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 |
| Compactor | 8 | 717 | 0.37 | 5 | 1 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.148 | 491.9 | 0.35 | 7.60 | 6.78 | 0.01 | 0.26 | 0.26 | 0.01 | 0.15 | 0.14 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 28.77 | 2,711.26 |

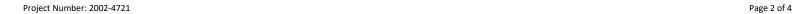




Table 4 - Construction Equipment Emission Calculations

November 9, 2020

| Equipment Concrete Mixer | Activity Code | | Load | Hours per | | | | | | | Emission | | | | | | | | Emissions | | | | | | | | l Emission (1 | | | | | Gallons |
|-----------------------------------|------------------|------------|--------------|-----------|--------|----------|------------|----------------|----------------|-----------------|-----------------|------------------|-------------------|-------|--|----------------|-----------------------------|----------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|-----------------------------|-----------------------------|---------------------|-----------------------------|------------------------------|---------------------------|
| Equipment | - | | Load | Hours per | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Code | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Concrete Mixer | _ | ВНР | Factor | Day* | Number | Peak Day | Total Days | ROG | со | NO _x | SO _X | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | ROG | со | NO _x | SO _X | PM ₁₀ | PM _{2.5} | ROG | со | NO _x | SO _X | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | Fuel Use |
| | 8 | 45 | 0.56 | 0 | 0 | 1 | 40 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | _ | 0.119 | 568.3 | 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 |
| Crane | 8 | 180 | 0.29 | 6 | 0 | 1 | 40 40 | 0.120 0.060 | 2.600 | 2.320 0.260 | 0.005 | 0.088 | 0.088 | | 0.153 | 507.2 504.3 | 0.00 | 2.26 | 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 10.34 | 0.00 950.71 |
| Excavator Hual Truck | 8 | 713 | 0.38 | 4 | 1 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.008 | 0.008 | _ | 0.152 0.153 | 508.4 | 0.06 | 6.21 | 5.54 | 0.01 | 0.01 | 0.01 | 0.00 | 0.05 0.12 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.29 | 2,215.21 |
| Paver | 8 | 225 | 0.42 | 0 | 0 | 1 | 40 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | _ | 0.153 | 508.4 | 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 |
| Road Grader | 8 | 244 | 0.41 | 6 | 1 | 1 | 40 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | _ | 0.154 | 511.7 | 0.08 | 2.91 | 0.34 | 0.01 | 0.01 | 0.01 | 0.00 | 0.06 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.54 | 1,226.89 |
| Scraper | 8 | 330 | 0.48 | 0 | 0 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | _ | 0.153 | 506.4 | 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 |
| Skidsteer | 8 | 71 | 0.37 | 6 | 1 | 1 | 40 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.52 | 322.18 |
| Slurry Mixer | 8 | 60 | 0.56 | 0 | 0 | 1 | 40 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 |
| Water truck | 8 | 200 | 0.38 | 6 | 1 | 1 | 40 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.06 | 2.21 | 0.26 | 0.01 | 0.01 | 0.01 | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.22 | 932.06 |
| Sub Total | | | | | | | | | | | | | | | | | 0.94 | 24.30 | 15.29 | 0.05 | 0.55 | 0.55 | 0.02 | 0.49 | 0.31 | 0.00 | 0.01 | 0.01 | 0.00 | 0.03 | 95.67 | 8,814.46 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Paving | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asphalt Fugitive | 9 | | | 0.3 | 1 | 1 | 5 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | _ | 0.000 | 0.000 | 2.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Backhoe | 9 | 75 | 0.37 | 0 | 0 | 1 | 5 | 0.060 | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | _ | 0.154 | 511.3 | 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 |
| Bulldozer-1 | 9 | 173 | 0.43 | 0 | 0 | 1 | 5 | 0.120 | 3.700 | 2.320 | 0.005 | 0.112 | 0.112 | | 0.153 | 506.0 | 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 |
| Bulldozer-2 | 9 | 310 717 | 0.43 0.37 | 0 | 0 | 1 | 5 5 | 0.120 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | _ | 0.154 0.148 | 510.3 491.9 | 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 | 0.00 406.69 |
| Compactor Concrete Mixer | 9 | 45 | 0.37 | 6 | 0 | 1 | 5 | 0.120 | 0.000 | 2.320 0.000 | 0.005 | 0.000 | 0.000 | _ | 0.148 | 568.3 | 0.42 | 9.12 0.00 | 8.14 0.00 | 0.02 | 0.31 | 0.31 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.32 0.00 | 0.00 |
| Crane | 9 | 180 | 0.29 | 0 | 0 | 1 | 5 | 0.000 | 2.600 | 2.320 | 0.007 | 0.000 | 0.000 | _ | 0.119 | 507.2 | 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 |
| Excavator | 9 | 204 | 0.29 | 0 | 0 | 1 | 5 | 0.120 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | | 0.153 | 504.3 | 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 |
| Hual Truck | 9 | 713 | 0.38 | 0 | 0 | 1 | 5 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.008 | | 0.153 | 508.4 | 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 |
| Paver | 9 | 225 | 0.42 | 6 | 1 | 1 | 5 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | _ | 0.153 | 508.1 | 0.08 | 2.75 | 0.33 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.59 | 144.87 |
| Road Grader | 9 | 244 | 0.41 | 0 | 0 | 1 | 5 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | _ | 0.154 | 511.7 | 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 |
| Scraper | 9 | 330 | 0.48 | 0 | 0 | 1 | 5 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 506.4 | 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 |
| Skidsteer | 9 | 71 | 0.37 | 6 | 1 | 1 | 5 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 40.27 |
| Slurry Mixer | 9 | 60 | 0.56 | 0 | 0 | 1 | 5 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 |
| Water truck | 9 | 200 | 0.38 | 4 | 1 | 1 | 5 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.04 | 1.47 | 0.17 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.85 | 77.67 |
| Sub Total | | | | | | | | | | | | | | | | | 3.20 | 14.63 | 9.59 | 0.03 | 0.33 | 0.33 | 0.01 | 0.04 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.19 | 669.50 |
| | | | | | | | | | | | | | - | | | | | | | | | | | | | | | | | | | |
| Curb, Gutter, Sidewalks and Flats | | | | 0 | 0 | 1 | 15 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Asphalt Fugitive Backhoe | 10 | 75 | 0.37 | 0 4 | 0 | 1 | 15 15 | 2.620 0.060 | 0.000 3.700 | 0.000 | 0.000 | 0.000 | 0.000 | _ | 0.000 0.154 | 0.000 511.3 | 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 85.08 |
| Bulldozer-1 | 10 | 173 | 0.43 | 0 | 0 | 1 | 15 | 0.120 | 3.700 | 2.320 | 0.005 | 0.008 | 0.008 | _ | 0.154 | 506.0 | 0.01 | 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 |
| Bulldozer-2 | 10 | 310 | 0.43 | 0 | 0 | 1 | 15 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.112 | _ | 0.154 | 510.3 | 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 |
| Compactor | 10 | 717 | 0.37 | 3 | 1 | 1 | 15 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | | 0.148 | 491.9 | 0.21 | 4.56 | 4.07 | 0.01 | 0.15 | 0.15 | 0.00 | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.47 | 610.03 |
| Concrete Mixer | 10 | 45 | 0.56 | 6 | 1 | 1 | 15 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | | 0.119 | 568.3 | 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 | 1.42 | 115.89 |
| Crane | 10 | 180 | 0.29 | 0 | 0 | 1 | 15 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 507.2 | 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 |
| Excavator | 10 | 204 | 0.38 | 6 | 1 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.152 | 504.3 | 0.06 | 2.26 | 0.27 | 0.01 | 0.01 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.88 | 356.51 |
| Hual Truck | 10 | 713 | 0.38 | 6 | 1 | 1 | 15 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 508.4 | 0.43 | 9.32 | 8.31 | 0.02 | 0.32 | 0.32 | 0.00 | 0.07 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.67 | 1,246.05 |
| Paver | 10 | 225 | 0.42 | 0 | 0 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.1 | 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 |
| Road Grader | 10 | 244 | 0.41 | 4 | 1 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | | 0.154 | 511.7 | 0.05 | 1.94 | 0.23 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.39 | 306.72 |
| Scraper | 10 | 330 | 0.48 | 0 | 0 | 1 | 15 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | _ | 0.153 | 506.4 | 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 |
| Skidsteer | 10 | 71 | 0.37 | 6 | 1 | 1 | 15 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | _ | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.32 | 120.82 |
| Slurry Mixer | 10 | 60 | 0.56 | 6 | 1 | 1 | 15 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | | 0.119 | 568.3 | 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 | 1.89 | 154.53 |
| Water truck Sub Total | 10 | 200 | 0.38 | 6 | 1 | 1 | 15 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.06 0.87 | 2.21 22.48 | 0.26 14.16 | 0.01 0.05 | 0.01 0.50 | 0.01 0.50 | 0.00 0.01 | 0.02 0.17 | 0.00 0.11 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 0.00 | 0.00 0.01 | 3.83 36.81 | 349.52 3,345.17 |
| Jub i Olui | | | | | | | | | | | | | | | | | 0.07 | 22.40 | 14.10 | 0.05 | 0.30 | 0.30 | 0.01 | 0.17 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 30.01 | 3,343.17 |
| Landscaping | | | | | | | | | | | | | 1 | + | | 1 | 1 | | | | | | | | | | | | | | | 1 |
| Asphalt Fugitive | 11 | | | 0 | 0 | 1 | 40 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 11 | 75 | 0.37 | 0 | 0 | 1 | 40 | 0.060 | 3.700 | 0.260 | 0.005 | 0.008 | _ | | 0.154 | - | 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 |
| Bulldozer-1 | 11 | 173 | 0.43 | 6 | 1 | 1 | 40 | | 3.700 | 2.320 | 0.005 | 0.112 | _ | | + | | 0.12 | 3.64 | 2.28 | 0.00 | 0.11 | 0.11 | 0.00 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.96 | 912.32 |
| Bulldozer-2 | 11 | 310 | 0.43 | 2 | 1 | 1 | 40 | 0.120 | | 2.320 | 0.005 | 0.088 | _ | | 0.154 | | 0.07 | 1.53 | 1.36 | 0.00 | 0.05 | 0.05 | 0.00 | 0.03 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.00 | 544.93 |
| Compactor | 11 | 717 | 0.37 | 3 | 1 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.148 | 491.9 | 0.21 | 4.56 | 4.07 | 0.01 | 0.15 | 0.15 | 0.00 | 0.09 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 17.26 | 1,626.76 |
| Concrete Mixer | 11 | 45 | 0.56 | 0 | 0 | 1 | 40 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 |
| Crane | 11 | 180 | 0.29 | 0 | 0 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | | 0.153 | 507.2 | 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 |
| Excavator | 11 | 204 | 0.38 | 6 | 1 | 1 | 40 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | | | 0.152 | 504.3 | 0.06 | 2.26 | 0.27 | 0.01 | 0.01 | 0.01 | 0.00 | 0.05 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10.34 | 950.71 |
| Hual Truck | 11 | 713 | 0.38 | 6 | 1 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | _ | 0.153 | 508.4 | 0.43 | 9.32 | 8.31 | 0.02 | 0.32 | 0.32 | 0.01 | 0.19 | 0.17 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 36.44 | 3,322.81 |
| Paver | 11 | 225 | 0.42 | 0 | 0 | 1 | 40 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | | 0.153 | 508.1 | 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 |
| Road Grader | 11 | 244 | 0.41 | 0 | 0 | 1 | 40 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | | 0.154 | 511.7 | 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 |
| Scraper | 11 | 330 | 0.48 | 0 | 0 | 1 | 40 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | _ | | 0.153 | | 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 |
| Chidataaa | 11 | 71 | 0.37 | 6 | 1 | 1 | 40 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | | | 0.153 | | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.52 | 322.18 |
| Skidsteer Skigge Miyer | | 60 | 0.50 | ^ | 2 | 4 | 40 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0 110 | | 0.00 | | | | | | | | | | | | | 0.00 | | |
| Slurry Mixer | 11 | 60 | 0.56 | 0 | 0 | 1 | 40 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | | | 0.119 | 568.3 | 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 |
| | | 60 200 | 0.56 0.38 | 0 6 | 0 | 1 | 40 40 | 0.000 | 0.000 2.200 | 0.000 | 0.007 | 0.000 | 0.000 | | 0.119 | 568.3 | 0.00 0.06 0.99 | 2.21 24.80 | 0.00 0.26 17.51 | 0.00 0.01 0.05 | 0.00 0.01 0.65 | 0.00 0.01 0.65 | 0.00 0.00 0.02 | 0.00 0.04 0.50 | 0.00 0.01 0.35 | 0.00 0.00 | 0.00 0.00 0.01 | 0.00 0.00 0.01 | 0.00 0.00 | 0.00 0.00 0.03 | 0.00 10.22 93.7 | 932.06 8,611.76 |

Project Number: 2002-4721 Page 3 of 4



Table 4 - Construction Equipment Emission Calculations

November 9, 2020

| | | | | | | | | Emission Factors (g/bhp-hr)** | | | | | | | | | | | Emission | s (lb/day) | | | | | | Tot | al Emission | (tons) | | | | Gallons |
|-----------------------------------|------------------|-----|----------------|-------------------|--------|----------|------------|-------------------------------|-------|-----------------|-----------------|------------------|-------------------|-------|----------|-------|------|----------|-----------------|-----------------|------------------|-------------------|------|----------|-----------------|-----------------|------------------|-------------------|------|------|----------|-----------|
| Equipment | Activity Code | ВНР | Load Factor | Hours per Day* | Number | Peak Day | Total Days | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2.5} | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | Fuel Use |
| Building and Tent Cabin Co | onstruction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asphalt Fugitive | 12 | | | 0 | 0 | 1 | 70 | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 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 |
| Backhoe | 12 | 75 | 0.37 | 4 | 1 | 1 | 70 | 0.060 | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.3 | 0.01 | 0.91 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.38 | 397.05 |
| Bulldozer-1 | 12 | 173 | 0.43 | 0 | 0 | 1 | 70 | 0.120 | 3.700 | 2.320 | 0.005 | 0.112 | 0.112 | 0.004 | 0.153 | 506.0 | 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 |
| Bulldozer-2 | 12 | 310 | 0.43 | 0 | 0 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.154 | 510.3 | 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 |
| Compactor | 12 | 717 | 0.37 | 0 | 0 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.148 | 491.9 | 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 |
| Concrete Mixer | 12 | 45 | 0.56 | 4 | 1 | 1 | 70 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 | 4.42 | 360.56 |
| Crane | 12 | 180 | 0.29 | 0 | 0 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 507.2 | 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 |
| Excavator | 12 | 204 | 0.38 | 4 | 1 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.152 | 504.3 | 0.04 | 1.50 | 0.18 | 0.00 | 0.01 | 0.01 | 0.00 | 0.05 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 12.07 | 1,109.16 |
| Hual Truck | 12 | 713 | 0.38 | 6 | 1 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 508.4 | 0.43 | 9.32 | 8.31 | 0.02 | 0.32 | 0.32 | 0.02 | 0.33 | 0.29 | 0.00 | 0.01 | 0.01 | 0.00 | 0.02 | 63.77 | 5,814.91 |
| Paver | 12 | 225 | 0.42 | 0 | 0 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.1 | 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 |
| Road Grader | 12 | 244 | 0.41 | 0 | 0 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.154 | 511.7 | 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 |
| Scraper | 12 | 330 | 0.48 | 0 | 0 | 1 | 70 | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.004 | 0.153 | 506.4 | 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 |
| Skidsteer | 12 | 71 | 0.37 | 6 | 1 | 1 | 70 | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 506.3 | 0.04 | 1.29 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.16 | 563.81 |
| Slurry Mixer | 12 | 60 | 0.56 | 4 | 1 | 1 | 70 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.004 | 0.119 | 568.3 | 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 | 5.89 | 480.75 |
| Water truck | 12 | 200 | 0.38 | 6 | 1 | 1 | 70 | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.004 | 0.153 | 508.4 | 0.06 | 2.21 | 0.26 | 0.01 | 0.01 | 0.01 | 0.00 | 0.08 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 17.89 | 1,631.11 |
| Sub Total | | | | | | | | | | | | | | | | | 0.59 | 15.22 | 9.77 | 0.03 | 0.33 | 0.33 | 0.02 | 0.53 | 0.34 | 0.00 | 0.01 | 0.01 | 0.00 | 0.03 | 115 | 10,357.35 |
| | | 1 | | | | | | | | | | | | | <u> </u> | | | <u> </u> | | | | | | <u> </u> | <u> </u> | | | | | | | |
| Onsite Total | | | | | | | | | | | | | | | | | 3.20 | 41.68 | 29.58 | 0.08 | 1.11 | 1.11 | 0.21 | 5.31 | 3.45 | 0.01 | 0.12 | 0.12 | 0.01 | 0.32 | 1.060.50 | 97.029.70 |

Notes:

- 1. Fuel use based on EPA 0.0511 gal/bhp-hr, AP-42 Chapt 3.3
- 2. Construction asphalt acreage based on estimate from grading plans.
- 3. The unit g/bhp-hr was converted to lb/bhp-hr using the multiplier (conversion) that 1 gram = 0.0022046 lb.
- 4. The unit pound was converted to tons using the multiplier (conversion) that 1 pound = 0.0005 tons.
- st The value for asphalt fugitive are in acers per day and the value for the water truck is in miles per day.

Project Number: 2002-4721 Page 4 of 4



Table 5 - Fugitive Dust Emissions Calculations

November 9, 2020

| | | Average | | | Number of | Emission | | Peak Day Emis | ssions (lbs/day) | Total Emissi | ons (tons) |
|--------------------------------------|---------------|---------|-------------|-------------------|-----------|----------|------------------------|------------------|-------------------|------------------|-------------------|
| Activity | Activity Code | Source | Peak Source | Source Units | Days | Factor | Emission Factor, Units | PM ₁₀ | PM _{2.5} | PM ₁₀ | PM _{2.5} |
| Grading | | | | | | | | | | | |
| Mobilization/Staging | 1 | 0.00 | 0.00 | acres/day | 20 | 0.429 | lbs PM10/day/acre | 0.00 | 0.00 | 0.000 | 0.000 |
| Demolition | 2 | 1.67 | 1.67 | acres/day | 15 | 0.429 | lbs PM10/day/acre | 0.72 | 0.07 | 0.005 | 0.000 |
| Bridge Construction | 3 | 0.03 | 0.03 | acres/day | 30 | 0.429 | lbs PM10/day/acre | 0.01 | 0.00 | 0.000 | 0.000 |
| Clear/Grub and Rough Grading | 4 | 0.36 | 0.36 | acres/day | 70 | 0.429 | lbs PM10/day/acre | 0.15 | 0.01 | 0.005 | 0.000 |
| Utilities Installation | 5 | 0.25 | 0.25 | acres/day | 120 | 0.429 | lbs PM10/day/acre | 0.11 | 0.01 | 0.006 | 0.001 |
| Drainage | 6 | 0.25 | 0.25 | acres/day | 70 | 0.429 | lbs PM10/day/acre | 0.11 | 0.01 | 0.004 | 0.000 |
| Trenching | 7 | 0.25 | 0.25 | acres/day | 15 | 0.429 | lbs PM10/day/acre | 0.11 | 0.01 | 0.001 | 0.000 |
| Streets and Parking | 8 | 1.00 | 1.00 | acres/day | 40 | 0.429 | lbs PM10/day/acre | 0.43 | 0.04 | 0.009 | 0.001 |
| Paving | 9 | 1.00 | 1.00 | acres/day | 5 | 0.429 | lbs PM10/day/acre | 0.43 | 0.04 | 0.001 | 0.000 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 0.25 | 0.25 | acres/day | 15 | 0.429 | lbs PM10/day/acre | 0.11 | 0.01 | 0.001 | 0.000 |
| Landscaping | 11 | 5.00 | 5.00 | acres/day | 40 | 0.429 | lbs PM10/day/acre | 2.15 | 0.20 | 0.043 | 0.004 |
| Building and Tent Cabin Construction | 12 | 0.00 | 0.00 | acres/day | 70 | 0.429 | lbs PM10/day/acre | 0.00 | 0.00 | 0.000 | 0.000 |
| | | | | | | | Max per day: | 2.15 | 0.20 | | |
| | | | | | | | Total: | | | 0.08 | 0.01 |
| Dumping | | | | | | | | | | | |
| Mobilization/Staging | 1 | 0.0 | 0.0 | tons/day | 20 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Demolition | 2 | 0.0 | 0.0 | tons/day | 15 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Bridge Construction | 3 | 0.0 | 0.0 | tons/day | 30 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Clear/Grub and Rough Grading | 4 | 0.0 | 0.0 | tons/day | 70 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Utilities Installation | 5 | 0.0 | 0.0 | tons/day | 120 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Drainage | 6 | 0.0 | 0.0 | tons/day | 70 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Trenching | 7 | 0.0 | 0.0 | tons/day | 15 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Streets and Parking | 8 | 255.5 | 255.5 | tons/day | 40 | 0.01421 | lbs/ton | 3.63 | 0.55 | 0.073 | 0.011 |
| Paving | 9 | 0.0 | 0.0 | tons/day | 5 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 34.0 | 34.0 | tons/day | 15 | 0.01421 | lbs/ton | 0.48 | 0.07 | 0.004 | 0.001 |
| Landscaping | 11 | 0.0 | 0.0 | tons/day | 40 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| Building and Tent Cabin Construction | 12 | 0.0 | 0.0 | tons/day | 70 | 0.01421 | lbs/ton | 0.00 | 0.00 | 0.000 | 0.000 |
| | | | | | | | Max per day: | 3.63 | 0.55 | | |
| | | | , , | | 1 | | Total: | | | 0.076 | 0.012 |
| Unpaved Road Travel | | | | | | | | | | | |
| Mobilization/Staging | 1 | 0.1 | 0.1 | vehicle-miles/day | 20 | 1.17 | lbs/vehicle-mile | 0.12 | 0.01 | 0.001 | 0.00012 |
| Demolition | 2 | 0.1 | 0.1 | vehicle-miles/day | 15 | 1.17 | lbs/vehicle-mile | 0.16 | 0.02 | 0.001 | 0.00012 |
| Bridge Construction | 3 | 0.1 | 0.1 | vehicle-miles/day | 30 | 1.17 | lbs/vehicle-mile | 0.08 | 0.01 | 0.001 | 0.00012 |
| Clear/Grub and Rough Grading | 4 | 0.1 | 0.1 | vehicle-miles/day | 70 | 1.17 | lbs/vehicle-mile | 0.08 | 0.01 | 0.003 | 0.00029 |
| Utilities Installation | 5 | 0.0 | 0.0 | vehicle-miles/day | 120 | 1.17 | lbs/vehicle-mile | 0.02 | 0.00 | 0.001 | 0.00012 |
| Drainage | 6 | 0.0 | 0.0 | vehicle-miles/day | 70 | 1.17 | lbs/vehicle-mile | 0.03 | 0.00 | 0.001 | 0.00012 |
| Trenching | 7 | 0.1 | 0.1 | vehicle-miles/day | 15 | 1.17 | lbs/vehicle-mile | 0.16 | 0.02 | 0.001 | 0.00012 |
| Streets and Parking | 8 | 0.1 | 0.1 | vehicle-miles/day | 40 | 1.17 | lbs/vehicle-mile | 0.09 | 0.01 | 0.002 | 0.00017 |
| Paving | 9 | 0.4 | 0.4 | vehicle-miles/day | 5 | 1.17 | lbs/vehicle-mile | 0.47 | 0.05 | 0.001 | 0.00012 |
| Curb, Gutter, Sidewalks and Flatwork | 10 | 0.1 | 0.1 | vehicle-miles/day | 15 | 1.17 | lbs/vehicle-mile | 0.16 | 0.02 | 0.001 | 0.00012 |
| Landscaping | 11 | 0.1 | 0.1 | vehicle-miles/day | 40 | 1.17 | lbs/vehicle-mile | 0.12 | 0.01 | 0.002 | 0.00023 |
| Building and Tent Cabin Construction | 12 | 0.0 | 0.0 | vehicle-miles/day | 70 | 1.17 | lbs/vehicle-mile | 0.05 | 0.00 | 0.002 | 0.00017 |
| | | | | | | | Max per day: | 0.47 | 0.05 | | |
| | | | | | | | Total: | | | 0.018 | 0.002 |



Table 5 - Fugitive Dust Emissions Calculations

November 9, 2020

| | | Average | | | Number of | Emission | | Peak Day Emis | sions (lbs/day) | Total Emissio | ns (tons) |
|---|---------------|-----------------|---------------------|-----------------------------|--------------------|-------------------|--------------------------------|----------------------|------------------------|-----------------------|-------------------|
| Activity | Activity Code | Source | Peak Source | Source Units | Days | Factor | Emission Factor, Units | PM ₁₀ | PM _{2.5} | PM ₁₀ | PM _{2.5} |
| Fugitive Dust Emissions: Inputs for the Table | | | | | | | | | | | |
| Emission factors based on following inputs | | | | | | | | | | | |
| Mean number of rain days per year | 0 | worst case | | | | | | | | | |
| Silt content of soil, fill storage pile, % | 1.5 | SCAQMD dej | fault value | | | | | | | | |
| Roadway inputs (paved and unpaved, as per URBEMIS) | | | | | | | | | | | |
| Roads mean vehicle weight, tons | 20.61 | based on projec | t description, HHD1 | + LDT and vehicles weight (| average of full an | d empty) (origina | al source (='Z:\Users\Mike\Dow | nloads\[Excelaron Ai | r Emissions-R4.xls]Off | site Emissions'!P60)) | |
| unpaved dirt road silt content, % | 8.4 | AP-42 constr | uction sites | | | | | | | | |
| Truck Loading inputs | | | | | | | | | | | |
| k, particle size multiplier, default=0.35 fpr pm10 | 0.35 | | | | | | | | | | |
| U, mean wind speed, mph range 1.3-15 | 8.15 | | | | | | | | | | |
| M, moisture content, default=12% | 12 | | | | | | | | | | |
| PM2.5/PM10 ratio truck loading | 0.15 | | | | | | | | | | |
| Site grading emissions from CalEEMod for grading | 0.091 | ratio of PM | 2.5/PM10 Cal | EEMod | | | | | | | |
| Demolition materials, tons/yds3 | 1.000 | estimated f | or concrete de | ebris | | | | | | | |
| Fill materials, tons/yds3 | 1.000 | estimated f | or soils | | | | | | | | |
| | | | | | | | | | | | |
| Mitigation: grading/dist area watering (fraction reduction) | 0.61 | 0.61 for wat | ering every 3 ho | ours (SCAQMD) | | | | | | | |
| Mitigation: dumping soil moisture (fraction reduction) | 0.30 | 0.69 for mini | mum 12% soil i | moisture (SCAQMD) | | | | | | | |
| Mitigation: roads (fraction reduction) | 0.55 | 0.55 for wate | ering 3X per da | y (SCAQMD), 0.80 for s | oil binders ap | plied monthly | (AP-42) | | | | |
| Notes: | | | | | | | | | | | |

PM2.5/PM10 ratio as per AP-42 k factor for PM10 and PM2.5

Demolition dust calculations as per EPA AP-42 11.19 and 13.2.4

Truck loading dumping cut/fill based on CalEEMod

Project Number: 2002-4721

Paved and unpaved road dust emissions based on AP-42 2006 (unpaved) Chapt 13. EPA AP-42 2006 is the same as URBEMS and CalEEMod

One month assumes 22 days of activity, as per URBEMIS



Table 6 - Emission Factors Nov

November 9, 2020

Onsite

| | | | | | | | | Emissio | on Factors (g | /bhp-hr) | | | | | | | |
|------------------|--------------|----------------------|------|------|-------|-------|-----------------|-----------------|------------------|-------------------|--------|-------|-------|------|---------|------|-----------|
| Equipment | Tier | Engine Size (bhp) | LF | Year | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | Make | Model # | ARB# | Equip. ID |
| Asphalt Fugitive | EF = lb/acre | | | | 2.620 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0000 | 0.000 | 0.000 | | | | |
| Backhoe | 4 | 75 | 0.37 | | 0.060 | 3.700 | 0.260 | 0.005 | 0.008 | 0.008 | 0.0042 | 0.154 | 511.3 | | | - | |
| Bulldozer-1 | 3 | 173 | 0.43 | | 0.120 | 3.700 | 2.320 | 0.005 | 0.112 | 0.112 | 0.0042 | 0.153 | 506.0 | | | | |
| Bulldozer-2 | 3 | 310 | 0.43 | | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.0042 | 0.154 | 510.3 | | | | |
| Compactor | 3 | 717 | 0.37 | | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.0042 | 0.148 | 491.9 | | | | |
| Concrete Mixer | | 45 | 0.56 | | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.0042 | 0.119 | 568.3 | | | | |
| Crane | 3 | 180 | 0.29 | | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.0042 | 0.153 | 507.2 | | | | |
| Excavator | 4 | 204 | 0.38 | | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.0042 | 0.152 | 504.3 | | | | |
| Hual Truck | 3 | 713 | 0.38 | | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.0042 | 0.153 | 508.4 | | | | |
| Paver | 4 | 225 | 0.42 | | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.0042 | 0.153 | 508.1 | | | | |
| Road Grader | 4 | 244 | 0.41 | | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.0042 | 0.154 | 511.7 | | | | |
| Scraper | 3 | 330 | 0.48 | | 0.120 | 2.600 | 2.320 | 0.005 | 0.088 | 0.088 | 0.0042 | 0.153 | 506.4 | | | | |
| Skidsteer | 4 | 71 | 0.37 | | 0.120 | 3.700 | 2.740 | 0.005 | 0.008 | 0.008 | 0.0042 | 0.153 | 506.3 | | | | |
| Slurry Mixer | | 60 | 0.56 | | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.000 | 0.0042 | 0.119 | 568.3 | | | | |
| Water truck | 4 | 200 | 0.38 | | 0.060 | 2.200 | 0.260 | 0.005 | 0.008 | 0.008 | 0.0042 | 0.153 | 508.4 | | | | |

Notes:

Emission Factors from CalEEMod, Appendix D

Asphalt fugitive EF lbs ROG/acre from CalEEMod, Appendix B.1

HP from CalEEMod Appendix D from OFFROAD and applicant data

LF from Carl Moyer per SLOAPCD CalEEMod Guidelines

Ch4 from CalEEMod

N2O from State (and Federal) Mandatory Reporting Rule, Table 6

-- Not Available or Applicable

Offsite - Running

from EMFAC2017, year 2020, aggregated model year

| | | | | | | g/mile | | | | | | | | | lbs/mile | | | | |
|------------|--------|-------|-------|-----------------|-----------------|------------------|-------------------|-------|-------|----------|---------|---------|-----------------|-----------------|------------------|-------------------|---------|---------|---------|
| Vehicle | Notes | ROG | СО | NO _x | so _x | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 | ROG | со | NO _x | SO _x | PM ₁₀ | PM _{2.5} | N2O | CH4 | CO2 |
| T7tc-d55 | 55 mph | 0.135 | 0.547 | 4.542 | 0.013 | 0.101 | 0.096 | 0.213 | 0.006 | 1354.173 | 0.00030 | 0.00120 | 0.00999 | 0.00003 | 0.00022 | 0.00021 | 0.00047 | 0.00001 | 2.97918 |
| T6 Utility | 55 mph | 0.011 | 0.043 | 1.202 | 0.008 | 0.010 | 0.009 | 0.136 | 0.000 | 866.416 | 0.00002 | 0.00010 | 0.00264 | 0.00002 | 0.00002 | 0.00002 | 0.00030 | 0.00000 | 1.90611 |
| LDT2-d | 55 mph | 0.012 | 0.105 | 0.098 | 0.003 | 0.006 | 0.006 | 0.042 | 0.001 | 265.354 | 0.00003 | 0.00023 | 0.00021 | 0.00001 | 0.00001 | 0.00001 | 0.00009 | 0.00000 | 0.58378 |
| LDA-g | 55 mph | 0.057 | 1.605 | 0.112 | 0.004 | 0.005 | 0.005 | 0.010 | 0.013 | 449.52 | 0.00013 | 0.00353 | 0.00025 | 0.00001 | 0.00001 | 0.00001 | 0.00002 | 0.00003 | 0.98894 |

Notes:

ROG, CO, Nox, PM10, PM2.5 and CO2 emission factors from EMFAC2014 (year 2020, aggregated model year)

CH4, N2O and SOx emission factors from EMFAC2017

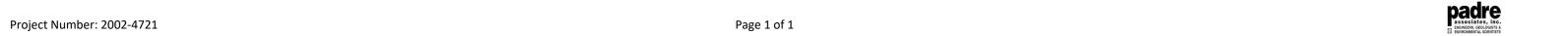


Table 7 - Construction Schedule

November 9, 2020

| | | | | | | | | | | | | | 1st QTR | | 2nd QT | R | | 3rd QTR | | 4th QTR | | 1st (| QTR | | 2nd C | TR | | 3rd QTR | |
|-------|--|------|-----------------|----------------|-------------|------------------|----------------------|-------------|---------------|---------------|-------------|--------|---------|--------|--------------|----------|--------|---------------|----------|------------|---------------|----------|---------------|------------|---------|-----------|--------|---------|--------|
| | | | | | | | | | | | | | | | | | | | Curren | nt Schedul | e as of Novem | ber 2019 | | | | | | | - |
| | | | | | | Heavy Truck Trip | os Round Trips / Day | | | Commute | r Vehicles | Jan-21 | Feb-21 | Mar-21 | Apr-21 May-2 | 1 Jun-21 | Jul-21 | Aug-21 Sep-2: | 1 Oct-21 | Nov-21 | Dec-21 Jan | -22 Feb- | 22 N | Mar-22 Apr | 22 May- | 22 Jun-22 | Jul-22 | Aug-22 | Sep-22 |
| | | | | HT Avg | HT Avg | HT Avg | HT Peak | HT Peak | HT Peak | | | | | | | | | | | | | | | | | | | | |
| Phase | Activity | Code | Duration, days* | (T-Baserock)** | (T-Asphalt) | (T-Equipment)** | (T-Baserock) | (T-Asphalt) | (T-Equipment) | Autos | LT | 1 | 2 | 3 | 4 5 | 6 | 7 | 8 9 | 10 | 11 | 12 1 | 3 14 | i | 15 10 | 17 | 18 | 19 | 20 | 21 |
| 1a | Mobilization/Staging | 1 | 1 20 | 0.0 | 0.0 | 1.4 | 1 (|) | 0 | 2 5 | 2 | 1 | | | | | | | | | | | | | | | | | |
| 1a | Demolition | 2 | 2 15 | 5 0.0 | 0.0 | 2.1 | L (|) | 0 | 3 5 | 2 | 1 | 1 | | | | | | | | | | | | | | | | |
| 1a | Bridge Construction | 3 | 30 | 0.0 | 0.0 | 2.1 | L (|) | 0 | 3 5 | 2 | | | 1 | 1 | | | | | | | | | | | | | | |
| 1a | Clear/Grub and Rough Grading | 4 | 1 70 | 0.0 | 0.0 | 2.1 | L (|) | 0 | 3 5 | 2 | | | | 1 1 | 1 | 1 | | | | | | | | | | | | |
| 1a | Utilities Installation | | 120 | 0.0 | 0.0 | 2.0 |) |) | 0 | 2 5 | 2 | | | | | | 1 | 1 1 | 1 | 1 | 1 | | | | | | | 1 | |
| 1a | Drainage | (| 5 70 | 0.0 | 0.0 | 2.0 |) |) | 0 | 2 5 | 2 | | | | | | | | | 1 | 1 | l 1 | | | | | | 1 | |
| 1a | Trenching | | 7 15 | 5 0.0 | 0.0 | 2.0 |) |) | 0 | 2 5 | 2 | | | | | | 1 | | | | | | | | | | | 1 | 1 |
| 1a | Streets and Parking | 8 | 3 40 | 16.0 | 1.0 | 2.1 | 16 | 5 | 2 | 3 5 | 2 | | | | | | | | | | | 1 | | 1 | | | | | |
| 1a | Paving | 9 | 9 5 | 5 0.0 | 23.1 | 1 2.0 |) (|) : | 24 | 2 5 | 2 | | | | | | | | | | | | | 1 | | | | | |
| 1a | Curb, Gutter, Sidewalks and Flatwork | 10 |) 15 | 5 2.1 | 0.0 | 2.0 |) . | 2 | 0 | 2 5 | 2 | | | | | | | | | | | | | 1 | | | | | |
| 1a | Landscaping | 1: | 40 | 0.0 | 0.0 | 2.1 | . (|) | 0 | 3 5 | 2 | | | | | | | | | | | | | | 1 | 1 | | | |
| 1a | Building and Tent Cabin Construction | 12 | 2 70 | 0.0 | 0.0 | 2.1 | |) | 0 | 3 5 | 2 | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 |
| | <u> </u> | 1 | 1 | | · L | II. | L. | 1 | Pe | ak Waste Tru | cks per day | 0 | 0 | 0 | 0 0 | 0 | 0 | 0 0 | 0 | 0 | 0 (|) 16 | <u></u> | 16 3 | 0 | 0 | 0 | 0 | 0 |
| | Notes: | | | | | | | | | Peak Fill Tru | | | 0 | 0 | 0 0 | 0 | 0 | 0 0 | 0 | 0 | 0 | | $\neg \vdash$ | 2 2 | . 0 | 0 | 0 | 0 | 0 |
| | Duration assumes 5 days per week | | | | | | | | | eak Equip Tru | | | 3 | 3 | 5 3 | 3 | 7 | 2 2 | 2 | 4 | 4 | 2 5 | | 3 4 | 3 | 5 | 3 | 3 | 3 |
| | * - SUM of months is multiplied by 20 to give days. | | | | | | | | | otal Peak Tru | | 4 | 3 | 3 | 5 3 | 3 | 7 | 2 2 | 2 | 4 | 4 | 2 23 | <u>,</u> | 21 3: | . 3 | 5 | 3 | 3 | 3 |
| | **- SUM of truck trips divided by the duration in day: | S. | | | | | | | | | tos per day | 10 | 5 | 5 | 10 5 | 5 | 15 | 5 5 | 5 | 10 | 10 | 5 10 | | 5 10 | | 10 | 5 | 5 | 5 |
| | | | | | | | | | | | cks per day | | 2 | 2 | 4 2 | 2 | 6 | 2 2 | 2 | 4 | 4 | 2 4 | - | 2 4 | 2 | 4 | 2 | 2 | 2 |

Project Number: 2002-4721 Page 1 of 1

Table 8 - Mitigation Measures Applied

November 9, 2020

| | | Proposed | |
|---|--------|----------|-------|
| Measures | Values | Project | Notes |
| Fugitive Dust | | | |
| Mitigation: grading/dist area watering (fraction reduction) | 0.61 | 0.61 | |
| Mitigation: dumping soil moisture (fraction reduction) | 0.30 | 0.30 | |
| Mitigation: roads (fraction reduction) | 0.55 | 0.55 | |
| | | | |

Yonder Yosemite CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS TABLE 1: OPERATION EMISSIONS SUMMARY

| Course | | | Pea | 0 0.18 36.82 0.36 0.66 0.51 16,969 0.815 0.151 0.030 0.029 6.680 0 0.18 36.82 0.36 0.66 0.51 16,969 | | | ıs/yr) | | Annual | Emission | ns (metric | tons/yr) | | | | | | | |
|---|--|------|------------------|---|--|-----------------|------------------|------|-----------------|-----------------|------------|---------------------|-------------------|------------|-----------------|------------------|-------|-----------------|---------------------|
| Source | NO _x | ROG | PM ₁₀ | PM _{2.5} | СО | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | СО | SO ₂ | N ₂ O | CH₄ | CO ₂ | MTCO ₂ e |
| Operation Phase | 5.35 | 0.86 | 0.19 | 0.18 | 36.82 | 0.36 | 0.66 | 0.51 | 16,969 | 0.815 | 0.151 | 0.030 | 0.029 | 6.680 | 0.049 | 0.084 | 2.254 | 2,693 | 2,517 |
| Peak Day within Tuolumne County | 5.35 | 0.86 | 0.19 | 0.18 | 36.82 | 0.36 | 0.66 | 0.51 | 16,969 | - | - | - | - | - | - | - | - | - | - |
| Total Annual Emissions within Tuolumne County | ne County 0.815 0.151 0.030 0.029 6.68 | | | | | | | | | | | | | 6.680 | 0.049 | 0.084 | 2.254 | 2,693 | 2,517 |
| TCAPCD Significance Thresholds | | | | | | | | | | | | | | 100 | | | | | |
| Threshold exceeded? | No | | | | | | | | | | | | | No | | | | | |
| | | | | | | | | | | | | G | | | | | 25 | 1 | |
| | | | | | | | | | | | | | Total | MTCO 2 e | per year | | 2, | 517 | |
| | | | | | | | | | | | | | S | Service Po | pulation | | 5. | 57 | |
| | • | | | | | | | | | | MTCC | ₂ e Emis | sion per S | Service Po | pulation | | 4. | 52 | |
| | • | | | | MTCO₂e Emission per Service Popul Project-level Emissions Thres | | | | | | | | | | | | 4. | 60 | |
| | | | | | | | | | | | | | Thr | eshold ex | ceeded? | | ٨ | lo | |

Notes:

- EPA Emission Factors for Greenhouse Gas Inventories (298 for N₂O, 25 for CH₄, and 1 for CO₂, March 2018, Table 10a - https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf

TCAPCD - Tuolumne County Air Pollution Control District

Service Population = Guest units x rounded up number of guest per unit + onsite employees + outside service workers + 1.52 people per onsite employee household

Average household size used for services population calculation is 2.52 people. Average household size obtained from US Census Bureau of Labor Statistics, November 2019.

NO_x - Oxides of Nitrogen

ROG - Reactive Organic Gases

PM_{2.5} - Particulate Matter 2.5 Microns or Less

PM₁₀ - Particulate Matter 10 Microns or Less

DPM - Diesel Particulate Matter

CO - carbon monoxide

SO₂ - Sulfur Dioxide

N₂O - Nitrous Oxide

CH₄ - Methane

CO₂ - Carbon Dioxide

Assumptions:

Operations assumed 7 days per week.



Yonder Yosemite CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS TABLE 2: Operations

Diesel Fuel Equipment Sources

| | | | | | | | | | | Emission | Factors (| g/bhp-hr) | | | | | | | Em | issions (II | o/day) | | | | | | Total Emiss | sions (tons | 3) | | Total Emis | ssions (m | etric tons) |
|-------|--------|-----|-------------|--------|---------------|-----------------|-----------------|-------|------------------|-------------------|-----------|-----------------|------------------|-------|-----------------|-----------------|-------|------------------|-------------------|-------------|-----------------|------------------|-------|-----------------|-----------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------|-----------------|
| | Source | ВНР | Load Factor | Number | Hours/ Day | Duration (days) | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ |
| Gator | | 20 | 50 | 2 | 3 | 365 | 3.691 | 0.439 | 0.145 | 0.133 | 3.764 | 0.005 | 0.004 | 0.171 | 528 | 0.49 | 0.058 | 0.019 | 0.018 | 0.498 | 0.001 | 0.001 | 0.023 | 70 | 0.089 | 0.011 | 0.004 | 0.003 | 0.091 | 0.0001 | 0.0001 | 0.004 | 11.558 |
| | | | | | | | | | | | | | | | Total | 0.49 | 0.06 | 0.02 | 0.02 | 0.50 | 0.00 | 0.00 | 0.02 | 70 | 0.089 | 0.011 | 0.004 | 0.003 | 0.091 | 0.0001 | 0.0001 | 0.004 | 11.6 |

| | | | | | | | Emission I | Factors, g | /gal for Prp | oane and | or g/ton fo | r Compes | sed Woo | | | | | | | | | s) | | Total Em | issions (m | etric tons) | | | | | | |
|-----------------------------------|-----|-------------|--------------------|---------------|-----------------|-----------------|------------|------------------|-------------------|----------|-----------------|------------------|---------|-----------------|-----------------|--------|------------------|-------------------|--------|-----------------|------------------|--------|-----------------|-----------------|------------|------------------|-------------------|-------|-----------------|------------------|-------|-----------------|
| Source | ВНР | Load Factor | Gallons or Tons | Hours/ Day | Duration (days) | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ |
| Propane Fire Place/Heater | | | 2.4375 | 24 | 210 | 5.897 | 0.454 | 0.318 | 0.318 | 3.402 | 1.500 | 0.408 | 0.091 | 5670 | 0.7605 | 0.0585 | 0.0409 | 0.0409 | 0.4387 | 0.1935 | 0.0526 | 0.0117 | 731.2 | 0.080 | 0.006 | 0.004 | 0.004 | 0.046 | 0.020 | 0.005 | 0.001 | 69.65 |
| Propane Fire Place/Heater | | | 0.25 | 12 | 210 | 5.897 | 0.454 | 0.318 | 0.318 | 3.402 | 1.500 | 0.408 | 0.091 | 5670 | 0.0390 | 0.0030 | 0.0021 | 0.0021 | 0.0225 | 0.0099 | 0.0027 | 0.0006 | 37.5 | 0.004 | 0.000 | 0.000 | 0.000 | 0.002 | 0.001 | 0.000 | 0.000 | 3.57 |
| Propane Water Heater or Equipment | | | 0.25 | 12 | 365 | 5.897 | 0.454 | 0.318 | 0.318 | 3.402 | 1.500 | 0.408 | 0.091 | 5670 | 0.0390 | 0.0030 | 0.0021 | 0.0021 | 0.0225 | 0.0099 | 0.0027 | 0.0006 | 37.5 | 0.007 | 0.001 | 0.000 | 0.000 | 0.004 | 0.002 | 0.000 | 0.000 | 6.21 |
| Compressed Wood | | | 0.0075 | - | 365 | 6,260 | 6,804 | 1,905 | 1,905 | 17,872 | 181.44 | 0.00 | 7257 | 1,339,005 | 0.1035 | 0.112 | 0.0315 | 0.0315 | 0.2955 | 0.0030 | 0.0000 | 0.1200 | 22 | 0.019 | 0.021 | 0.006 | 0.006 | 0.054 | 0.001 | 0.000 | 0.020 | 3.67 |
| | | | | | | | | | | | | | | Total | 0.942 | 0.177 | 0.077 | 0.077 | 0.779 | 0.216 | 0.058 | 0.133 | 828 | 0.110 | 0.028 | 0.011 | 0.011 | 0.106 | 0.024 | 0.006 | 0.021 | 83 |

On-Road Sources

| | | | | | | | | | Emissio | n Factors | (g/mile) | | | | | | | Peak Day | y Emissior | ıs (lb/day) | | | | | T | Total Emiss | sions (tons | s) | | Total Em | nissions (m | tric tons) |
|---------------------------------------|-------------------------|-------------------------------|-----------------------|------------------------------------|--------------------|-----------------|--------|------------------|-------------------|-----------|-----------------|--------|--------|-----------------|-----------------|-------|------------------|-------------------|------------|-----------------|------------------|--------|-----------------|-----------------|-------|------------------|-------------------|-------|-----------------|----------|-------------|-----------------|
| Source | Peak Round Trips/Day | Average Round Trips/Day | Number of Vehicles | Length of Round Trip (miles) | Duration (days) | NO _x | ROG | PM ₁₀ | PM _{2.5} | co | SO ₂ | N₂O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N₂O | CH₄ | CO ₂ |
| Passenger Vehicle - LDA (offsite) | 27 | 27 | 27 | 15 | 365 | 0.0599 | 0.0119 | 0.0012 | 0.0011 | 0.7289 | 0.0027 | 0.0058 | 0.0029 | 271 | 1.445 | 0.286 | 0.030 | 0.027 | 17.571 | 0.065 | 0.139 | 0.0688 | 6524.9 | 0.264 | 0.052 | 0.005 | 0.005 | 3.207 | 0.012 | 0.023 | 0.01139 | 1080.3 |
| Light-Duty Truck - LDT2 (offsite) | 9 | 9 | 9 | 15 | 365 | 0.0977 | 0.0117 | 0.0065 | 0.0062 | 0.1054 | 0.0025 | 0.0417 | 0.0005 | 265 | 0.262 | 0.031 | 0.017 | 0.017 | 0.282 | 0.007 | 0.112 | 0.0015 | 710.8 | 0.048 | 0.006 | 0.003 | 0.003 | 0.052 | 0.001 | 0.0185 | 0.00024 | 117.7 |
| Passenger Vehicle - LDA (offsite) | 1.3 | 1.3 | 18 | 15 | 365 | 0.0599 | 0.0119 | 0.0012 | 0.0011 | 0.7289 | 0.0027 | 0.0058 | 0.0029 | 271 | 0.045 | 0.009 | 0.001 | 0.001 | 0.542 | 0.002 | 0.004 | 0.0021 | 201.4 | 0.008 | 0.002 | 0.000 | 0.000 | 0.099 | 0.000 | 0.001 | 0.00035 | 33.3 |
| Light-Duty Truck - LDT2 (offsite) | 1.3 | 1.3 | 6 | 15 | 365 | 0.0977 | 0.0117 | 0.0065 | 0.0062 | 0.1054 | 0.0025 | 0.0417 | 0.0005 | 265 | 0.024 | 0.003 | 0.002 | 0.002 | 0.026 | 0.001 | 0.010 | 0.0001 | 65.8 | 0.004 | 0.001 | 0.000 | 0.000 | 0.005 | 0.000 | 0.0017 | 0.00002 | 10.9 |
| Passenger Vehicle - LDA (offsite) | 40 | 40 | 40 | 7 | 365 | 0.0599 | 0.0119 | 0.0012 | 0.0011 | 0.7289 | 0.0027 | 0.0058 | 0.0029 | 271 | 1.395 | 0.276 | 0.029 | 0.027 | 16.969 | 0.062 | 0.134 | 0.0665 | 6301.1 | 0.255 | 0.050 | 0.005 | 0.005 | 3.097 | 0.011 | 0.022 | 0.01100 | 1043.2 |
| Light-Duty Truck - LDT2 (offsite) | 9 | 9 | 9 | 7 | 365 | 0.0977 | 0.0117 | 0.0065 | 0.0062 | 0.1054 | 0.0025 | 0.0417 | 0.0005 | 265 | 0.115 | 0.014 | 0.008 | 0.007 | 0.124 | 0.003 | 0.049 | 0.0006 | 312.7 | 0.021 | 0.003 | 0.001 | 0.001 | 0.023 | 0.001 | 0.008 | 0.00011 | 51.8 |
| Med-Heavy Duty - T6 Utility (offsite) | 6 | 6 | 6 | 7 | 52 | 1.2017 | 0.0106 | 0.0098 | 0.0094 | 0.0433 | 0.0082 | 0.1362 | 0.0005 | 866 | 0.629 | 0.006 | 0.005 | 0.005 | 0.023 | 0.004 | 0.071 | 0.0003 | 453.8 | 0.016 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.00168 | | 10.7 |
| | | | | | | | | | | | | | | Total | 3.91 | 0.624 | 0.091 | 0.085 | 35.538 | 0.144 | 0.520 | 0.1399 | 14,570.5 | 0.616 | 0.113 | 0.016 | 0.015 | 6.482 | 0.026 | 0.076 | 0.02312 | 2,347.9 |

Electrical Equipment Sources

| | | | | | Emission | on Factor (I | b/kWh | Emi | ssions (lb/ | day) | Total Emi | ssions (m | etric tons) |
|--------------------------|------|---------------|--------|--------------------|------------------|--------------|-----------------|------------------|-------------|-----------------|------------------|-----------|-----------------|
| Source | KWh | Hours/ Day | Number | Duration (days) | N ₂ O | CH₄ | CO ₂ | N ₂ O | CH₄ | CO ₂ | N ₂ O | CH₄ | CO ₂ |
| Electric Cart Energy Use | 3.30 | 5 | 4 | 365 | 0.000004 | 0.00003 | 0.528 | 0.0000003 | 0.000002 | 0.03484 | 0.00040 | 0.00013 | 0.00012 |
| | | | | | | | Total | 0.0000003 | 0.000002 | 0.03484 | 0.00040 | 0.00013 | 0.00012 |

Land Use Sources

| Electricity Use | | | | | Em | ission Fact | or | | Emissions | } | | Emissions | ; |
|-------------------|--|-----------------------------------|---|-----------------------------------|----------|-------------|-----------------|----------|-----------|-----------------|----------|------------|-----------------|
| Electricity Use | | | | | | (lb/kWh) | | (1 | b/kWh/day | () | (metr | ic tons/kV | /h/yr) |
| Source | Units (sf or Number of Rooms) | Electricity Use kW/units/yr | Electricity Lighting Use kW/uints/yr | Electricity Water Use kW/yr | N₂O | CH₄ | CO ₂ | N₂O | CH₄ | CO ₂ | N₂O | CH₄ | CO ₂ |
| Hotel | 60,750 | 2.12 | 2.65 | 3.42 | 0.000004 | 0.00003 | 0.5279 | 0.00318 | 0.02620 | 419.11 | 0.00058 | 0.00434 | 69.38845 |
| Lodge | 14,132 | 4.20 | 4.87 | 2.77 | 0.000004 | 0.00003 | 0.5279 | 0.00140 | 0.01159 | 185.39 | 0.00023 | 0.00192 | 30.69304 |
| Event Center | 7,459 | 4.20 | 4.87 | 1.46 | 0.000004 | 0.00003 | 0.5279 | 0.00074 | 0.00612 | 97.85 | 0.00012 | 0.00101 | 16.20046 |
| Parking Lot | 45,000 | 0.00 | 0.88 | 0.00 | 0.000004 | 0.00003 | 0.5279 | 0.00043 | 0.00358 | 57.28 | 0.00007 | 0.00059 | 9.4831 |
| Exterior Lighting | 500,000 | 0.00 | 0.88 | 0.00 | 0.000004 | 0.00003 | 0.5279 | 0.00482 | 0.03978 | 636.38 | 0.00080 | 0.00659 | 105.359 |
| Pool/Spa | 7,459 | 1.86 | 1.85 | 0.43 | 0.000004 | 0.00003 | 0.5279 | 0.00030 | 0.00250 | 40.03 | 0.00005 | 0.00041 | 6.62713 |
| Employee Housing | 12 | 915 | 810.36 | 0.77 | 0.000004 | 0.00003 | 0.5279 | 0.00023 | 0.00187 | 29.95 | 0.00004 | 0.00031 | 4.95855 |
| Total | | | | | | | | 0.011108 | 0.091641 | 1466 | 0.001893 | 0.015172 | 242.7 |

| Wastewater Treatment | | Emis | sion Factor (II | b/gal) | Emissi | ons (poun | d/day) | Emission | s (metric t | tons/year) |
|----------------------|---|------------------|-----------------|-----------------|------------------|-----------|-----------------|------------------|-------------|-----------------|
| Source | Wastewater Generated (gallons/yr) | N ₂ O | CH₄ | CO ₂ | N ₂ O | CH₄ | CO ₂ | N ₂ O | CH₄ | CO ₂ |
| Project Site | 14,595,405 | 0.0000019 | 0.0000030 | 0.00086 | 0.0748 | 0.1183 | 34.4 | 0.00003 | 0.00005 | 0.01560 |
| Total | | | | | 0.0748 | 0.1183 | 34.4 | 0.00003 | 0.00005 | 0.01560 |

| Solid Waste | | Emission Factor (tons/ton) | | Emissions (| oound/day) | Emissions (metric tons/year) | |
|--------------------|---------------------------------------|----------------------------|-----------------|-------------|-----------------|------------------------------|-----------------|
| Source | Solid Waste Generated (tons/yr) | CH ₄ | CO ₂ | CH₄ | CO ₂ | CH₄ | CO ₂ |
| Hotel | 32.9 | 0.04257 | 0.14307 | 0.0042 | 0.0142 | 1.40 | 4.70 |
| Lodge/Enent Center | 10 | 0.04257 | 0.14307 | 0.0013 | 0.0043 | 0.42 | 1.41 |
| Employee Housing | 9 | 0.04257 | 0.14307 | 0.0011 | 0.0038 | 0.37 | 1.25 |
| | | | Total | 0.0066 | 0.0222 | 2.2 | 7.4 |

- Notes:
 Equipment, number of personnel, hours and days of operation, square footage provided by the client.
 Occupancy rate of approximately 50% based on the National Association of RV Parks and Campgrounds, 2019 Industry Trends and Insights Report
 Per client the fire pit will use manufactured compressed wood logs.
 Weight of compressed wood logs estimated using specifications of Pre-to-Logs Fire Logs manufactured by Lignetics.
 Round trips for LDA, LDT2 and LDT2 is based on CalEEMod Appendix D.

- Propane heaters assumed to be used only seven months out of the year during cold season.



Project Number: 2002-4723 Page 1 of 1

Yonder Yosemite CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS TABLE 3: Emission Factors and Assumptions

| Onsite | | | | | | Emission | Factors (g/ | bhp-hr) | | | | Emission Factors (lb/bhp-hr) | | | | | | | | |
|---------------------------------------|---------------------------|-------------|-----------------|--------|------------------|-------------------|-------------|-----------------|------------------|--------|-----------------|-------------------------------------|---------|------------------|-------------------|------------|-----------------|------------------|----------|-----------------|
| Source | Operational Horsepower | Load Factor | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N ₂ O | CH₄ | CO ₂ |
| Gator | 20 | 50 | 3.691 | 0.439 | 0.145 | 0.133 | 3.764 | 0.005 | 0.0042 | 0.171 | 528 | 0.0081 | 0.0010 | 0.0003 | 0.0003 | 0.0083 | 0.00001 | 0.00001 | 0.00038 | 1.1635 |
| Onsite | | | | Emissi | on Factors, | g/gal for Prp | ooane and/o | r g/ton for | Compessed | Wood | | Emission Factors (lb/gal or lb/ton) | | | | | | | | |
| Source | Operational Horsepower | Load Factor | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N₂O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | со | SO ₂ | N₂O | CH₄ | CO ₂ |
| Propane Fire Place/Heater | | | 5.897 | 0.454 | 0.318 | 0.318 | 3.402 | 1.50 | 0.408 | 0.091 | 5669.90 | 0.0130 | 0.0010 | 0.0007 | 0.0007 | 0.0075 | 0.00331 | 0.00090 | 0.00020 | 12.5000 |
| Propane Water Heater or Equipment | | | 5.897 | 0.454 | 0.318 | 0.318 | 3.402 | 1.50 | 0.408 | 0.091 | 5669.90 | 0.0130 | 0.0010 | 0.0007 | 0.0007 | 0.0075 | 0.00331 | 0.00090 | 0.00020 | 12.5000 |
| Compressed Wood | | | 6,260 | 6,804 | 1,905 | 1,905 | 17,872 | 181.4 | 0.0000 | 7,257 | 1,339,005 | 13.8000 | 15.0000 | 4.2000 | 4.2000 | 39.4000 | 0.40000 | 0.00000 | 15.99998 | 2,952 |
| Offsite | | | | | | Emissio | n Factors (| a/mile) | | | | | | | Emissi | on Factors | (lb/mile) | | | |
| Source | Region | Speed | NO _x | ROG | PM ₁₀ | PM _{2.5} | co " | SO ₂ | N ₂ O | CH₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH₄ | CO ₂ |
| Passenger Vehicle - LDA (offsite) | Mountain Counties | 55 | 0.0599 | 0.0119 | 0.0012 | 0.0011 | 0.7289 | 0.0027 | 0.0058 | 0.0029 | 270.7 | 0.0001 | 0.0000 | 0.0000 | 0.0000 | 0.0016 | 0.00001 | 0.00001 | 0.00001 | 0.5967 |
| Light-Duty Truck - LDT2 (offsite) | Mountain Counties | 55 | 0.0977 | 0.0117 | 0.0065 | 0.0062 | 0.1054 | 0.0025 | 0.0417 | 0.0005 | 265.4 | 0.0002 | 0.0000 | 0.0000 | 0.0000 | 0.0002 | 0.00001 | 0.00009 | 0.00000 | 0.5850 |
| Med-Heavy Duty - T6 Utility (onsite) | Mountain Counties | 15 | 3.4351 | 0.0661 | 0.0081 | 0.0077 | 0.2964 | 0.0154 | 0.2570 | 0.0031 | 1635.3 | 0.0076 | 0.0001 | 0.0000 | 0.0000 | 0.0007 | 0.00003 | 0.00057 | 0.00001 | 3.6052 |
| Med-Heavy Duty - T6 Utility (offsite) | Mountain Counties | 55 | 1.2017 | 0.0106 | 0.0098 | 0.0094 | 0.0433 | 0.0082 | 0.1362 | 0.0005 | 866.4 | 0.0026 | 0.0000 | 0.0000 | 0.0000 | 0.0001 | 0.00002 | 0.00030 | 0.00000 | 1.9101 |
| Heavy Duty Haul Truck - T7T (onsite) | Mountain Counties | 15 | 10.2772 | 0.8447 | 0.1693 | 0.1620 | 2.0494 | 0.0237 | 0.3944 | 0.0392 | 2509.1 | 0.0227 | 0.0019 | 0.0004 | 0.0004 | 0.0045 | 0.00005 | 0.00087 | 0.00009 | 5.5315 |
| Heavy Duty Haul Truck - T7T (offsite) | Mountain Counties | 55 | 4.8283 | 0.1313 | 0.1079 | 0.1032 | 0.5511 | 0.0128 | 0.2135 | 0.0061 | 1358.4 | 0.0106 | 0.0003 | 0.0002 | 0.0002 | 0.0012 | 0.00003 | 0.00047 | 0.00001 | 2.9948 |
| Heavy Duty Trucks - T7TC (onsite) | Mountain Counties | 15 | 10.7347 | 0.9067 | 0.1469 | 0.1406 | 2.3825 | 0.0238 | 0.3954 | 0.0421 | 2515.4 | 0.0237 | 0.0020 | 0.0003 | 0.0003 | 0.0053 | 0.00005 | 0.00087 | 0.00009 | 5.5456 |
| Heavy Duty Trucks - T7TC (offsite) | Mountain Counties | 55 | 4.5424 | 0.1354 | 0.1007 | 0.0964 | 0.5471 | 0.0128 | 0.2129 | 0.0063 | 1354.2 | 0.0100 | 0.0003 | 0.0002 | 0.0002 | 0.0012 | 0.00003 | 0.00047 | 0.00001 | 2.9854 |

| Electricity Emission Factors | Emission Factors (lb/kWhr) | | | |
|------------------------------|----------------------------|------------------|---------|-----------------|
| Source | Electricity Use Region | N ₂ O | CH₄ | CO ₂ |
| Electricity Usage | California | 0.000004 | 0.00003 | 0.5279 |

| Natural Gas Emission Factors | Emission Factors (lb/Kbtu) | | | |
|------------------------------|----------------------------|------------------|----------|-----------------|
| Source | Electricity Use Region | N ₂ O | CH₄ | CO ₂ |
| Natural Gas Usage | California | 0.0000000 | 0.000000 | 0.0000 |

Electricity Use by Land Use

| Source | Electricity (kWhr/sf/yr) | Lighting Electricity (kWhr/sf/vr) |
|-------------------|--------------------------|---|
| Hotel | 2.12 | 2.65 |
| Lodge | 4.20 | 4.87 |
| Event Center | 4.20 | 4.87 |
| Parking Lot | 0.00 | 0.88 |
| Exterior Lighting | 0.00 | 0.88 |
| Pool/Spa | 1.86 | 1.85 |
| Employee Housing | 915.02 | 810.36 |

Electricity Use by Electric Vehicles

| | Electricity |
|--------------------------|-------------|
| Source | (kWhr/day) |
| Electric Cart Energy Use | 3.30 |

Solid Waste Disposal Rate

| Source | Region | Rate (tons/yr) | | |
|--------------------|-----------|----------------|--|--|
| Hotel | Statewide | 65.7 | | |
| Lodge/Event Center | Statewide | 19.7 | | |
| Employee Housing | Statewide | 8.8 | | |

Solid Waste Emissions Factors

| Landfill Type | CH ₄ (tons/ton) | CO ₂ (tons/ton) |
|----------------------------|----------------------------|----------------------------|
| No Landfill Gas Collection | 0.042565854 | 0.143068564 |

- EPA Emission Factors for Greenhouse Gas N_2O , CH_4 , and CO_2 , March 2018, Table 6- https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf

Recylcing and Composting

Recylcing and Composting

Program

Percentage of Waste Recycled or

Composted

50

- Equipment list and engine size provided by Project Applicant. HP were adjusted whenever data was available for the size of the equipment provided by the applicant.
- Equipment criteria pollutant emission factors and load factors were obtained from CalEEMod, Appendix D 2016.
- N₂O emission factors for equipment were obtained from CFR Part 98 Table C-2 and CalEEMod Appendix D- 20164. Kg/mmbtu was converted to kg/bhp-hr using a diesel energy density of 7000 btu/hp-hr.
- CO_2 and CH_4 emission factors for construction equipment were obtained from $extit{CalEEMod Appendix D 2016}$.
- Vehicle emissions factors obtained from EMFAC-2017
- $-\,CO2\,\,, CH4\,\,and\,\,N2O\,\,emission\,factors\,for\,\,equipment\,\,were\,\,obtained\,\,from\,\,CFR\,\,Part\,\,98\,\,Table\,\,C-2\,\,and\,\,CalEEMod\,\,Appendix\,\,D\,\,2016$
- Electricity, propane and wood emission factors were obtained from CalEEMod, Appendix D 2016 and AP-42 Chapter 1, External Combustion Sources
- Electricity use by electric vehicles was obtained from Evaluation of Solar-Assisted, Electric and Gas Golf Carts, 2010.
- Solid waste and waste water emission factors and waste disposal rates obtained from CalEEMod Appendix D 2016
- Water use obtained from CalEEMod Appendix D 2016
- Waste disposal rates obtained from CalRecycle's estimated solid waste generation rates
- * The hotel and employee housing are listed by number of rooms.

| Water Use Rates | | | | | Water Use | | | |
|------------------|--------------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|--|-----------------------------|--|--|
| Source | Units (sf or Number of Rooms)* | Indoor Water Use (gal/unit/yr) | Outdoor Water Use (gal/unit/yr) | Total Indoor Water Use (gal) | Total Outdoor Water Use (gal) | Total Water Use (gal) | | |
| Hotel | 200 | 25,367 | 2,819 | 5,073,400 | 563,800 | 5,637,200 | | |
| Lodge | 14,132 | 304 | 19 | 4,289,557 | 273,793 | 4,563,350 | | |
| Event Center | 7,459 | 304 | 19 | 2,264,068 | 144,511 | 2,408,578 | | |
| Parking Lot | 45,000 | 0 | 0 | 0 | 0 | 0 | | |
| Pool/Spa | 7,459 | 59 | 36 | 441,148 | 270,381 | 711,529 | | |
| Employee Housing | 12 | 65,154 | 41,075 | 781,848 | 492,900 | 1,274,748 | | |
| | | | Total | 12,850,020 | 1,745,385 | 14,595,405 | | |

| Wastewater Treatment | Emis | Emission Factor (lb/gal) | | | | | | |
|----------------------|------------------|--------------------------|-----------------|--|--|--|--|--|
| Source | N ₂ O | CH₄ | CO ₂ | | | | | |
| Project Site | 0.0000019 | 0.000003 | 0.00086 | | | | | |



Project Number: 2002-4723 Page 1 of 1

APPENDIX B

BIOLOGICAL RESOURCES SURVEY REPORT

BIOLOGICAL RESOURCES SURVEY REPORT

HIGHWAY 120 LODGING HOSPITALITY PROJECT TUOLUMNE COUNTY, CALIFORNIA

Project No. 2002-4722

Prepared for:

James Tate, c/o TK Consulting 2082 Michelson Dr., Suite 400 Irvine, California 92612

Prepared by:

Padre Associates, Inc. 369 Pacific Street San Luis Obispo, California 93401

DECEMBER 2020

Revised July 2021





Authenticity and Signature Page



Padre Associates, Inc. 369 Pacific Street San Luis Obispo, California 93401

Padre Associates, Inc. hereby certifies that all statements furnished in the following Biological Resources Survey Report and all supporting information required for this biological evaluation are true and correct to the best of our knowledge and belief. Further, we certify that the field surveys associated with this report were performed by Padre using standards accepted by Tuolumne County and accurately represent all information retained from the field visit to the Highway 120 Lodging Hospitality Project Site, Tuolumne County, California.

Christina Santala

Project Biologist

Eric Snelling Principal Nathan Tallman Project Biologist



TABLE OF CONTENTS

| 1.0 | INTRO | DUCTION | 1-1 |
|-----|--|--|--|
| 1 | I.1 PR | DJECT LOCATION | 1-1 |
| 1 | 1.2 PR | DJECT DESCRIPTION | 1-1 |
| 1 | I.3 SIT | E HISTORY | 1-1 |
| 2.0 | REGU | LATORY AUTHORITY | 2-1 |
| 2 | 2.1 FEI | DERAL REGULATIONS | 2-1 |
| | 2.1.1 | Endangered Species Act of 1972. | 2-1 |
| | 2.1.2 | Migratory Bird Treaty Act | 2-1 |
| | 2.1.3 | Waters of the United States | 2-2 |
| | 2.1.4 | Federal Wetlands | _ |
| | 2.1.5 | Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) | |
| 2 | 2.2 ST/ | ATE REGULATIONS | |
| | 2.2.1 | California Department of Fish and Wildlife | |
| | 2.2.2 | Porter-Cologne Water Quality Control Act | |
| 2 | 2.3 LO | CAL AUTHORITY | 2-6 |
| 3.0 | METH | ODS | 3-1 |
| 3 | 3.1 DE | SKTOP REVIEW | 3-1 |
| 3 | | LOGICAL RESOURCES SURVEYS | |
| 3 | 3.3 AQ | JATIC RESOURCES DELINEATION SURVEY | 3-3 |
| 4.0 | FINDI | NGS | 4-1 |
| 4 | 1.1 RE | GIONAL SETTING | 4-1 |
| 4 | 1.2 BO | TANICAL RESOURCES | 4-1 |
| | 4.2.1 | | . ד ו |
| | | Vegetation Communities | |
| | 4.2.2 | Vegetation Communities | |
| | 4.2.2 | · · · | 4-1 |
| | 4.2.2 4.2.3 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and | 4-1 4-4 |
| | | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) | 4-1 4-4 4-4 |
| | 4.2.3 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) | 4-1 4-4 4-4 4-4 |
| | 4.2.3 4.2.4 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) | 4-1 4-4 4-4 4-4 |
| | 4.2.3 4.2.4 4.2.5 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) | 4-1 4-4 4-4 4-4 4-5 |
| | 4.2.3 4.2.4 4.2.5 4.2.6 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) | 4-1 4-4 4-4 4-4 4-5 |
| | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland | 4-1 4-4 4-4 4-5 4-5 anish 4-5 |
| | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland Arctostaphylos viscida Shrubland Alliance (Whiteleaf manzanita chaparral) Ceanothus cuneatus Shrubland Alliance (Buck brush chaparral) Eriodictyon californicum Shrubland Alliance (California yerba santa scrub) Riparian Scrub Acmispon americanus (Lotus unifoliatus) Provisional Herbaceous Alliance (Spaciover fields) Ruderal | 4-14-44-44-54-5 anish4-5 |
| | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 4.2.9 4.2.10 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland Arctostaphylos viscida Shrubland Alliance (Whiteleaf manzanita chaparral) Ceanothus cuneatus Shrubland Alliance (Buck brush chaparral) Eriodictyon californicum Shrubland Alliance (California yerba santa scrub) Riparian Scrub Acmispon americanus (Lotus unifoliatus) Provisional Herbaceous Alliance (Spaclover fields) Ruderal Developed | 4-1 4-4 4-4 4-5 4-5 anish 4-6 4-6 |
| | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 4.2.9 4.2.10 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland | 4-14-44-44-5 anish4-54-64-6 |
| 4 | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 4.2.9 4.2.10 1.3 WIL | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland | 4-14-44-44-5 anish4-54-64-6 |
| 4 | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 4.2.10 4.3 WIL 4.4 WIL 4.5 SPI | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland Arctostaphylos viscida Shrubland Alliance (Whiteleaf manzanita chaparral) Ceanothus cuneatus Shrubland Alliance (Buck brush chaparral) Eriodictyon californicum Shrubland Alliance (California yerba santa scrub) Riparian Scrub Acmispon americanus (Lotus unifoliatus) Provisional Herbaceous Alliance (Spaclover fields) Ruderal Developed DLIFE DLIFE MOVEMENT CORRIDORS ECIAL-STATUS BIOLOGICAL RESOURCES | 4-14-44-44-5 anish4-64-64-6 |
| 4 | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 4.2.9 4.2.10 4.3 WIL 4.4 WIL 4.5 SPI 4.5.1 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland. Arctostaphylos viscida Shrubland Alliance (Whiteleaf manzanita chaparral) Ceanothus cuneatus Shrubland Alliance (Buck brush chaparral) Eriodictyon californicum Shrubland Alliance (California yerba santa scrub) Riparian Scrub Acmispon americanus (Lotus unifoliatus) Provisional Herbaceous Alliance (Spaclover fields) Ruderal Developed. DLIFE DLIFE MOVEMENT CORRIDORS ECIAL-STATUS BIOLOGICAL RESOURCES Special-Status Plant Communities and USFWS Critical Habitat | 4-14-44-44-5 anish4-64-64-64-7 |
| 4 | 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.8 4.2.9 4.2.10 4.3 WIL 4.5 SPI 4.5.1 4.5.1 4.5.2 | Pinus ponderosa Forest and Woodland Alliance (Ponderosa Pine forest and woodland) Mixed foothill woodland Arctostaphylos viscida Shrubland Alliance (Whiteleaf manzanita chaparral) Ceanothus cuneatus Shrubland Alliance (Buck brush chaparral) Eriodictyon californicum Shrubland Alliance (California yerba santa scrub) Riparian Scrub Acmispon americanus (Lotus unifoliatus) Provisional Herbaceous Alliance (Spaclover fields) Ruderal Developed DLIFE DLIFE MOVEMENT CORRIDORS ECIAL-STATUS BIOLOGICAL RESOURCES | 4-14-44-44-5 anish4-54-64-64-64-7 |



| 4.5.4 | Special-Status Plants | 4-10 |
|---|--|------|
| 4.5.5 | Special-Status Wildlife | 4-14 |
| 5.0 IMPAC | r discussion | 5-1 |
| | NT COMMUNITIES AND HABITATS | |
| | TREES | |
| | ATIC RESOURCES | |
| | CIAL-STATUS PLANTS | |
| | CIAL-STATUS WILDLIFE | |
| | Special-Status AmphibiansSpecial-Status Reptiles | |
| | Special-Status Memmals | |
| | Special-Status Bats | |
| | vigratory Birds and Raptors | |
| 6.0 RECOM | IMENDED AVOIDANCE MEASURES | 6-1 |
| 7.0 REFER | ENCES | 7-1 |
| | LIST OF FIGURES | |
| Figure 1-1. F | Project Location | 1-2 |
| Figure 4-1. F | Plant Community Map | 4-2 |
| Figure 4-2. F | Regional Special-Status Biological Resources | 4-8 |
| Figure 5-1. F | Plant Community and Habitat Impacts | 5-6 |
| Figure 5-2. | Aquatic Resource Impacts | 5-7 |
| | LIST OF TABLES | |
| Table 3-1. B | iological Resources Survey Summary | 3-2 |
| Table 4-1. S | Summary of Habitats and Vegetation within the BSA | 4-3 |
| Table 4-2. S | pecial-Status Plant Species | 4-12 |
| Table 4-3. S | pecial-Status Wildlife Species | 4-16 |
| Table 5-1. P | lant Community and Habitat Impact Summary Table | 5-1 |
| Table 5-2. A | quatic Resources Impact Summary Table | 5-3 |
| | APPENDICES | |
| Appendix A. Appendix B. Appendix C. Appendix D. Appendix E. Appendix F. Appendix G. | Site Photographs Vascular Plant Species List Wildlife Species List CNDDB Results / USFWS Species List Preliminary Aquatic Resources Delineation Report Special-Status Plant Spring Botanical Survey Report Oak Tree Inventory Report | |



1.0 INTRODUCTION

The following Biological Resources Survey Report (Report) has been prepared by Padre Associates, Inc. (Padre) to document the results of a biological resources and wetland delineation survey conducted in July 2020 and May 2021 on behalf of TK Consulting for the Highway 120 Lodging Hospitality Project (Project) located in the Big Oak Flat area adjacent to Highway 120 in Tuolumne County, California (Project site). This Report documents the results of Padre's desktop review and field survey, and presents a discussion of existing biological resources, aquatic features, and special-status plants and animals with the potential to occur within the proposed Project site. This report also includes an analysis of the potential Project impacts to these resources and recommended avoidance measures to avoid and or minimize Project impacts.

1.1 PROJECT LOCATION

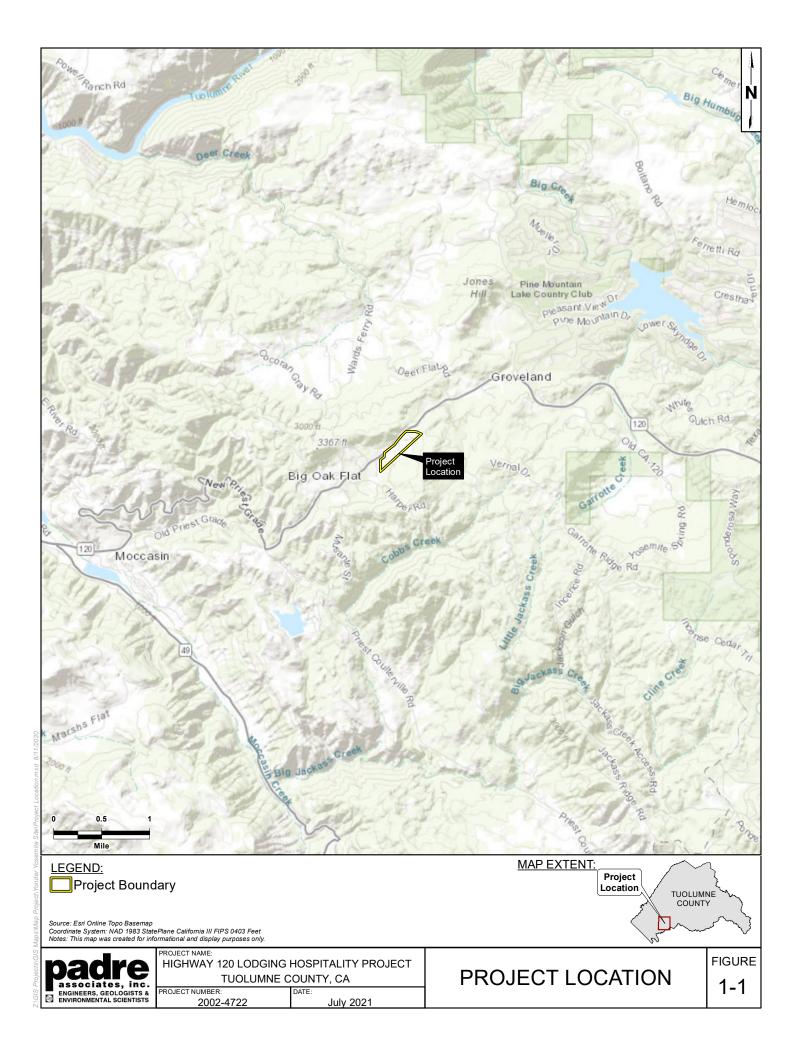
The site is located along State Route 120 between Big Oak Flat and Groveland in Tuolumne County, in the NW½ of Section 29, Township 1 south, Range 16 east within the Groveland 7.5-minute United States Geological Survey (USGS) quadrangle, and is comprised of ten parcels identified as Assessor's Parcel Number (APN) 066-140-013, 066-140-014, 066-140-015, 066-140-016, 066-140-017, 066-140-018, 066-140-019, 066-140-022, 066-140-031, and 066-140-032 (Project site). The Project site is bounded on the north by State Route 120, on the east by undeveloped forest land, on the south by a cemetery and undeveloped forest land, and on the west by vacant land and a hardware store.

1.2 PROJECT DESCRIPTION

The Project proposes development of the approximately 31-acre property consisting of recreational development consisting of 200 guest room accommodations, which will include a combination of luxury units, family units, and classic units. The Project also includes a lodge, restaurant, events space, pool, and spa.

1.3 SITE HISTORY

The Project site was initially cleared in the mid-1980s as part of a previous development proposal. The Project site was mass-graded at that time and drainage improvements were partially installed underground. A service station building, canopy, and underground storage tanks were constructed at that time; however, the service station never operated. The service station is currently vacant. The Project site has been vacant since the 1980s and erosion has occurred within onsite drainages due to the lack of erosion control devices and vegetation. The Project site has partially revegetated naturally over the last 30 years.





2.0 REGULATORY AUTHORITY

The regulatory authority section describes those policies and plans administered by resource agencies pertaining to those biological resources that are known to exist and/or have the potential to occur within the Project region.

2.1 FEDERAL REGULATIONS

2.1.1 Endangered Species Act of 1972.

The Federal Endangered Species Act (FESA), administered by the United States Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA), and the National Marine Fisheries Service (NMFS), provides protection to species listed as Threatened or Endangered, and critical habitat designated for the protection of such species. FESA prohibits "take" of Threatened and Endangered species (including plants) except under certain circumstances and only with authorization from the USFWS through a permit under sections 4(d), 7, or 10(a) of the FESA. Under FESA, take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Critical Habitat is defined in Section 3(5)(A) of FESA as: (1) specific areas within the geographical area occupied by the species at the time of listing, on which are found those physical or biological features that are essential to the conservation of the listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time of listing that are essential for the conservation of a listed species.

The FESA also provides protection to those species proposed to be listed under FESA or critical habitats proposed to be designated for such species. In addition to the listed species, the Federal government also maintains lists of species that are neither formally listed nor proposed but could potentially be listed in the future. These Federal candidate species include taxa for which substantial information on biological vulnerability and potential threats exist and are maintained in order to support the appropriateness of proposing to list the taxa as an Endangered or Threatened species.

2.1.2 Migratory Bird Treaty Act

The USFWS also administers the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). Under the MBTA, it is unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 10, including feathers or other parts of birds, nests, eggs or products, except as allowed by implementing regulations (50 CFR 21). In 2017, Solicitor of the Department of the Interior issued a legal opinion (M-37050 or M-Opinion) stating that "The Migratory Bird Treaty Act Does Not Prohibit Incidental Take" which in effect revoked take protections under the MBTA. On January 5, 2021, the USFWS published a final rule that defined the scope of the MBTA stating that incidental take of birds resulting from an activity is not prohibited when the underlying purpose of that activity is not to take birds. On May 6, 2021, the USFWS announced a proposed rule to revoke the January 7 final regulation that limited the scope of the MBTA, in an effort to reinstate federal MBTA protections. The proposed rule is pending as



of June 2021. In the interim, migratory birds are protected (for take) through AB 454 California Migratory Bird Protection Act (California Fish and Game Code 3513).

2.1.3 Waters of the United States

The U.S. Army Corps of Engineers (ACOE) is responsible for the issuance of permits for the placement of dredged or fill material into waters of the United States (U.S.) pursuant to Section 404 of the Clean Water Act (CWA) (33 USC 1344).

In non-tidal waters the lateral extent of Federal jurisdiction is determined by the ordinary high water mark (OHWM), which is defined as the: "...line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." (33 CFR 328[e]). Additional physical characteristics, including matted vegetation, sediment sorting, multiple observed flow events, water staining, and others, have also been used to determine the OHWM (U.S. Army Corps of Engineers, 2005).

Wetlands could also be regulated as waters of the U.S. if they were adjacent to jurisdictional waters (other than waters that are themselves wetlands). The ACOE regulation concerning wetlands adjacent to jurisdictional waters is defined at 33 CFR 328.4(c)(4):

Non-tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:

- In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
- When <u>adjacent</u> wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands (emphasis added)

The term adjacent is defined at 33 CFR 328.3(C) as:

The term adjacent means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands"

The recently issued Navigable Waters Protection Rule offers further clarification that adjacent wetlands include the following:

- Wetlands that physically touch each other
- Wetlands separated from a water of the U.S. by only a natural berm, bank or dune
- Wetlands inundated by flooding from a water of the U.S. in a typical year
- Wetlands that are physically separated from a jurisdictional water of the U.S. by an artificial dike, barrier, or similar artificial structure with a direct hydrologic surface connection to the jurisdictional water in a typical year
- Wetlands that are divided by a road or similar artificial structure with a direct hydrologic surface connection through or over that structure in a typical year

In 2015, the ACOE and Environmental Protection Agency (EPA) issued new definitions for waters/wetlands (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency, 2015), known as the 2015 Clean Water Rule. Immediately subsequent to issuance, the new Rule



was challenged in Federal courts, resulting in a nationwide hold on the new Rule, reverting to the 1986 regulations and subsequent guidance for Approved Jurisdictional Determinations. In 2017, the ACOE and EPA published their intent to "review and rescind or revise" the 2015 Clean Water Rule, and the EPA asked the courts to suspend the case while the Rule was under review. In 2018 the EPA delayed the effective date of the 2015 Clean Water Rule for two years, and the Sixth Circuit Court lifted its stay of the Rule. A Federal judge then issued a nationwide injunction on the administrative delay of the Clean Water Rule for failure to comply with the Administrative Procedure Act. Pursuant to the Court order, the 2015 Clean Water Rule became effective in 22 states, including California (U.S. Army Corps of Engineers, 2018).

In December 2018 the ACOE and EPA proposed a revised definition of waters of the U.S. that was published in the Federal Register in early 2019, and subsequently repealed the 2015 Clean Water Rule reverting regulation back to the 1986 regulations and subsequent guidance for Approved Jurisdictional Determinations. On January 23, 2020, the ACOE and EPA finalized the Navigable Waters Protection Rule to define Waters of the U.S. and streamline the definition so that it includes four categories of jurisdictional waters, provides clear exclusions for features not regulated, and defines terms in the regulatory text. The Navigable Waters Protection Rule fulfills Executive Order 13788 and became effective on June 23, 2020.

The four clear categories of waters that are considered waters of the U.S. under the Navigable Waters Protection Rule include the following:

- Territorial seas and traditional navigable waters (TNW)
- Perennial and intermittent tributaries that contribute surface flow, directly or through non-jurisdictional surface water features, to a TNW in a typical year
- Lakes, ponds, and impoundments of jurisdictional waters
- Adjacent wetlands (wetlands that are physically touching, separated by natural feature, or separated by artificial feature with direct hydrologic surface water connection)

The Navigable Waters Protection Rule also outlines what aquatic features are not waters of the U.S. The most notable of these are groundwater, ephemeral features, many farm and roadside ditches, artificial lakes and ponds or water filled depressions excavated in upland, stormwater control and groundwater recharge features.

2.1.4 Federal Wetlands

Wetlands are a special category of waters of the U.S., and are defined at 33 CFR 328.3(b) as: "...those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

The ACOE utilizes the *Corps of Engineers Wetland Delineation Manual* (1987), herein referred to as 1987 ACOE Manual, to identify wetlands subject to regulatory jurisdiction (jurisdictional wetlands) under the CWA. In central and southern California, Nevada, Arizona, and the other arid regions of the western U.S. the *Regional Supplement to the Corps of Engineers*



Wetland Delineation Manual: Arid West Region (Version 2.0) prepared by the ACOE's Engineer Research and Development Center (2008) is used to delineate jurisdictional wetlands.

The ACOE identifies jurisdictional wetlands using a three-parameter definition using vegetation, soil, and hydrological characteristics. Excluding unusual conditions (atypical conditions or disturbed sites), all three parameters must be present for a site to be considered a jurisdictional wetland.

2.1.5 Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)

The ACOE is also responsible for authorizing work affecting navigable waters of the U.S. Structures or work under or over a navigable water of the U.S. is considered to have an impact on the navigable capacity of the waterbody (33 CFR 322.3[a]).

2.2 STATE REGULATIONS

2.2.1 California Department of Fish and Wildlife

2.2.1.1 Wildlife and Plant Protection

The California Department of Fish and Wildlife (CDFW) administers a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the California Endangered Species Act of 1984 (CESA - Fish and Game Code Section 2050) that regulates the listing and take of threatened and endangered species. Under Section 2081 of CESA, CDFW may authorize the take of an endangered and/or threatened species, or candidate species by a permit or Memorandum of Understanding for scientific, educational, or management purposes.

CDFW also maintains lists of "candidate species" which are species that CDFW has formally noticed as under review for addition to the threatened or endangered species lists. California candidate species are afforded the same level of protection as listed species. CDFW also designates "species of special concern" which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species, but may be added to official lists in the future. The species of special concern list is intended by CDFW as a management tool to call attention to declining populations and focus efforts on decreasing threats to long-term viability.

CDFW also administers other State laws designed to protect wildlife and plants, including those laws stated within Fish and Game Code Section 3511, 3503, 3503.5, and 3513. Under Section 3511 of the Fish and Game Code, CDFW designates species that are afforded "fully protected" status. Fish and Game Code 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Section 3503.5 of the Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest of eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Fish and Game Code 3513 states that Federal MBTA protections are afforded in California through Assembly Bill (AB) 454 California Migratory Bird Protection Act.

CDFW also manages the California Native Plant Protection Act of 1977 (Fish and Game Code Section 1900, et seq), which was enacted to identify, designate and, protect rare plants. In accordance with CDFG guidelines, California Native Plant Society (CNPS) Rare Plant Rank 1B



plants are considered "rare" under the Act, and are evaluated in California Environmental Quality Act (CEQA) reports.

2.2.1.2 Section 1602 Lake and Streambed Alteration Agreement

The California Department of Fish and Wildlife (CDFW) administers several laws and programs designed to protect fish and wildlife resources in the State of California, including Section 1602 of the California Fish and Game Code, which requires a Lake or Streambed Alteration Agreement between CDFW and any State or local governmental agency or public utility before the initiation of any construction project that will:

- Divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake;
- Use materials from a streambed; or
- Result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake.

Therefore, CDFW claims jurisdiction over the bed, bank, and channel of drainage features with regard to activities regulated under Section 1602 of the California Fish and Game Code. CDFW has adopted the same wetland definition as USFWS, classified by the presence of only one parameter; however, CDFW does not specifically regulate wetlands.

2.2.2 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (CA Water Code §§ 13000-13999.10) mandates that waters of the State of California shall be protected. Current policy in California is that activities that may affect waters of the State shall be regulated to attain the highest quality. Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the State. The Porter-Cologne Act establishes that the State assumes responsibility for implementing portions of the Federal CWA, rather than operating separate State and Federal water pollution control programs in California. Consequently, the State is involved in activities such as setting water quality standards, issuing discharge permits, and operating grant programs. Pursuant to Section 401 of the CWA, the ACOE cannot issue a Federal CWA permit until the State of California first issues a Water Quality Certification to ensure that a project will comply with State water quality standards. The CWA's 401 certification requirement applies to many types of permits and is an important tool for the State to control projects that might degrade State waters. In Stanislaus County, the authority to issue water quality certifications is vested with the Central Valley Regional Water Quality Control Board (CVRWQCB).

In 2019, the State Water Resources Control Board adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material (Procedures), for inclusion in the Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) wetland delineation procedures; 3) a wetland jurisdictional framework; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Procedures took effect in May 2020.



2.2.2.1 Waters of the State

State Water Code defines Waters of the State broadly to include any surface water or groundwater including saline waters, within the boundaries of the State. These include:

- Natural wetlands
- Wetlands created by modification of a water of the State
- Wetlands that meet definition of waters of the U.S.
- Artificial wetlands that meet the following criteria:
 - Agency approved mitigation projects
 - Specifically identified in a water quality control plan as a wetland or other water of the State
 - Resulting from historic human activity, not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape
 - Greater than or equal to one acre in size, unless constructed for one of a variety of industrial or land management purposes

2.2.2.2 State Wetland Policy

A State wetland is defined in the new Procedures as an aquatic feature that "...under normal circumstances has continuous or recurrent saturation of the upper substrate caused by groundwater, shallow surface water, or both; duration of saturation sufficient to cause anaerobic conditions in the upper substrate; and, vegetation that is dominated by hydrophytes or lacks vegetation."

If an aquatic feature meets the definition of a wetland it may be considered a water of the State.

2.3 LOCAL AUTHORITY

Tuolumne County incorporates all USFWS, CDFW, RWQCB, and ACOE standards when assessing project impacts to vegetation, wildlife, and wetland habitats, as well as the California Environmental Quality Act (CEQA) evaluation process, when applicable. In addition, Tuolumne County has developed a framework of land use policies and recommendations intended to reduce impacts to sensitive biological resources. Tuolumne County does not have a County-specific definition for the classification of wetlands.

Relevant policies and recommendations can be found in the County planning documents listed below.

- Tuolumne County Wildlife Handbook (Tuolumne County 1987);
- 2018 Tuolumne County General Plan, Volume I: General Plan Policy Document (Tuolumne County 2018);
 - Chapter 16 Natural Resources Element; and
- Public Resources Code Section 21083.4 (Oak Woodlands).



3.0 METHODS

Methods to collect biological resources information included a desktop review and field survey of the Biological Survey Area (BSA). The BSA encompassed the entire approximately 31-acre property and an approximately 250-foot buffer extending to the hardware store parking lot in Big Oak Flat. A wetland delineation survey was completed in conjunction with the biological resources survey to identify and document existing aquatic features within the BSA. Detailed information on resources utilized for the desktop review and field survey methods are provided in the following sections.

3.1 DESKTOP REVIEW

The desktop review included a query of the CDFW California Natural Diversity Database (CNDDB) to identify reported occurrences of special-status plant species and sensitive habitats within the region surrounding the BSA. For the purposes of this Report, the term "region" refers to an approximate five-mile buffer surrounding the BSA. The Project site is located within the Groveland 7.5-minute USGS quadrangle, and the CNDDB search was focused on this and eight adjacent quadrangles including Tuolumne, Duckwall Mtn., Jawbone Ridge, Buckhorn Peak, Coulterville, Penon Blanco Peak, Moccasin, and Standard quadrangles. The CNDDB is a statewide digital database utilized to locate the nearest occurrences of rare, Threatened, Endangered, and special-status species and natural communities in California. All wildlife taxa listed with the CNDDB are considered "special animals" in which the CDFW is interested in tracking, regardless of their legal protection status. In addition, a species list was requested from USFWS Information for Planning and Consultation (IPaC) platform (Sacramento Fish and Wildlife Office Consultation No. 08ESMF00-2021-SLI-0326) and a review of site records from other environmental documents and range maps including Zeiner et al, (1998, 1990a, 1990b) and Sibley (2014) were utilized to determine what species the Project site has the potential to support.

The USFWS Critical Habitat Portal (USFWS, 2020a) was reviewed to determine location of Critical Habitat for federally protected species that may potentially occur in the region. The USFWS Critical Habitat Portal is an online database that provides most recent datasets for federally defined Critical Habitat areas.

The USFWS National Wetland Inventory (NWI) is an online resource that provides detailed information on the abundance, characteristics, and distribution of USFWS-defined wetlands, and NWI data are used to promote the understanding, conservation and restoration of wetlands throughout the United States. A query of the NWI database was conducted to identify wetlands and waters in the BSA and the Project region (USFWS, 2020b).

In addition, the desktop review examined the Wetland Delineation Report for the Yosemite Gateway Plaza Project, Tuolumne County, California (LSA, 2010) to gather background information of the documented aquatic features to utilize as guidance for completion of the wetland delineation field survey.



3.2 BIOLOGICAL RESOURCES SURVEYS

On July 21, 2020, Padre Biologists, Christina Santala and Nathan Tallman, completed a field survey within the BSA focused on the existing biological resources (wildlife, plants, plant communities), and presence/absence of special-status plant and wildlife species and habitats, as well as the suitability of habitat to support these species within the BSA. On May 10 through May 12, 2021, Padre completed additional field surveys focused on special-status plants and an oak tree inventory.

Biological resources field survey methods consisted of walking systematic transects throughout the BSA and recording wildlife species observed by visual observation using binoculars, indirect signs (e.g., tracks, scat, skeletal remains, and burrows), and/or auditory cues (i.e., calls and songs). Field notes on botanical resources and plant communities were also recorded. The initial biological resources field survey was conducted in July 2020, which was relatively late in the growing season of annual grass and herbaceous plant species and was outside the typical blooming for some potentially occurring special-status species known to occur in the Project area. The May 2021 field survey served as a follow-up spring botanical survey that captured the blooming periods for potentially occurring special-status plant species.

The oak tree inventory consisted of mapping all oak trees within and overlapping to the Project footprint, and pine trees and oaks outside of the Project footprint that may be incorporated into Project landscape design. Field methods consisted of mapping the location and collecting data on oak trees using a Global Positioning System (GPS) and recording notes on species, diameter at breast height (DBH), and health of each oak tree. A summary of field surveys completed to date is provided in Table 3-1. Biological Resources Survey Summary.

Table 3-1. Biological Resources Survey Summary

| Date | Survey Type | Biologists |
|-----------------|--------------------------------|--|
| July 21, 2020 | Biological resources | Christina Santala, Nathan Tallman |
| July 21, 2020 | Aquatic resources delineation | Christina Santala, Nathan Tallman |
| May 10-12, 2021 | Special-status plant botanical | Christina Santala, Shannon Gonzalez, Cody Montoya |
| May 10-12, 2021 | Oak tree inventory | Christina Santala, Shannon Gonzalez, Cody Montoya |
| May 22, 2021 | Biological resources | Tuolumne County Biologist |



3.3 AQUATIC RESOURCES DELINEATION SURVEY

On July 21, 2020, in conjunction with the biological resources survey, Padre completed a field survey to identify, document and determine regulatory jurisdiction for all aquatic resources observed within the Project site. A summary of the wetland delineation survey and determination results are provided within this Report in Section 4.5.2 Aquatic Resources. The complete aquatic resources delineation report is attached as Appendix E - Preliminary Aquatic Resources Delineation Report.

In summary, all potential wetlands were evaluated for the presence of hydrophytic vegetation, hydric soils, and hydrology. Wetland delineation methods followed guidelines from the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (Environmental Laboratory, 2008). All data was recorded on ACOE Wetland Determination Data Forms – Arid West Region (Version 2.0). A handheld Global Positioning Systems (GPS) unit was used to record the location of the samples and the wetland boundary (upon determination).

All non-wetland waters were evaluated based on desktop and field verification of presence of bed and bank and field indicators for the OHWM following the guidelines of *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley, 2008). A GPS unit was used to record representative points at the top of the bank of representative features. Desktop mapping of the feature limits were completed following the field survey.



4.0 FINDINGS

The following discussion of botanical resources includes those that were identified in the desktop review, those observed during the July 2020 field survey within the BSA, and resources that have the potential to occur based on the presence of suitable habitat. Supporting documentation includes Figure 4-1 – Plant Community Map, Figure 4-2 - Regional Special-Status Biological Resources, Appendix A – Site Photographs, Appendix B – Vascular Plant List, Appendix C – Wildlife List, Appendix D – CNDDB Results Table and USFWS Species List, and Appendix E – Preliminary Aquatic Resources Delineation Report.

4.1 REGIONAL SETTING

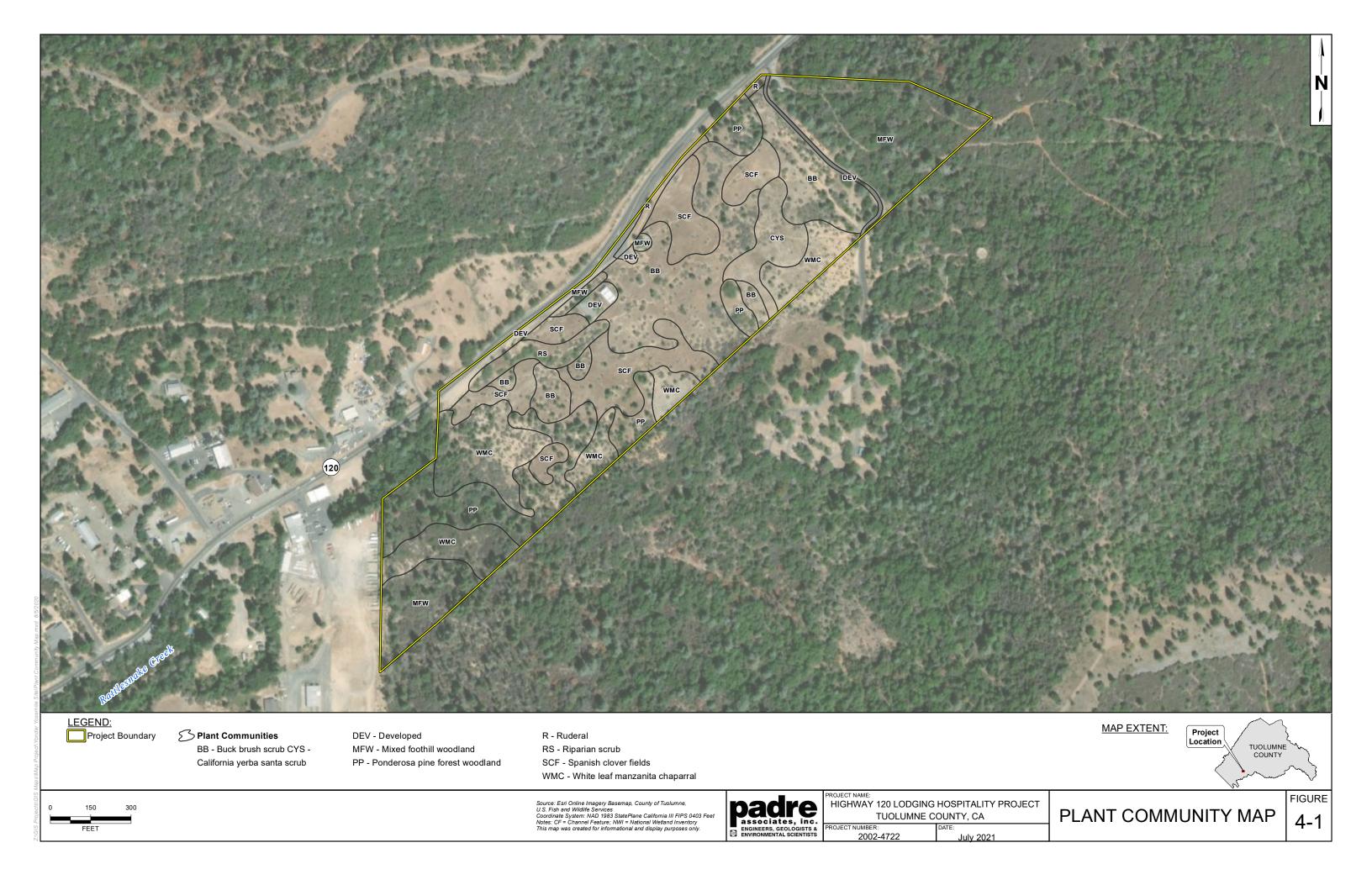
The Project site is located in the foothills on the west slope of the Sierra Nevada mountain range, approximately 20 miles west of Yosemite National Park, at an elevation of approximately 3,000 feet above sea level. The regional topography is generally hilly to mountainous with moderate to steep slopes. The Project site is currently vacant, with one vacant commercial building and a canopy structure associated with a partially developed service station facility. The majority of the Project site was previously disturbed approximately 30 years ago during the partial construction of a previous development. The extent of disturbance ranged from complete vegetation clearing to selective thinning of forest habitat. Because of the variability of past disturbance, there are relatively mature stands of woodland habitat at the eastern and westernmost ends of the Project site.

The surrounding land uses include a transportation, light industrial, commercial, residential, forested open space, and a cemetery adjacent to the southern boundary of the Project site. State Route 120 parallels the entire northern boundary of the Project site which reduces the overall value of the of the site as a wildlife corridor.

4.2 BOTANICAL RESOURCES

4.2.1 Vegetation Communities

Based on species composition, life form, and community membership rules, the vegetation within the BSA was classified into vegetation types based on treatments described in *A Manual of California Vegetation Second Edition* (MCV2) (Sawyer et al., 2009), and site-specific classifications. All identifiable plant species observed within the BSA were documented. Plant specimens that were not positively identified in the field were further examined using appropriate botanical keys, including *The Jepson Manual Vascular Plants of California* (Baldwin et. al., 2012). A list of plant species identified in the BSA during the July 2020 field survey is provided in Appendix B. The eight vegetation types observed included *Pinus ponderosa* Forest and Woodland Alliance (Ponderosa Pine forest and woodland), Mixed foothill woodland, *Arctostaphylos viscida* Shrubland Alliance (Whiteleaf manzanita chaparral), *Ceanothus cuneatus* Shrubland Alliance (Buck brush chaparral), *Eriodictyon californicum* Shrubland Alliance (California yerba santa scrub), Riparian Scrub, *Acmispon americanus* (*Lotus unifoliatus*) Provisional Herbaceous Alliance (Spanish clover fields), Ruderal, and land use described as Developed. Approximate acreages and regulatory status of each of each type is listed in Table 4-1 – Summary of Habitats and Vegetation within the BSA.





The CDFW has created the List of Vegetation Alliances and Associations (Natural Communities List) (CDFW, 2020c), to assist in the identification of which Natural Communities are considered to be a high priority for conservation. The Natural Communities List includes CNDDB Natural Community occurrences (i.e., Holland types) and vegetation types classified according to the current State standard MCV2 nomenclature. All Natural Community occurrences in the CDFW Natural Communities have a corresponding G (global) and S (State) rank, according their degree of imperilment (as measured by rarity, trends, and threats) using the Heritage Methodology with ranking range described as G1-G5 being globally critically imperiled (G1) to demonstrably secure (G5) and S1-S5 being State critically imperiled (S1) to demonstrably secure (S5). Alliances and associations with a rarity ranking of 1-3 are considered sensitive and are indicated in the CDFW Natural Communities List.

Table 4-1. Summary of Habitats and Vegetation within the BSA

| Vegetation/Habitat Classification | Regulatory Status | Acres within the BSA | Percentage of the Project Site |
|------------------------------------|----------------------|----------------------|-----------------------------------|
| Ponderosa Pine forest and woodland | G5, S4 | 5.2 | 14% |
| Mixed foothill woodland | NA | 7.5 | 21% |
| White leaf manzanita chaparral | G4, S4 | 6.1 | 17% |
| Buck brush chaparral | G4(?) | 8.4 | 23% |
| California yerba santa scrub | G4, S4 | 1.4 | 4% |
| Riparian Scrub | See Notes | 0.9 | 2% |
| Spanish clover fields | G4(?), S4(?) | 5.2 | 14% |
| Ruderal | NA | 0.4 | 1% |
| Developed | NA | 1.4 | 4% |
| | Total: | 36.5 | 100% |

Notes:

Riparian scrub is a site-specific classification based on observed species composition (CDFW Natural Community); there is no specific State regulatory status rank. However, CDFW typically affords protection to riparian vegetation through California Fish and Game Code section 1600 notification process.

Global and State Ranks (CDFW, 2020b):

- G1 S1 Critically Imperiled Extreme rarity (often 5 or fewer populations)
- G2 S2 Imperiled Very restricted range, very few populations (often 20 or fewer)
- G3 S3 Vulnerable Restricted range, relatively few populations (often 80 or fewer)
- G4 S4 Apparently secure Uncommon but not rare
- G5 S5 Secure Common; widespread and abundant
- (?) A question mark (?) denotes an inexact numeric rank due to insufficient samples over the full expected range of the type, but existing information indicates that designated rank is appropriate.



4.2.2 *Pinus ponderosa* Forest and Woodland Alliance (Ponderosa Pine forest and woodland)

Ponderosa pine forest and woodland a occurs on all upland topography, floodplains, low-gradient depositions along streams, and raised benches, and is characterized by presence of *Pinus ponderosa* (Ponderosa pine) dominant or co-dominant in the tree canopy with several pine and oak (*Quercus* sp.) species, tree and shrub canopy is open to continuous, and herbaceous layer is sparse, abundant, or grassy (Sawyer et. al., 2009). As observed during the July 2020 survey, this alliance occurred intermittently throughout the BSA, and intergraded with surrounding vegetation types while exhibiting variable tree and canopy density. Within the BSA, Ponderosa pine was the dominant species with sparse to dense, intermittent cover of component species including white-leaved manzanita (*Arctostaphylos viscida*), Manzanita (*Arctostaphylos manzanita*), Buck brush (*Ceanothus cuneatus*), interior live oak (*Quercus wislizeni*), and poison oak (*Toxicodendron diversilobum*), no herbaceous cover was present.

4.2.3 Mixed foothill woodland

Mixed foothill woodland is a site-specific classification consisting of an assemblage of mature tree, shrub, and herbaceous species that occurred in dense stands primarily on the eastern and western-most ends of the BSA. Species observed included Ponderosa pine, foothill pine (*Pinus sabiana*), interior live oak, California black oak (*Quercus kelloggii*), white alder (*Alnus rhombifolia*), poison oak, buck brush, white-leaved manzanita, and remnant/dead annual grasses including soft chess (*Bromus hordaceous*) and ripgut grass (*Bromus diandrus*).

4.2.4 Arctostaphylos viscida Shrubland Alliance (Whiteleaf manzanita chaparral)

Whiteleaf manzanita chaparral occurs on ridges and upper slopes that may be steep, soils are shallow but weathered clays developed from sandstone, granitic, or ultramafic substrates, and is characterized by presence of white-leaved manzanita dominant in the shrub layer with codominant species including chamise (*Adenostoma fasciculatum*), *Arctostaphylos* spp., *Ceanothus* spp., with emergent trees including *Pinus* spp. at low cover, shrub layer is open to continuous and herbaceous layer is sparse. As observed during the July 2020 survey, this alliance occurred on rocky, gravely moderate to steep slopes intermittently throughout the BSA with a large dense stand in the western portion of the BSA. White-leaved manazanita was dominant to co-dominant with manzanita in the shrub layer, with sparse to intermittent component species including buck brush, California yerba santa, California black oak, and Ponderosa pine.

4.2.5 Ceanothus cuneatus Shrubland Alliance (Buck brush chaparral)

Buck brush chaparral occurs on ridges and upper slopes, soils are shallow, rocky, and well drained. Buck brush chapparal is characterized by the presence of buck brush dominant or co-dominant in the shrub canopy with chamise, *Arctostaphylos* spp., deer brush (*Ceanothus integerrimus*), birch leaf mahogany (*Cercocarpus betuloides*), California buckwheat (*Eriogonum fasciculatum*), Fremont's silk tassel (*Garrya fremontii*), toyon (*Heteromeles arbutifolia*), *Quercus spp.*, sugar bush (*Rhus ovata*), and Black sage (*Salvia mellifera*), and emergent trees including *Pinus* spp. and *Quercus* spp. may be present at low cover, shrub canopy is intermittent to continuous, and herbaceous layer is sparse to grassy (Sawyer et. al., 2009). As observed during the July 2020 survey, this alliance occurred throughout the BSA on level to moderate slopes. Buck brush was the dominant species with sparse to dense component species including



Ponderosa pine, white-leaved manzanita, manzanita, interior live oak, blue oak (*Quercus douglasii*), Spanish clover (*Acmispon americanus*), rattail fescue (*Festuca myuros*), and slender wild oat (*Avena barbata*).

4.2.6 Eriodictyon californicum Shrubland Alliance (California yerba santa scrub)

California yerba santa scrub occurs on lower to middle slopes of serpentine, metavolcanics, and plutonic substrates, soils are loamy, and is characterized by the presence of California yerba santa dominant in the shrub canopy with chamise, buck brush, sticky monkeyflower (*Diplaucus aurantiacus*), chaparral yucca (*Hesperoyucca whipplei*), deerweed (*Acmispon glaber*), silver bush lupine (*Lupinus albifrons*), elderberry (*Sambucas nigra*), and poison oak, and emergent trees including *Pinus* spp. and *Quercus* spp. may be present at low cover, shrub canopy is open to intermittent, and herbaceous layer is open to continuous, and grassy (Sawyer et. al., 2009). As observed during the July 2020 survey, this alliance occurred primarily in the eastern portion of the BSA intergrading with Buck brush scrub on moderate slopes California yerba santa was the dominant species with sparse component species including buck brush, white-leaved manzanita, and manzanita.

4.2.7 Riparian Scrub

Riparian woodland is a site-specific classification that consisted of an assemblage of tree, shrub, and herbaceous species that occurred primarily within and along the banks of the erosional drainage feature located along the northern perimeter of the BSA. As observed during the July 2020 survey, the dominant species was red willow (*Salix laevigata*) with co-dominant to intermittent, scattered and sparse component species including arroyo willow (*Salix lasiolepis*), interior live oak, Himalayan blackberry (*Rubus aremeniacus*), white alder, lamp rush (*Juncus effusis*), nit grass (*Gastridium phleoides*), creek monkey flower (*Erythranthe guttata*), and annual grasses.

4.2.8 Acmispon americanus (Lotus unifoliatus) Provisional Herbaceous Alliance (Spanish clover fields)

Spanish clover fields occurs on seasonally to intermittently flooded alluvial flats, stream terraces, soils are deep loams and alluvial silts, and is characterized by the presence of Spanish lotus (Acmispon americanus) dominant in the herbaceous layer with (Agrostis spp.), sticktight (Bidens frondosa), soft chess (Bromus hordaceus), bindweed (Convulvulus arvensis), turkey mullein (Croton setigerus), willow herb (Epilobium spp.), meadow barley (Hordeum brachyantherum), rush (Juncus sp.), hayfield tarweed (Hemizonia congesta), Italian ryegrass (Festuca perennis), lupine (Lupinus spp.), Pennyroyal (Mentha pulegium), common lippia (Phyla nodiflora), clover (Trifolium spp.), neckweed (Veronica peregrina), rattail fescue (Festuca myuros), and cocklebur (Xanthium strumarium), herbaceous cover is intermittent to continuous (Sawyer et. al., 2009). A provisional alliance is described when California Native Plant Society (CNPS) has sufficient data to propose the vegetation type, but do not have enough research and regional information to be confident about its status in California's vegetation (CNPS, 2020). As observed during the July 2020 survey, this alliance occurred throughout the BSA primarily intergrading with buck brush scrub on level to minimal slopes. Spanish clover was the dominant species with sparse and intermittent to moderately dense component species including Ponderosa pine, white-leaved manzanita, buck brush, lamp rush, vinegar weed (Trichostema



lanceolatum), stinkwort (Dittrichia graveolens), slender wild oat, Italian rye grass (Festuca perennis), and rattail fescue.

4.2.9 Ruderal

Ruderal habitat is a term used to describe those areas that have been disturbed by past land-use practices and/or recent ground disturbance. Ruderal habitat occurred primarily along the State Route 120 road shoulder and in the vicinity of the abandoned gas station structure and building. The vegetation cover consisted of sparse disturbance-adapted weedy species including medusa head (*Elymus caput-medusae*), black mustard (Brassica nigra), remnant non-native annual grasses.

4.2.10 Developed

Within this Report, Developed is a term that describes a land surface that has been modified for commercial, residential, industrial, or infrastructure use such as buildings, parking lots, and paved roads. As observed during the July 2020 field survey, Developed areas included abandoned gas station structure, abandoned building, paved driveway and road (Memorial Road). oil and gas production facilities, structures, pipelines, and paved roads.

4.3 WILDLIFE

Wildlife were identified during the survey through indirect sign and direct observations of individuals. Species observed and detected included several bird species such as California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), turkey vulture (*Cathartes aura*), redtailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), acorn woodpecker (*Melanerpes formicivorus*), oak titmouse (*Baeolophus inornatus*), lesser goldfinch (*Spinus psaltria*), and brewer's blackbird (*Euphagus cyanocephalus*). Other wildlife observed during the survey included common reptiles such as western fence lizard (*Sceloporus occidentalis*) and direct/indirect sign of mammals including black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), and mule deer (*Odocoileus hemionus*). No nests or nesting bird activity were observed. A complete list of observed wildlife species can be found in Appendix C.

4.4 WILDLIFE MOVEMENT CORRIDORS

Wildlife movement corridors are considered an important ecological resource by various agencies (CDFW and USFWS) and under CEQA. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging, breeding, refuge sites, and/or seasonal migrations to preferred habitat. Movement corridors are essential for wildlife to maintain space for dispersal and to mitigate potential habitat fragmentation which can adversely affect wildlife population by reducing genetic and species diversity.

Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local, such as those between foraging and nesting/denning areas, or they may be regional in nature. Migration corridors are not unidirectional access routes; however, reference is usually made to source and receiver areas in discussions of wildlife movement networks. "Habitat linkages" are migration corridors that contain contiguous strips of native



vegetation between source and receiver areas. These natural linkages provide cover and forage sufficient for temporary inhabitation by a variety of ground-dwelling animal species. Wildlife migration corridors are essential to the regional fitness of an area as they provide avenues of genetic exchange and allow animals to access alternative territories as fluctuating dispersal pressures dictate.

The Project region consists of relatively unpopulated areas of forest and woodland habitat in the foothills of the Sierra Nevada mountain range, with highways, roads and scattered residential and commercial development. The swaths of forested areas serve as movement and dispersal corridors for a variety of wildlife species. The Project site could potentially be used by a variety of wildlife species including, several bat species, mule deer, and coyote (*Canis latrans*).. However, there are features within and adjacent to the Project site that act as barriers to wildlife dispersal and migration. Specifically, State Route 120 bounds the northern boundary of the Project site creating a significant barrier to dispersal and north/south wildlife movements. In addition, the distinct transition between the intermittent channel to ephemeral channel (upstream of Rattlesnake Creek) acts as a barrier for amphibian dispersal through the Project site.

4.5 SPECIAL-STATUS BIOLOGICAL RESOURCES

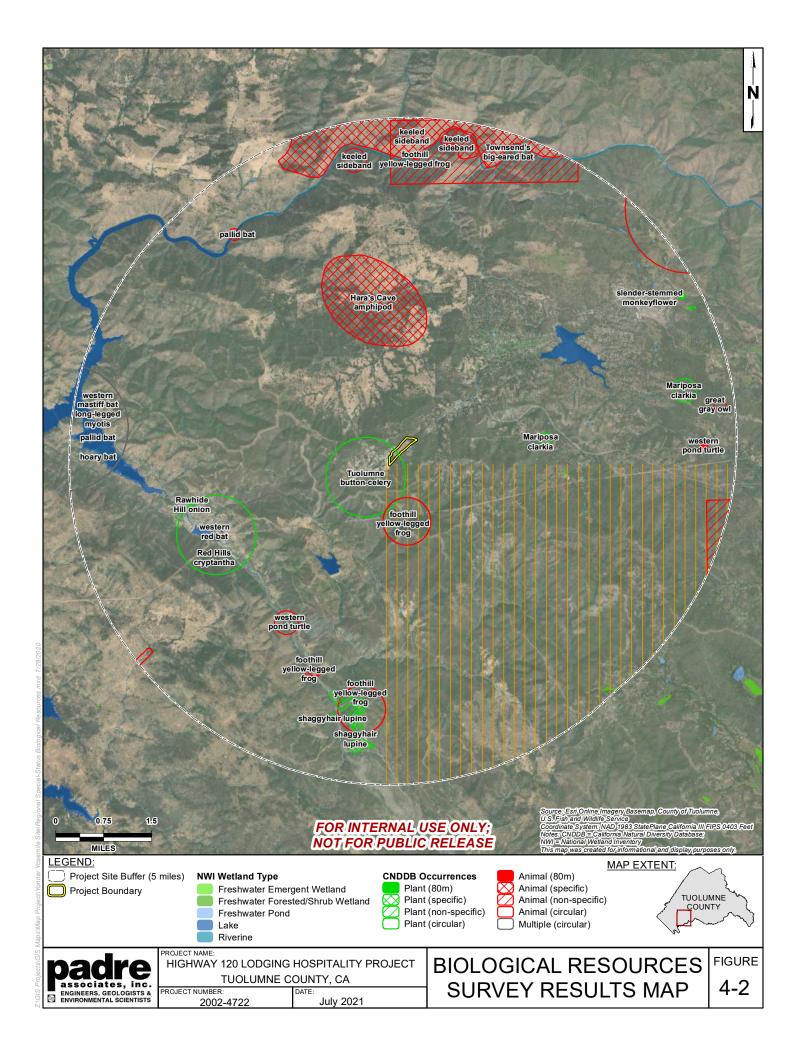
This section discusses special-status habitats (including aquatic features), plants, and wildlife and their potential for occurrence within the BSA. Results of the nine quadrangle CNDDB query for occurrences of special-status plant and wildlife species, and sensitive communities, and USFWS IPaC species request can be found in Appendix D – CNDDB Results and USFWS Species List. Note that the nine-quadrangle query (approximately ten-mile radius around the BSA) was completed to provide a comprehensive overview of regionally occurring special-status species, then narrowed down to occurrences within five miles to focus on those species with a higher potential to occur based on proximity to the Project site. Figure 4-2 depicts CNDDB occurrences and USFWS Critical Habitat within five miles of the Project site.

4.5.1 Special-Status Plant Communities and USFWS Critical Habitat

Critical Habitat as defined by the USFWS and CDFW was not documented within the BSA, or within five miles of the BSA (USFWS, 2020a). Sensitive natural communities (term refers to the Holland type description for sensitive plant communities used in CNDDB) were not identified on CNDDB within the Project region (CDFW, 2020a).

4.5.2 Oak Trees

No distinct oak woodland community was observed within the Project site. However, the Mixed foothill woodland vegetation community observed within the Project site consisted of moderate to dense canopy cover of mature trees and shrubs including Ponderosa pine, interior live oak, California black oak, blue oak, and buck brush, with the oak trees occurring as small clusters and/or individual trees. In May 2021, Padre conducted an oak tree inventory survey to identify and map all oak trees within and overlapping to the Project footprint. All sizes and maturity levels of oaks were mapped including saplings.





Oak trees are protected in Tuolumne County under County Ordinance 2903 Chapter 9.24, which is intended to discourage premature removal of oak trees prior to development. Also, under California Public Resources Code Section 21083.4 (Oak Woodlands) states that a county shall require one or more oak woodland mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands.

4.5.3 Aquatic Resources

Based on the results of the desktop review and field survey, there were no USFWS NWI features within the BSA (USFWS, 2020b). Numerous aquatic features (depressions, channels, etc.) were observed within the BSA. Wetlands and waters are considered sensitive natural habitats by the ACOE, RWQCB, and CDFW, and within this Report aquatic features within the Project site are considered a special-status biological resource.

The Project site was cleared of all vegetation approximately 30 years ago as part of a development project that was abandoned. The topography of the site ranges from steep slopes in the eastern portion adjacent to Memorial Road and the cemetery transitioning to rolling, moderate to level topography in the central and southwestern portion of the Project site, with an overall westerly slope aspect. Due to the topographical characteristics and lack of vegetation, annual rains caused significant erosion damage over the course of 30 years. Many erosional features including rills, gullies, incised channels, and shallow depressions were formed by stormwater run-off during winter rains flowing from adjacent forested hillsides through the relatively unvegetated open space of the Project site towards Rattlesnake Creek. There has been substantial vegetation re-establishment and natural recruitment of upland herbaceous, shrub, and tree species over the last 30 years. However, there has been relatively minimal riparian and wetland plant species establishment during this time-period because of the ephemeral nature of the erosion features that were formed. The existing conditions of the Project site exhibit presence of aquatic features formed as a result of erosion including degraded and eroded deeply incised channels lacking vegetation, and numerous shallow but distinct gullies and rills supporting minimal to no riparian vegetation (ephemeral channels), one eroded and deeply incised ephemeral channel that supports a stand of riparian vegetation (ephemeral riparian channel), one intermittent channel supporting riparian vegetation (intermittent channel), several shallow ephemeral depressional features (seasonal wetlands), and one ephemeral man-made pond created as part of the service station construction that was abandoned many years ago.

The wetland delineation survey completed by Padre in July 2020 identified approximately 2.98 acres of wetlands and waters (seasonal wetlands, ephemeral channels, ephemeral riparian channel, and an intermittent channel) within the proposed Project site preliminarily determined to be under ACOE and/or CDFW, and RWQCB jurisdiction. Refer to Appendix E – Preliminary Aquatic Resources Delineation Report for further details.



4.5.4 Special-Status Plants

Special-status plants are either listed as Endangered or Threatened under FESA or CESA, considered Rare under the California Native Plant Protection Act, or considered rare (but not legally listed) by resources agencies, professional organizations, and the scientific community under the following categories. Special-status plants include:

- 1. Plants listed or proposed for listing as Threatened or Endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species,).
- 2. Plants that are candidates for possible future listing as Threatened or Endangered under the Federal Endangered Species Act (Federal Register October 10, 2019).
- 3. Plants that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380).
- 4. Plants considered by the CNPS to be "Rare, Threatened, or Endangered" in California (Ranks 1B and 2 in CNPS, 2020).
- 5. Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Ranks 3 and 4 in CNPS, 2020).
- 6. Plants listed or proposed for listing by the State of California as Threatened or Endangered under the California Endangered Species Act (14 CCR 670.5).
- 7. Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- 8. Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies or jurisdictions including those listed on the CDFW Special Plants List.
- 9. Plants considered sensitive or unique by the scientific community or occurring at the limits of their natural range. For example, some botanical gardens will consider species in their region as sensitive based on local occurrences.

As discussed above, the nine-quadrangle query documented 20 special-status plant species within the Project site region (ten miles). Padre narrowed the list of 20 species to those species that occurred within five miles of the BSA because proximity is a standard indicator for potential occurrence at a given location. Padre evaluated the species within five miles of the BSA to identify which had the highest potential to occur within the Project site. This evaluation compared the habitat preferences of the documented species (CDFW, 2020a) to the existing habitats and conditions of the BSA. The results of the evaluation indicated that there were ten species that had a greater potential to occur within the Project site based on suitable habitat and proximity of documented occurrences.

The Special-status plant species that have been documented within a five-mile radius of the Project site (CDFW, 2020a) and have the highest potential to occur include Rawhide Hill onion (Allium tuolumnense), Mariposa clarkia (Clarkia biloba ssp. australis), Red Hills cryptantha (Cryptantha spithamaea), yellow-lip pansy monkeyflower (Diplacus pulchellus), Tuolumne button-celery (Eryngium pinnatisectum), slender-stemmed monkey flower (Erythranthe filicaulis),



Congdon's lomatium (*Lomatium congdonii*), shaggy hair lupine (*Lupinus spectabilis*), Layne's ragwort (*Packera layneae*), and Red Hills ragwort (*Senecio clevelandii* var. *heterophyllus*). Table 4-2 – Special-Status Plant Species summarizes the regulatory status, blooming period, habitat preferences, and potential occurrence within the Project site for these ten species.

No special-status plant species were observed during the July 2020 field survey. The biological resources field survey was completed in July, outside the typical blooming period for three out of the ten potentially occurring special-status plant species. On May 10 through May 12, 2021, Padre completed a follow-up spring botanical survey during the blooming period for potentially occurring special-status plants and no special-status plant species were observed. In addition, no special-status species were observed during the field survey completed by the Tuolumne County biologist completed on May 22, 2021.



Table 4-2. Special-Status Plant Species

| Species Name | Status | Habitat Requirements | Blooming Period | Potential for Occurrence within BSA | Observed within the BSA ¹ |
|--|---------------|--|--------------------|--|--|
| Allium tuolumnense Rawhide Hill onion | CRPR 1B.2, | Foothill woodland, strict serpentine affinity. Elevation: 300-600 m. | March-May | Low. Suitable soil and elevation not present. | No |
| Clarkia biloba ssp. australis Mariposa clarkia | CRPR 1B.2 | Chaparral, cismontane woodland, serpentinite. April-July Elevation: 300-1460 m. | | Low. Suitable soils not present. | No |
| Cryptantha spithamaea Red Hills cryptantha | CRPR 1B.3 | Chaparral, cismontane woodland, serpentinite, sometimes streambeds, sometimes openings. Elevation: 275-460 m. April-May present. | | Low. Suitable elevation not present. | No |
| Diplacus pulchellus Yellow-lip pansy monkeyflower | CRPR 1B.2 | depressions or seepage areas. Elevation 600 – and apple 2000 m. | | Moderate. Suitable habitat and documented occurrence approximately 4.8 miles NE of the BSA. | No |
| Eryngium pinnatisectum Tuolumne button-celery | CRPR 1B.2 | Cismontane woodland, lower montane coniferous forest, vernal pools. Elevation: 70-915 m. | May- August | High. Suitable habitat is present and documented occurrence less than one mile from BSA. | No |
| Erythranthe filicaulis Slender-stemmed monkey flower | CRPR 1B.2 | Cismontane woodland, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest, vernally mesic. Elevation: 900-1750 m. | April- August | Moderate. Suitable habitat is present and documented occurrence approximately 5.0 miles NE of the BSA. | No |
| Lomatium congdonii Congdon's lomatium | CRPR 1B.2 | Foothill woodland, chaparral, serpentine. Elevation: 300- 1200 m. | March-June | Low. Suitable soil not present. | No |
| Lupinus spectabilis Shaggy hair lupine | CRPR 1B.2 | Chaparral, cismontane woodland, serpentine. Elevation: 260-825 m. | April-May | Low. Suitable soil and elevation not present. | No |



| Species Name | Status | Habitat Requirements | Blooming Period | Potential for Occurrence within BSA | Observed within the BSA ¹ |
|--|-------------------------|---|--------------------|--|--|
| Packera layneae Layne's ragwort | SR, FT, CRPR 1B.2 | Foothill woodland, chaparral, disturbed areas, openings, serpentine soils. Elevation 300-900 m. | April- August | Low. Suitable soils not present. | No |
| Senecio clevelandii var. heterophyllus Red Hills ragwort | CRPR 1B.2 | Foothill Woodland, wetland-riparian, serpentine soils. Elevation 260-900 m. | June-July | Low. Suitable soils not present. | No |

Notes:

¹Surveys were conducted in July 2020 (Padre), May 10-12, 2021 (Padre), and May 22, 2021 (Tuolumne County).

CNPS Ranking System (CNPS, 2020):

CRPR California Rare Plant Rank

1A Plants presumed extirpated in California and either rare or extinct elsewhere.

1B Plants rare, threatened, or endangered in California and elsewhere.

CRPR Threat Ranks (CNPS, 2020):

0.1 Seriously threatened in California.

0.2 Moderately threatened in California.



4.5.5 Special-Status Wildlife

Special-status species are either listed as Endangered or Threatened under the under FESA or CESA, or considered rare (but not formally listed) by resource agencies, professional organizations, and the scientific community under the following categories. For the purposes of this report, special-status wildlife species include:

- 1. Animals listed or proposed for listing as Threatened or Endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
- 2. Animals that are candidates for possible future listing as Threatened or Endangered under the Federal Endangered Species Act (Federal Register October 10, 2019).
- 3. Animals that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380).
- 4. Animal Species of Special Concern to the CDFW (Shuford and Gardali, 2008 for birds; Williams, 1986 for mammals; Moyle et al., 2015 for fish; and Thomson et al., 2016 for amphibians and reptiles), and animals included in Special Animals List (CDFW, 2021).
- 5. Animals listed or proposed for listing by the State of California as Threatened and Endangered under the California Endangered Species Act (14 CCR 670.5).
- 6. Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
- 7. Animal species protected under the Marine Mammal Protection Act (as amended in 1994).
- 8. Birds of Conservation Concern. Migratory and nonmigratory bird species (beyond those already designated as federally Threatened or Endangered) that represent the USFWS highest conservation priorities in effort to draw attention to species in need of conservation action (Shuford and Gardali, 2008).
- 9. Birds on the CDFW Watch List include "Taxa to Watch" (Shuford and Gardali, 2008) 1) not on the current Special Concern list but were on previous lists and they have not been state listed under CESA; and 2) were previously state or federally listed and now are on neither list.
- 10. The Western Bat Working Group (WBWG) is comprised of agencies, organizations and individuals interested in bat research, management, and conservation from the 13 western states and provinces. Species designated as "High Priority" on the WBWG list are imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.
- 11. The CNDDB ranking element codes are part of the "Heritage Methodology" for special animals in which the CDFW is interested in tracking, regardless of their legal protection status. It is a shorthand formula that provides information about the status of a taxon, both throughout its entire range and within California. Additional sensitivity rankings included in CNDDB include Migratory Bird Treaty Act, BLM Sensitive, CDF Sensitive, US Forest Service Sensitive species.



Based on the literature review and species lists obtained from a nine-quadrangle CNDDB query and USFWS species lists (IPaC Trust Resource Report) (Consultation code: 08ESMF00-2021-SLI-2194), there were 33 species that have been reported within the Project region (ten miles) (Appendix – D). Padre narrowed the list of 33 species to those species that occurred within five miles of the BSA because proximity is a standard indicator for potential occurrence at a given location. Padre evaluated the species within five miles of the BSA, and species on the USFWS species list, to identify which had the highest potential to occur within the Project site. This evaluation compared the habitat preferences of the documented species (CDFW, 2020a) to the existing habitats and conditions of the BSA. The results of the evaluation indicated that there were 27 species that had a greater potential to occur within the Project site based on suitable habitat and/or proximity of documented occurrences.

The 27 species have been documented within a five-mile radius of the Project site and/or are listed in the USFWS species list, or known to occur within the Project region include keeled sideband snail (*Monadenia circumcarinata*), Hara's Cave amphipod (*Stygobromus harai*), Delta smelt (*Hypomesus transpacificus*), California red-legged frog (*Rana draytonii*), foothill yellow-legged frog (*Rana boylii*), western pond turtle (*Emys marmorata*), great grey owl (*Strix nebulosa*), oak titmouse, bald eagle (*Haliaetus leucocephalus*), Golden Eagle (*Aquila* chrysaetos), Lawrence's Goldfinch (Carduelis *lawrencei*), wrentit (*Chamaea fasciata*), common yellowthroat (*Geothlypis trichas sinuosa*), song sparrow (*Melospiza melodia*), white headed woodpecker (*Picoides albolarvatus*), Nuttall's woodpecker (*Picoides nuttallii*), spotted towhee (*Pipiloma culatus clementae*), rufous hummingbird (*Selasphorus rufus*), Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), long-legged myotis (*Myotis volans*), hoary bat (*Lasiurus cinereus*), Yuma myotis (*Myotis yumanensis*), western red bat (*Lasiurus blossevillii*), and Fisher (*Pekania pennant*),

Oak titmouse and Nutall's woodpecker were the only special-status wildlife species observed at the Project site during the July 2020 field survey. Table 4-3 – Special-Status Wildlife Species summarizes the suitable habitat and regional occurrence information for these species.



Table 4-3. Special-Status Wildlife Species

| Scientific Name Common Name | Status | s Habitat | | Nearest Documented Occurrence |
|---|---------|---|---|--|
| Invertebrates | | | • | |
| Monadenia circumcarinata Keeled sideband snail | SA | Endemic to the Tuolumne River canyon, in association with steep limestone outcrops and talus slopes. Occurs in limestone where fractures or loose talus allow deep, sub-surface sheltering. | A | South of Tuolumne River, approximately .75 mile up the trail from mouth of Indian Creek to Corcoran Flat; approximately 4.5 miles northwest of the Project site (CDFW, 2020a). |
| Stygobromus harai Hara's cave amphipod | SA | Found in small lakes and standing water in caves & mine tunnels within central California foothills. | А | Unnamed spring, 9 miles southeast of Sonora; approximately 1.4 miles north of the Project site (CDFW, 2020a). |
| Amphibians | | | | |
| Rana boylii Foothill yellow-legged frog | SE, CSC | Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats including coastal scrub, chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, and riparian forests and woodlands. | A | Cobbs Creek, about 1 mile southeast of Big Oak Flat, east of Don Pedro Reservoir; approximately 0.6 miles south of the Project site (CDFW, 2020a). |
| Rana draytonii California red-legged frog | FT | Aquatic habitats with quiet water areas and refugia on a minimum of 25 percent of the pool margin and standing water that is retained into late July. | А | Nearest occurrence is from 1941 approximately 21 miles, northeast of the Project site within Yosemite National Park (USFWS, 2020c). |
| Fish | | | | |
| Hypomesus transpacificus Delta smelt | FT | Low-salinity open water with high turbidity, high oxygen saturation, low in contaminants and supports high densities of calanoid copepods and mysid shrimp. | A | Occur within Sacramento-San Joaquin River Delta. Project site is outside of the species range (USFWS, 2020c). |
| Reptiles | | | | |



| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|----------|---|-------------------------------|---|
| Emys marmorata Western pond turtle | CSC | Permanent or nearly permanent bodies of water in many habitat types, below 6000 ft. elevation; requires basking site such as logs, vegetation mats or open mud banks. Needs suitable (sandy banks or open, grassy fields) upland habitat near water sources. | Р | Moccasin Creek, 2.5 miles south of State Route 120 on State Route 49; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |
| Phrynosoma blainvillii Coast horned lizard | CSC, SA | Inhabits open areas of sandy soil and low vegetation in valleys, grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills. | Р | Known to occur in Tuolumne County. |
| Birds | | | | |
| Aquila chrysaetos Golden Eagle | CFP, BCC | Found in open and semi-open areas of native vegetation primarily in mountains up to 12,000 feet, canyonlands, riverside cliffs, and bluffs. Nest on cliffs in grassland, chaparral, shrubland, and forest habitats. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Baeolophus inornatus Oak titmouse | SA, BCC | Oak woodlands and open pine or mixed oakpine forest. Cavity nester. | Р | Observed/detected within Project site during July 2020 survey. |
| Carduelis lawrencei Lawrence's Goldfinch | BCC | Dry, open oak woodlands with chaparral, weedy fields, and a source of freshwater. Tree nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Chamaea fasciata Wrentit | BCC | Dense shrublands with coyote bush, manzanita, California lilac, and blackberry thickets in foothills and desert regions in California. Nests in shrubs. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |



| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|------------------|--|-------------------------------|---|
| Geothlypis trichas sinuosa Common Yellowthroat | BCC | Thick tangled vegetation in a variety of habitats from wetlands to prairies across North America. Vegetation including pine forests, palmetto thickets, drainage ditches, hedgerows, orchards, shrub-covered hillsides, and disturbed sites. Most common in wet areas. Shrub nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Haliaeetus leucocephalus Bald Eagle | BEPA, SE, CFP | Found at lakes, reservoirs, river systems, and coastal wetlands. The breeding range is generally in mountainous areas near lake or river margins, where they find large trees (usually conifers) with open branches for nesting. | А | Eagles have been documented nesting at the Don Pedro Reservoir approximately 6.3 miles southwest of the Project site (HDR, 2013). |
| Melospiza melodia Song Sparrow | BCC | Found in many open habitats including tidal marshes, arctic grasslands, desert scrub, pinyon pine forests, prairies, pacific rain forest, chaparral, agricultural fields, overgrown pastures, marshes and lake edges, and suburbs. Nest is shrubs. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Picoides albolarvatus White Headed Woodpecker | BCC | Found throughout western North America. Associated with old-growth ponderosa and sugar pine in open canopies with limited understory and abundant pine seed crop. Often found in recently burned forests. Need dead trees for nesting. Cavity nester. | | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Picoides nuttallii Nuttall's Woodpecker | BCC | Oak woodlands between 900 to 5,500 feet elevation. Also found in suburban areas and woodlands near streams. Cavity nester. | Р | Observed/detected within Project site during July 2020 survey. |
| Pipilo maculatus clementae Spotted Towhee | BCC | Dry thickets, brushy tangles, forest edges, old fields, shrubby bakcyards, chaparral, canyon bottoms, places with dense shrub cover and sufficient leaf litter. Ground nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |



| Scientific Name Common Name | Status Habitat | | Habitat Present /Absent | Nearest Documented Occurrence |
|---|----------------|---|-------------------------------|--|
| Selasphorus rufus Rufous hummingbird | BCC | Open, shrubby areas, forest opening, yards and parks, sometimes found in forest, thickets, swamps, and meadows from sea level to approximately 6,000 feet. Tree nester. | Р | No CNDDB documentation within Project region. However, this species is known or expected to occur in the region (USFWS, 2021). |
| Strix nebulosa Great gray owl | SE | Resident of old growth mixed conifer or red fir forest habitat, in or on edge of meadows above 4,500 ft. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate. | | Shanahan Flat; approximately 4.6 miles east-southeast of the Project site (CDFW, 2020a). |
| Mammals | | | | |
| ntrozous pallidus CSC, allid bat WBWG-H | | Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. | Р | Adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of Project site (CDFW, 2020a). |
| Corynorhinus townsendii Townsend's big-eared bat | CSC, WBWG-H | Wide variety of habitats, most common is mesic sites. Roosts in the open (do not tuck themselves into crevices), hang from walls and ceilings, extremely sensitive to human disturbance. | Р | About 3 miles NNW of Farretti Road at Boitano Road; approximately 3.9 miles north of the Project site (CDFW, 2020a). |
| Eumops perotis californicus Western mastiff bat | CSC, WBWG-H | Open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels. | Р | Southeast of Moccasin, adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |
| Lasiurus blossevillii Western red bat | CSC, WBWG-H | Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging. | Р | Southeast of Moccasin, adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |



| Scientific Name Common Name | Status | Habitat | Habitat Present /Absent | Nearest Documented Occurrence |
|---|---------------|---|-------------------------------|--|
| Lasiurus cinereus Hoary bat | SA, WBWG-M | Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water. | Р | Southeast of Moccasin, adjacent to Highway 49 and Moccasin Creek; approximately 2.8 miles southwest of the Project site (CDFW, 2020a). |
| Myotis Volans Long-legged myotis | SA, WBWG-H | Most common in woodland and forest habitats above 4000 ft. Trees are important day roosts; caves and mines are night roosts. Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings. | Р | Vicinity of Don Pedro Reservoir, near intersection of State Route 120 and Jacksonville Road; approximately 4.1 miles west of the Project site (CDFW, 2020a). |
| Pekania pennant Fisher – Southern Sierra Nevada DPS | FE | Dense, mature mixed-conifer and ponderosa pine forests that support many large trees and do not accumulate as much or deep snow. | A | No recent occurrences occur near the Project site. Fisher populations occur within southern Yosemite National Park and Sierra National Forest (Sweitzer et al., 2015, USFWS, 2021). Historic occurrences (1920's) are approximately 22 miles east of the Project site within Yosemite National Park. |

Status Codes:

CSC California Species of Special Concern (CDFW) CFP Fully protected under Fish and Game Code (CDFW)

SA Special Animal (CDFW) WL Watch List (CDFW)

SE State Endangered (CDFW) FT Federal Threatened (USFWS)
ST State Threatened (CDFW) FE Federal Endangered (USFWS)

A Habitat Absent BCC Birds of Conservation Concern (USFWS)

P Habitat Present

WBWG – Western Bat Working Group (WBWG):

H – High priority

L/M - Low Moderate Priority

M - Medium Priority



The following sections discuss the habitat preferences and potential for occurrence within the Project site of special-status wildlife species listed in Table 4-3.

4.5.5.1 Special-Status Invertebrates

Keeled sideband snail and Hara's Cave amphipod are both invertebrates that are considered Special Animals (SA) with the CDFW. These species occupy very specific habitats; the Tuolumne River canyon in association with steep limestone outcrops and talus slopes for the keeled sideband snail, and small lakes or standing water in caves and mine tunnels within central California foothills for Hara's Cave amphipod. Both habitats are absent from the Project site.

4.5.5.2 Special-Status Amphibians

Foothill yellow-legged frogs are considered State Endangered (SE) and a California Species of Special Concern (CSC) with the CDFW. This species generally inhabits shallow streams with a rocky substrate in a variety of habitats including various scrub/shrubland, woodland, and forest habitats. Suitable aquatic habitat for yellow-legged frog is not present within the Project site primarily because of dispersal barriers such as State Route 120, lack of hydrological connection of the main drainage to Rattlesnake Creek, and lack of rocky substrate in the drainages.

California red-legged frogs are listed as federally threatened (FT) under the USFWS. Populations of this species remain in the San Francisco Bay Area, along the California coast, and the western edge of the Central Valley. The California red-legged frog occurs in different habitats depending on their life stage and season. All stages are most likely to be encountered in and around breeding sites, which include coast lagoons, marshes, springs, permanent and semi-permanent natural ponds, ponded and backwater portions of streams, as well as artificial impoundments such as stock ponds, irrigation ponds, and siltation ponds with dense and extensive vegetative cover of emergent and bank vegetation including willow (*Salix* sp.), cattail, and bulrush. The Project site lacks suitable habitat for California red-legged frog, a species which has no documented occurrences in the Project region.

4.5.5.3 Special-Status Reptiles

Western pond turtle is designated as a CSC with the CDFW and this species inhabits permanent or nearly permanent bodies of water with available basking sites in a variety of habitat types. This species also requires suitable upland habitat near water sources (e.g., sandy banks or open, grassy fields) for egg-laying. Low-quality aquatic habitat for western pond turtle is present within the Project site including the main drainage feature along State Route 120 and the man-made pond within the Project site; therefore, given that the most recent occurrence of pond turtle is approximately 2.5 miles away, there is a low to unlikely potential for this species to occur within the Project site.

The coast horned lizard is a California species of special concern. It inhabits open areas of sandy soil and low vegetation in valleys and foothills throughout northern California to Baja California. It is found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil, including sandy washes and along dirt roads (Stebbins, 2003). No coast horned lizards were observed within the Project site; however, suitable habitat (sandy soils and extensive ant hills) is present within the Project site.



4.5.5.4 Special-Status Birds

Great gray owl is designated as SE and is a resident of old growth mixed conifer or red fir forest habitat, in or on edge of meadows above 4,500 feet in elevation. Suitable habitat for great gray owl is not present within the Project site.

Oak titmouse is designated as a SA with the CDFW and generally inhabits oak woodlands and open pine or mixed oak-pine forest. Nutall's woodpecker is designated as a BCC (Bird of Conservation Concern) with the CDFW and generally inhabits woodlands near streams and suburban areas. Suitable habitat for these species is present within the Project site and these species were observed during the July 2020 survey.

No nesting bird activity was observed within the Project site during the field survey; however, vegetation, trees, and other substrates (e.g., man-made structures, areas of open ground, etc.) present within the site provide suitable nesting habitat for a variety of bird species. Nesting birds and their nests/eggs are protected under the Federal MBTA of 1918 and California Fish and Game Code Section 3503, 3503.5, and 3513. However, in 2017, Solicitor of the Department of the Interior issued a legal opinion (M-37050 or M-Opinion) stating that "The Migratory Bird Treaty Act Does Not Prohibit Incidental Take" which in effect revoked take protections under the MBTA. On January 5, 2021, the USFWS published a final rule that defined the scope of the MBTA stating that incidental take of birds resulting from an activity is not prohibited when the underlying purpose of that activity is not to take birds. On May 6, 2021, the USFWS announced a proposed rule to revoke the January 7, 2021 final regulation that limited the scope of the MBTA, in an effort to reinstate federal MBTA protections. The proposed rule is pending as of June 2021. In the interim, migratory birds are protected (for take) through AB 454 California Migratory Bird Protection Act (California Fish and Game Code 3513). Nesting bird season generally occurs between February 1 and August 31.

4.5.5.5 Special-Status Mammals

The fisher is not expected to occur within the Project site but is discussed in this section because it is a federally endangered species and was indicated as a potentially occurring species by USFWS (USFWS, 2021). The fisher inhabits old growth forests from northern California to British Columbia. The species is a mustelid (weasel) family, about the size of a housecat. Fisher prey mostly on small and medium-sized mammals, such as rabbits, porcupines, squirrels, and voles, and will also consume birds, carrion, and even fruit on occasion. Most notably, it is a specialized predator of porcupines, which it kills by flipping over to expose the non-quilled belly. Each individual travels over a home range of 50 to 150 square miles, even more in winter when food is scarce. Historically fishers occurred within the Yosemite Valley, 20 miles east of the Project site; however, current distribution of the Sierra Nevada DPS of fisher is limited to the southern extent of Yosemite National Park, south of the Merced River and Northwestern Sierra National Forest. Therefore, due to a lack of habitat and no recent occurrences, it is unlikely the species would occur at the Project site.

The common mountain lion (*Puma concolor*) is not a protected species; however, the subspecies (*Puma concolor brownii*) is considered a Species of Special Concern by CDFW, but its range does not extend into Tuolumne County. Common mountain lion is discussed in this section for informational purposes only. The common species of mountain lion is found throughout California primarily in foothills and mountains wherever deer are found, since deer are this species



main food source. Mountain lions require extensive areas of riparian vegetation and brushy stages of various habitats, with interspersions of irregular terrain, rocky outcrops, and tree/brush edges, and typically use caves or other natural cavities, and thickets for denning. The Project site does not contain suitable habitat for mountain lion primarily due to lack of sufficient prey source (minimal deer presence) and State Route 120 acting as a dispersal barrier. As such, mountain lion is not expected to occur within the Project site.

Several special-status bat species have to potential to occur within the Project site and are discussed below in Section 4.5.5.6 – Special-Status Bats.

4.5.5.6 Special-Status Bats

Pallid bat, western mastiff bat, Townsend's big-eared bat, and western red bat are all considered CSCs, and hoary bat, long-legged myotis, and Yuma myotis are all considered SAs with the CDFW. These special-status bats occupy a wide-range of different habitats and utilize various types of roosts including but not limited to cliffsides, trees, and man-made structures/buildings. Suitable roosting/foraging habitat for the special-status bats listed above are present throughout the Project site including trees, buildings, and water sources.



5.0 IMPACT DISCUSSION

Biological resources that may be directly or indirectly impacted through implementation of the proposed Project include special-status wildlife and plant species and their habitats, plant communities, and aquatic features. Special-status species that have the potential to be impacted include foothill yellow-legged frog, western pond turtle, various species of bats, and nesting migratory birds, including oak titmouse. This section describes the potential impacts to each of these resources. In addition, the direct and indirect impacts are further categorized as temporary and permanent impacts to the biological resources within the Project site. Temporary impacts are those resulting from disturbances such as vegetation trimming, equipment staging, and installation and use of temporary access routes. Permanent impacts are those resulting from construction of permanent structures, paved roads, and habitat fragmentation.

5.1 PLANT COMMUNITIES AND HABITATS

The Project site does not contain sensitive plant communities as defined by CDFW, or USFWS-designated Critical Habitat, however, it does contain several distinct vegetation alliances ranging from herbaceous plant dominated communities to mature woodland communities. These communities and habitats provide denning, foraging, and breeding habitat for wildlife within the Project region, as well as provide suitable habitat and soil conditions for potentially occurring special-status plant species. Impacts to plant communities and habitats would be minimized by implementation of avoidance and minimization measures discussed in Section 6.0 below. Refer to Table 5-1 – Plant Community and Habitat Impact Summary Table for acreages of plant communities to be disturbed during project activities, and Figure 5-1 Plant Community Impacts.

Table 5-1. Plant Community and Habitat Impact Summary Table

| Plant Community/Habitat | Acres within the | Impacted Acres ¹ | | |
|------------------------------------|------------------|-----------------------------|-----------|--|
| | BSA | Temporary | Permanent | |
| Ponderosa Pine forest and woodland | 5.2 | 3.95 | 1.29 | |
| Mixed foothill woodland | 7.5 | 5.55 | 1.91 | |
| White leaf manzanita chaparral | 6.1 | 4.36 | 1.74 | |
| Buck brush chaparral | 8.4 | 6.44 | 1.97 | |
| California yerba santa scrub | 1.4 | 0.98 | 0.42 | |
| Riparian Scrub | 0.9 | 0.63 | 0.26 | |
| Spanish clover fields | 5.2 | 3.82 | 1.41 | |
| Ruderal | 0.4 | 0.34 | 0.05 | |
| Developed | 1.4 | 1.12 | 0.31 | |
| Totals: | 36.5 | 27.19 | 9.36 | |



| Plant Community/Habitat | Acres within the | Impacted Acres ¹ | | |
|-------------------------|------------------|-----------------------------|-----------|--|
| | BSA | Temporary | Permanent | |
| N | | | | |

Notes:

¹Permanent impacts from construction of buildings, paved roads, and permanent infrastructure footprints. Temporary impacts from use of staging areas, vegetation clearing, etc. during construction.

5.2 OAK TREES

There are expected to be impacts to interior live oak, blue oak, and California black oak. Tuolumne County requires mitigation for impacts (removal and/or damage) to oak trees that are five inches or greater DBH. Pursuant to the May 2021 oak tree inventory survey, three mature blue oak, five mature California black oak, and 97 mature interior live oak, for a total of 105 mature oak trees are within the Project footprint. However, not all 105 oak trees would be removed, as some would be avoided/protected or trimmed based on final project footprint, final Project design (infrastructure and lodging unit location) and resulting required setback distance from protected oak trees, and site topography.

An Oak Tree Protection and Replacement Plan will be developed and will provide specific details on required setbacks and oak tree replacement ratios for trees to be removed or trimmed. Requirements set forth in the Oak Tree Protection and Replacement Plan will be incorporated into the Project Landscape Plan including oak tree replacement planting and creation of understory refuge habitat to blend with the Project's natural pine and mixed woodland surroundings and would provide sufficient natural area to encourage wildlife use within the region. Note that California black oaks are not protected in Tuolumne County but is included here for informational purposes. Appendix G – Oak Tree Inventory Letter Report (Draft) provides details of potential oak impacts. Impacts to oak trees would be minimized by implementation of avoidance and minimization measures discussed in Section 6.0 below.

5.3 AQUATIC RESOURCES

Based on aquatic resources delineation surveys completed within the site, The Project site supports Federal wetlands, State wetlands, and other waters of the U.S. subject to ACOE jurisdiction under Section 404 of the Clean Water Act CWA and RWQCB jurisdiction under Section 401 of the CWA. Table 5-2 – Aquatic Resources Impact Summary Table summarizes the extent of both temporary and permanent impacts to each type of aquatic habitat. The Project would result in 2.68 acres of temporary disturbance primarily to ephemeral channels, seasonal wetland, and ephemeral riparian channel communities. The proposed Project is scheduled to occur when the wetlands are dry, so temporary impacts include potential disturbance during initial grading, vegetation removal, and staging areas for construction. Temporary indirect effects may occur from soil erosion or storm water run-off. Permanent impacts would result from construction of buildings, paved roads, and permanent infrastructure footprints. It is anticipated that wetlands should not require dewatering or diversion during construction. Permanent impacts include potential fill and or diversion of ephemeral channels and seasonal wetlands. Approximately 0.29 acres of ephemeral channels, seasonal wetland habitat and the man-made pond would be lost during the construction of paved roads and hospitality buildings.



The Project Habitat Restoration and Mitigation Plan (Restoration Plan) will be developed and would incorporate aquatic feature mitigation requirements in compliance with conditions set forth in the approved agency permits. The Restoration Plan would address temporary and permanent impacts to aquatic habitats disturbed during Project implementation. The goal of the Restoration Plan would be to restore, create, and enhance aquatic features and riparian vegetation within the proposed Project site to provide functioning habitat amongst the lodging units and infrastructure. The existing aquatic features are highly degraded and formed as a result of erosion damage caused by past grading and vegetation clearing within the Project site. Restoration of these features would provide an ecological uplift (quantifiable ecological benefit) through revegetation and/or re-alignment, and recontouring of the aquatic features by improving the riparian habitat and hydrological connections within the Project site and the surrounding landscape more natural conditions. Specifically, the Restoration Plan would provide guidelines for restoration and mitigation implementation, monitoring and maintenance, success criteria, reporting and adaptive management methods to ensure habitat function and successful vegetation establishment. Impacts to aquatic resources would be minimized by implementation of avoidance and minimization measures discussed in Section 6.0 below.

Table 5-2. Aquatic Resources Impact Summary Table

| Aquatic Resource | Total within BSA | | Total Impacted within Disturbance Footprint ¹ | | | | |
|--------------------------------|------------------|---------|---|---------|-----------|--------|--|
| Aquatic Nesource | | | Temporary | | Permanent | | |
| | Acres | Sq ft | Acres | Sq ft | Acres | Sq ft | |
| Seasonal Wetland | 0.357 | 15,564 | 0.336 | 14,625 | 0.022 | 939 | |
| Man-made pond | 0.016 | 700 | 0.013 | 574 | 0.003 | 126 | |
| Intermittent Channel | 0.069 | 3,004 | 0.056 | 2,449 | 0.000 | 0 | |
| Ephemeral Riparian Channel | 0.203 | 8,851 | 0.187 | 8,138 | 0.016 | 706 | |
| Ephemeral Channel ² | 2.33 | 101,465 | 2.09 | 90,740 | 0.25 | 10,699 | |
| Totals: | 2.98 | 129,585 | 2.68 | 116,526 | 0.29 | 12,470 | |

Notes:

¹Temporary impacts from use of staging areas, vegetation clearing, etc. during construction. Permanent impacts from construction of buildings, paved roads, and permanent infrastructure footprints.

²Acreages are calculated based on total linear feet of Ephemeral Channel (7,805 ft.) and a mean channel width of 13 feet. Project is proposed to have temporary impacts on 6,980 ft. and permanent impacts on 823 ft of Ephemeral Channel wetlands. Linear foot values represent the combined length of all Ephemeral Channels.



5.4 SPECIAL-STATUS PLANTS

No special-status plant species were observed within the Project site during the July 2020 field survey and May 10 through 12, 2021 follow-up spring botanical survey completed by Padre, or during the May 22, 2021 survey completed by the Tuolumne County biologist.

However, if Project initiation is planned for spring or summer 2022 (or subsequent years), the spring botanical survey should be repeated to ensure that special-status species have not become established within the Project site. If Special-Status plant species are found, potential impacts include vegetation removal, ground disturbances, construction, and habitat loss. An Impact avoidance and minimization measure focused on special-status plants is discussed in Section 6.0 below as a contingency measure if special-status plants are observed at any time during (or prior to) Project ground disturbance.

5.5 SPECIAL-STATUS WILDLIFE

5.5.1 Special-Status Amphibians

There is no suitable aquatic habitat for yellow-legged frog and California red-legged frog within the Project site primarily because of dispersal barriers such as State Route 120, lack of hydrological connection of the main drainage to Rattlesnake Creek, and/or lack of rocky substrate in the drainages. Therefore, potentially occurring special-status amphibians are not expected to occur within the Project site and as such, no impacts are expected to occur these species.

5.5.2 Special-Status Reptiles

There is low-quality aquatic habitat for western pond turtle within the Project site including the intermittent drainage feature along State Route 120 and the man-made pond within the Project site; therefore, there is a low to unlikely potential for this species to occur within the Project site.

The sandy, rocky washes, patches of loose soil, and grassland, chapparal and woodland habitats within the Project site provides suitable habitat for coast horned lizard. No coast horned lizards were observed within the Project site; however, there is potential for this species to occur. Coast horned lizard could be indirectly impacted due to loss of habitat and/or could be directly impacted by equipment strike during mobilization or ground disturbance. Impacts to special-status reptile species would be minimized by implementation of avoidance and minimization measures discussed in Section 6.0 below.

5.5.3 Special-Status Mammals

Due to lack of suitable habitat, presence of State Route 120 acting as a wildlife movement barrier, and lack of documented occurrences in the region, the fisher is not expected to occur within the Project site and as such, no impacts are expected to occur to this species.

5.5.4 Special-Status Bats

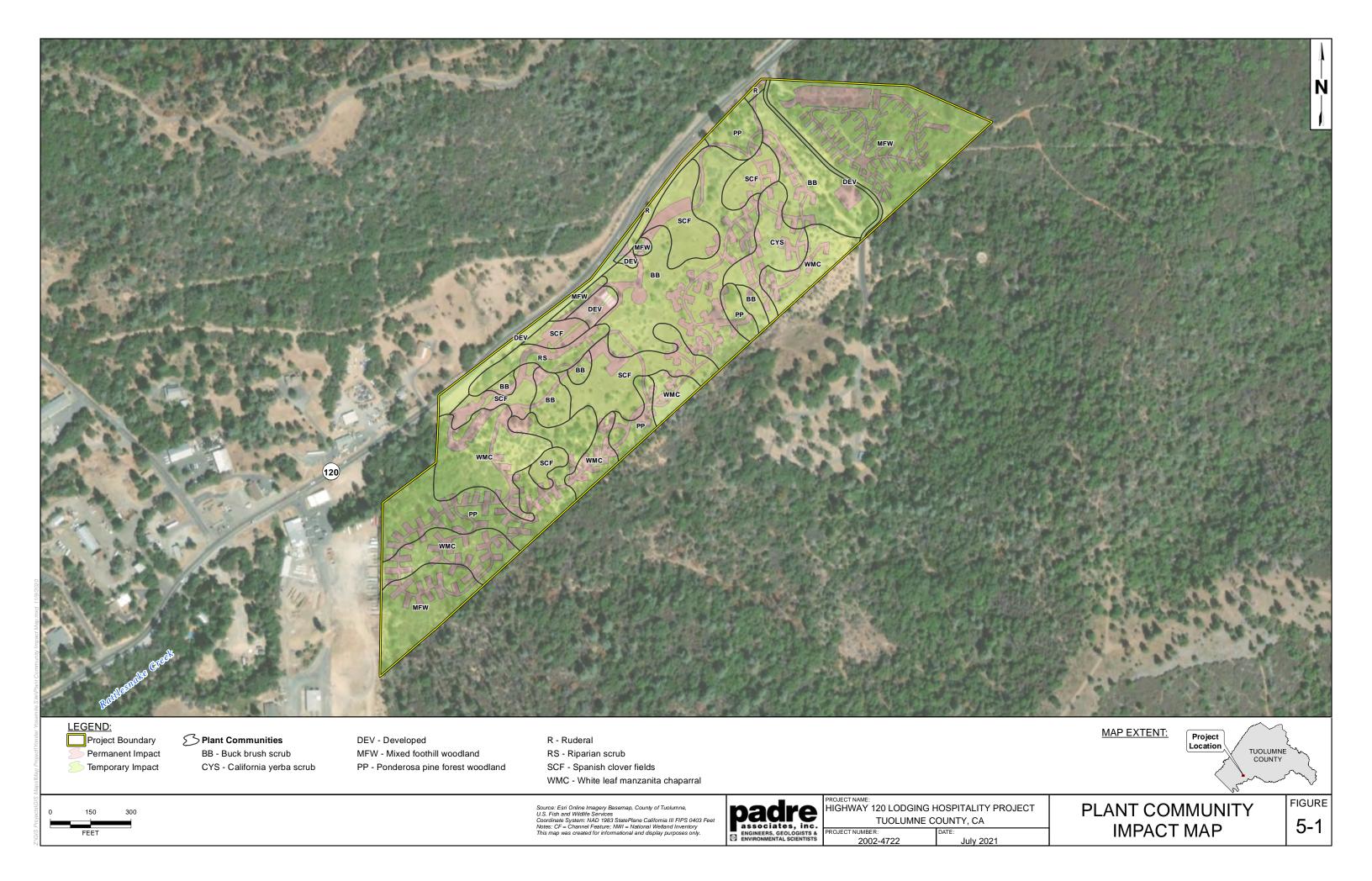
The abandoned structures within the Project site, mature forest adjacent to the Project site, and large rock outcrops with extensive fractures on the southern portion of the site provide suitable roosting habitat for special-status bat species including, but not limited to, pallid bat, western mastiff bat, and long-legged myotis. These species may be directly impacted by equipment strike during demolition and/or tree removal. In addition, indirect impacts from roosting

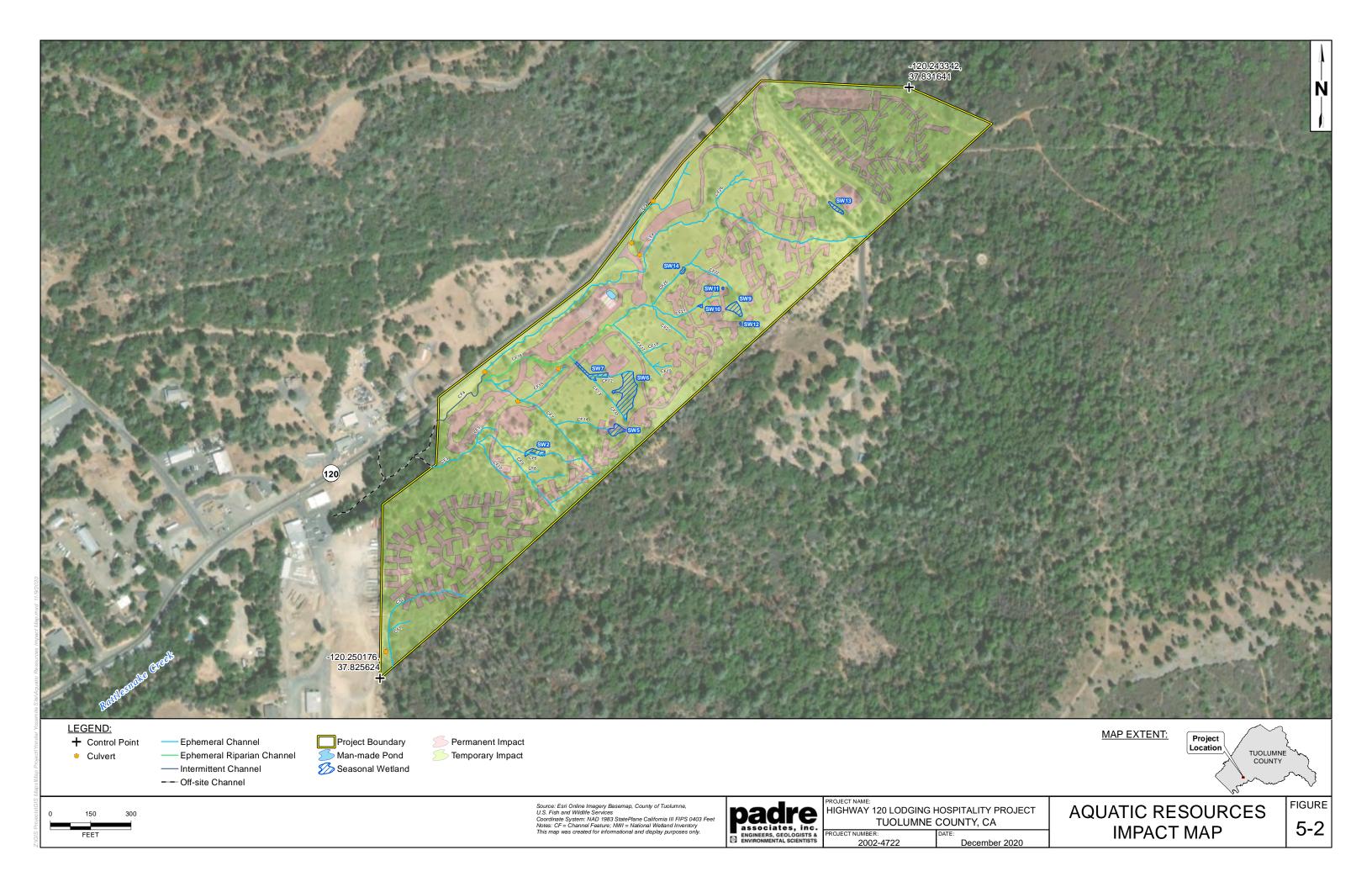


habitat loss and disturbance, and increased construction-related noise levels could adversely affect the ability of these and other bat species to roost and breed within the Project site and vicinity. Impacts to special-status bat species would be minimized by implementation of avoidance and minimization measures discussed in Section 6.0 below.

5.5.5 Migratory Birds and Raptors

Under the MBTA, and currently California Fish and Game Code 3513, migratory bird species and their nests and eggs are protected from injury or death. The woodland and shrubland habitats within and in the vicinity of the Project site provide suitable habitat for nesting birds and raptors including oak titmouse. Birds, nests, and eggs may be directly impacted by equipment strike during tree and shrub vegetation removal and ground disturbance, and indirectly impacted by tree and vegetation removal resulting in habitat loss that could adversely affect reproductive success resulting in local population decline. Impacts to migratory birds and raptors would be minimized by implementation of avoidance and minimization measures discussed in Section 6.0 below.







6.0 RECOMMENDED AVOIDANCE MEASURES

Padre recommends that the following avoidance measures be implemented prior to and/or during proposed Project activities to avoid and or minimize impacts to biological resources:

- <u>Work Timing</u>. All work activities shall be completed during daylight hours (between sunrise and sunset) and outside of rain events.
- Environmental Awareness Training. A qualified biologist shall provide a Biological Awareness Training to all Project personnel to familiarize workers with surrounding common and special-status species and their habitats, applicable regulatory requirements and permit conditions, and measures that must be implemented to avoid or minimize potential impacts to biological resources.
- <u>Biological Monitoring</u>. A qualified biologist shall be onsite to monitor for special-status wildlife species during initial ground disturbing and vegetation removal activities. The need for additional monitoring shall be at the discretion of the qualified biologist.
- Nesting birds. If the Project is anticipated to take place during nesting bird season (February 1 through August 31), then a qualified biologist shall conduct a nesting bird pre-activity survey within 48 hours of Project start. If an active nest is identified on or within 300 feet of the Project site during the pre-activity survey or any time during Project activities, an appropriate work exclusion buffer of 75± feet for migratory bird species and 300± feet for non-listed raptor species, or a distance at the discretion of the biologist based on biological or ecological reasons, shall be established around the nest.

Depending on conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within the buffer without impacting the breeding effort. In this case (to be determined on a case-by-case basis), the nest(s) shall be monitored by a qualified biologist during construction within the buffer. However, if it is an active raptor nest, the Project proponent shall first notify CDFW for consultation to determine the feasibility of continuing work within the standard 300±-foot buffer. Work will start within the buffer only after approval from CDFW. In the case of other active nests (non-raptor species), the biologist shall determine whether Project activities within the buffer would impact the nest, and if so, shall immediately inform the construction manager to stop work within the designated buffer. The qualified biologist shall monitor the nest until it is no longer active and/or the young have fledged and will notify the construction manager and Project proponent that work may start within the buffer.

If construction begins outside of the migratory bird breeding season (February 1 through August 31), then the Project proponent is permitted to continue construction activities throughout the breeding season.

<u>Bat Maternity Roosts</u>. If the Project is anticipated to take place during bat maternity season (typically during the summer months in California), then a qualified biologist shall conduct a pre-activity survey for potential roosting sites, onsite or within 100 feet of the Project boundaries, and Project activities shall avoid any roosts identified during the survey. However, if any onsite structure demolition is anticipated to take place



outside of the typical maternity season, a pre-activity survey shall be conducted to determine bat presence (day roosting). If bats are present within the structure, then bat exclusion methods will be incorporated into demolition activities.

Pre-activity field surveys shall be conducted early in the breeding season before any construction activities begin, when bats are establishing maternity roosts but before pregnant females give birth (typically late spring to early summer). If no roosting bats are found, then no further mitigation is required. If roosting bats are found, then disturbance of the maternity roosts shall be avoided by halting construction until the end of the breeding season or a qualified bat biologist excludes the roosting bats in consultation with CDFW. If at any time during the maternity roosting season construction stops for a period of two weeks or longer, preconstruction surveys shall be conducted prior to construction resuming.

- <u>Coast Horned Lizard Survey.</u> Prior to ground disturbance, a qualified biologist shall conduct a field survey focused on presence of coast horned lizard. The survey will be conducted within the central portion of the Project site in areas of loose soils with ant hills. If coast horned lizards are found, they shall be relocated out of the Project area by the qualified biologist.
- Special-Status Plants Pre-activity Survey. No special-status plant species were observed during the 2020 and 2021 surveys. However, if Project initiation is planned for spring or summer 2022 (or subsequent years), the following is recommended:
 - A follow-up spring botanical survey shall be repeated to ensure that potentially occurring special-status plant species have not become established within the Project site.
 - If observed during the follow-up survey, special-status plants shall be mapped and incorporated into the Project habitat restoration and mitigation plan. Special-status plants shall be avoided if feasible. If impacts are unavoidable, the plants may be salvaged, transplanted, or seed may be collected for planting and/or seeding elsewhere within the Project site.
 - If on-site restoration is not feasible, may consider off-site mitigation or purchase conservation credits.
- Habitat Restoration. The applicant shall obtain a Nationwide Permit from ACOE pursuant to Section 404 of the Clean Water Act, a Water Quality Certification from the Central Valley RWQCB pursuant to Section 401 of the Clean Water Act, and a Lake or Streambed Alteration Agreement from the CDFW pursuant to Section 1602 of the Fish and Game Code for any grading or fill activity within drainages and wetlands and trimming/removal of riparian vegetation. As part of the permitting process, the applicant will be required to provide a compensatory habitat creation/restoration plan (Plan) to mitigate impacts to jurisdictional areas. The Plan shall be written and implemented by a biologist familiar with restoration and mitigation techniques. The Plan shall be written and implemented by a biologist familiar with restoration and mitigation techniques. Compensatory mitigation shall occur on-site using regionally collected native plant material to ensure no net loss of wetlands. The CDFW and



RWQCB may require a higher mitigation ratio. The Plan shall include, but not be limited to the following components:

- Description of the project/impact site (i.e., location, responsible parties, jurisdictional areas to be filled/impacted by habitat type);
- Goals of the compensatory mitigation project (types and areas of habitat to be established, restored, enhanced, and/or preserved;
- Compensatory mitigation will ensure that there will be no net loss of wetland/waters, and improved hydrological function of the Project Site;
- Description of the proposed compensatory mitigation-site (location, size, ownership status, existing ecological/hydrologic functions and values);
- Implementation Plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan);
- Maintenance activities during monitoring period (activities, responsible parties, schedule);
- Monitoring plan for the compensatory mitigation-site (performance standards, target functions and values, target hydrological regime, target jurisdictional and non-jurisdictional acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports);
- Completion of compensatory mitigation (notification of completion, agency confirmation);
- Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism); and
- If on-site compensatory mitigation is not feasible, alternative strategies may include off-site mitigation or purchase conservation credits.
- Work Limits. The Project impact area shall be clearly marked or delineated with stakes, flagging, tape, or signage prior to work. A qualified biologist will provide guidance to fence field crew during installation of delineation materials. Areas outside of work limits, including Project Landscape Plan protected areas (woodland and shrubland stands, oak tree planting areas), and aquatic features to be avoided shall be considered environmentally sensitive and shall not be disturbed. No work will be conducted outside of the designated work limits to avoid disturbance to vegetation and natural habitats surrounding the Project footprint. The work limit setback distance for aquatic features that will be avoided will be based on ACOE, RWQCB, and/or CDFW permit conditions.
- <u>Vehicles and Equipment.</u> All equipment and vehicles shall be checked and maintained daily to prevent spills of fuel, oil, and other hazardous materials. A designated staging area shall be established for vehicle/equipment parking and storage of fuel, lubricants,



and solvents. All fueling and maintenance activities shall take place in the staging area.

- Oak Tree Survey. Prior to permit issuance, a qualified biologist shall conduct a field survey focused on identification and mapping of oak trees (*Quercus* sp.) within the Project footprint to determine impacts to oak trees and oak woodland canopy. The survey is intended to comply with Tuolumne County Ordinance 2903 Chapter 9.24, intended to discourage premature removal of oak trees and Public Resources Code Section 21083.4 (Oak Woodlands). If oak tree removal is unavoidable, an Oak Tree Protection and Replacement Plan will be prepared.
- Oak Tree Protection and Replacement Plan. Prior to grading permit issuance, an Oak Tree Protection and Replacement Plan shall be prepared and submitted for County approval. Native oak trees with a 5-inch or greater DBH are protected in Tuolumne County (except black oak which is often used as a landscaping tree). There are 100 oak trees (97 interior live oak, and 3 blue oak) with a 5-inch or greater DBH) within the proposed Project footprint. Refer to Appendix G Oak Tree Inventory for details regarding the oak tree inventory survey results. The Oak Tree Protection and Replacement Plan shall address these native oaks where grading, construction, utility installation or other disturbance (including removal) occurs within 1 ½ times the dripline, and shall incorporate the following information:
 - Oak tree replacement applies to native oaks with a five inch or greater DBH that will be removed and/or impacted during Project activities;
 - High visibility fencing shall be installed around perimeter of oak trees to be retained in accordance with the Oak Tree Protection and Replacement Plan figure and Project grading plans. A qualified biologist will accompany on-site construction personnel during installation to provide guidance and ensure setback of 1 ½ times the drip line is achieved;
 - For every oak tree (equal to or greater than five inches DBH) removed, the same and/or similar genus (upon approval by Tuolumne County) as those removed will be planted at a 2:1 replacement ratio if fifteen-gallon trees are used, and 3:1 replacement if five-gallon trees are used;
 - A qualified biologist may approve replanting to include up to 20% California black oak to be included in native oaks to be replanted;
 - The Project Landscape Plan will incorporate oak tree replacement planting requirements described in the Oak Tree Protection and Replacement Plan. Content will include planting methods, oak tree replacement ratio, species planted, and maintenance, monitoring, and reporting methods, and depiction of the designated planting area(s) and planting locations of replacement oak trees. A qualified biologist will review the Project Landscape Plan prior to submittal to County. The Project Landscape Plan will be submitted after County approval of the Oak Tree Protection and Replacement Plan, and will be implemented upon approval by the County prior to Project initiation; and



- An in-lieu fee may be paid to the County, or other entity approved by the County as an additional mitigation strategy in combination with oak tree replacement planting.
- Woodland and Shrubland Protection. Habitat that shall remain during construction (including stands and individuals of oak trees, Ponderosa pine, and manzanita) shall be clearly marked or delineated with stakes, flagging, tape, or signage prior to work to avoid disturbance during construction activities. A qualified biologist will provide guidance to fence field crew during installation of delineation materials. The Project Landscape Plan and/or grading plans will depict protected woodland and shrubland protected areas. Exact locations of these protected areas will be determined during the development of the Project Landscape Plan and will be based on the location, density, species composition of existing stands of woodland and shrubland within and adjacent to the proposed Project footprint.
- <u>Permitting</u>. All appropriate agency permits shall be obtained prior to initiation of Project activities, including, but not limited to, an ACOE Section 404 Nationwide Permit, RWQCB Water Quality Certification/Discharge and Fill Permit, and/or CDFW Lake or Streambed Alteration Agreement. Project activities shall comply with agency permit conditions to further reduce potential impacts to sensitive species and habitats.



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APPENDIX A

Site Photographs





Photo 1. Overview of Project Site from Memorial Drive (aspect west; 7/21/20).



Photo 2. Representative view of Manzanita scrub habitat in eastern portion of Project Site (aspect north; 7/21/20).





Photo 3. Ephemeral channel (aspect northeast; 7/21/20).



Photo 4. Ephemeral channel within Ponderosa pine forest and woodland habitat (aspect southwest; 7/21/20).





Photo 5. Ephemeral channel meandering through Spanish clover field and Buck brush scrub habitats (aspect north; 7/21/20).



Photo 6. Man-made pond (aspect north, 7/21/20).





Photo 7. Intermittent channel and seep; standpipe (aspect south; 7/21/20).



Photo 8. Intermittent channel (aspect northeast, 7/21/20).

APPENDIX B

Vascular Plant Species List

Vascular Plant List

Species Observed within the BSA

Highway 120 Lodging Hospitality Project Site, Tuolumne County, California

| Scientific Name | Common Name | Habit | Indicator Status | Family |
|-----------------------------------|------------------------|------------|------------------|----------------|
| Acmispon americanus | Spanish lotus | AH | UPL | Fabaceae |
| Alnus rhombifolia | White alder | Т | | Betulaceae |
| Acrotstaphylos manzanita | Manzanita | S | | Ericaceae |
| Aira caryophyllea* | Silver hairgrass | AG | FACU | Poaceae |
| Arctostaphylos viscida | White-leaved manzanita | S | | Ericaceae |
| Artemisia douglasiana | California mugwort | PH | FAC | Asteraceae |
| Avena barbata* | Slim oat | AG | | Poaceae |
| Brassica nigra* | Black mustard | AH | | Brassicaceae |
| Briza minor* | Little quaking grass | AG | FAC | Poaceae |
| Bromus sitchensis var. carinatus | California brome | AG | | Poaceae |
| Bromus diandrus* | Ripgut brome | AG | | Poaceae |
| Bromus hordeaceus* | Soft chess brome | AG | | Poaceae |
| Carex densa | Sedge | PH | OBL | Cyperaceae |
| Ceanothus cuneatus | Buck brush | S | | Rhamnaceae |
| Centromadia fitchii | Spikeweed | AH | FACU | Asteraceae |
| Centaurea solsticialis* | Yellow starthistle | AH | | Asteraceae |
| Centaurea stoebe ssp. micranthos* | Spotted knapweed | AH | | Asteraceae |
| Croton setiger | Turkey-mullein | AH | • | Euphorbiaceae |
| Cynodon dactylon* | Bermuda grass | PG | FACU | Poaceae |
| Cyperus eragrostis | Tall flatsedge | PH | FACW | Cyperaceae |
| Deinandra pallida | Kern tarweed | AH | 17.000 | Asteraceae |
| Dittrichia graveolens* | Stinkwort | AH | • | Asteraceae |
| Elymus caput-medusae* | Medusa head | AG | • | Poaceae |
| Eleocharis macrostachya | Creeping spikerush | PH | FACW | Cyperaceae |
| Elymus elymoides | Squirreltail | PG | FACU | Poaceae |
| | Willow herb | AH | FACO | |
| Epilobium brachycarpum | California willow herb | AH | • | Onagraceae |
| Epilobium foliosum | | S S | • | Onagraceae |
| Ericameria arborescens | Golden-fleece | S | • | Asterceae |
| Eriogonum nudum | Buckwheat | S | • | Polygonaceae |
| Eriodictyon californicum | Yerba santa | | • | Boraginaceae |
| Erysimum capitatum var. capitatum | Western wallflower | AH | ODI | Brassicaceae |
| Erythranthe guttata | Creek monkeyflower | AH | OBL | Phrymaceae |
| Festuca microstachys | Small fescue | AG | • | Poaceae |
| Festuca myuros* | Rattail fescue | AG | | Poaceae |
| Festuca perennis* | Italian rye grass | PG | FAC | Poaceae |
| Galium sp. | Bedstraw | AH | E4011 | Rubiaceae |
| Gastridium phleoides* | Nit Grass | AG | FACU | Poaceae |
| Grindelia camporum | Gumweed | PH | FACW | Asteraceae |
| Heteromeles arbutifolia | Toyon | S | • | Rosaceae |
| Hirschfeldia incana* | Mediterranean mustard | AH | | Brassicaceae |
| Holocarpha virgata | Narrow tarplant | AH | | Asteraceae |
| Hordeum brachyantherum | Meadow barley | PH | FACW | Poaceae |
| Hordeum marinum ssp. gussoneaum* | Foxtail barley | AG | FACU | Poaceae |
| Juncus bufonius | Toad rush | AG/H | FACW | Juncaceae |
| Juncus effuses | Lamp rush | PG/H | FACW | Juncaceae |
| Lactuca Serriola* | Prickly lettuce | AH | FACU | Asteraceae |
| Lathyrus latifolius* | Perennial sweet pea | PH | | Fabaceae |
| Lupinus sp. | Lupine | Н | | Fabaceae |
| Mentha pulegium | Pennyroyal | PH | OBL | Lamiaceae |
| Navarretia intertexta | Needleleaf navarretia | AH | FACW | Polemoniaceae |
| Pinus ponderosa | Yellow pine | T | FACU | Pinaceae |
| Pinus sabiana | Foothill pine | Т | | Pinaceae |
| Plantago lanceolata* | English plantain | PH | FAC | Plantaginaceae |
| Polygpogon monspeliensis* | Rabbitsfoot grass | AG | FACW | Poaceae |
| Pseudognaphalium californicum | California everlasting | AH | | Asteraceae |
| Quercus douglasii | Blue oak | , " . T | • | Fagaceae |
| Quercus Kelloggii | California black oak | T | • | Fagaceae |
| Quercus wislizeni | Interior live oak | T | • | Facaceae |
| Rubus ulmifolius* | Elmleaf blackberry | V/S | • | Rosaceae |
| rabao animonao | Emiliar blackborry | V/O | • | 1.000000 |

Vascular Plant List

Species Observed within the BSA

Highway 120 Lodging Hospitality Project Site, Tuolumne County, California

| Scientific Name | Common Name | Habit | Indicator Status | Family |
|----------------------------|----------------------|-------|------------------|----------------|
| Rubus aremeniacus* | Himalayan blackberry | S | FAC | Rosaceae |
| Rumex crispus* | Curly dock | AH | FAC | Polygonaceae |
| Rumex acetosella* | Sheep sorrel | PH | FACU | Polygonaceae |
| Salix laevigata | Red willow | S/T | FACW | Saliaceae |
| Salix lasiolepis | Arroyo willow | Т | FACW | Salicaceae |
| Torilis arvensis* | Tall sock destroyer | AH | | Apiaceae |
| Toxicodendron diversilobum | Poison Oak | PH | | Anacardiaceae |
| Tribulus terrestris* | Puncture vine | AH | | Zygophyllaceae |
| Trichostema lanceolatum | Vinegarweed | AH | FACU | Lamiaceae |
| Vicia sp. | Vetch | AH | | Fabaceae |
| Xanthium strumarium | Rough cocklebur | AH | FAC | Asteraceae |

Notes: Scientific nomenclature follows Baldwin (2012).

An "*" indicates non-native species which have become naturalized or persist without cultivation.

An "." indicates that no indicator has been assigned dur to lack of information to determine indicator status; or is not listted and assumed upland species.

Habit definitions:

Wetland indicator status (Lichvar and Kartesz, 2016): OBL (Obligate Wetland Plants)- Almost always occur in wetlands. AG - Annual grass.

FACW (Facultative Wetland Plants) - Usually occur in wetland, but may occur in non-wetla

FAC (Facultative Wetland Plants) - Occur in wetlands and non-wetlands.

FACU (Facultative Upland Plants) - Usually occur in non-wetlands, but may occu

UPL (Upland Plants) - Almost always occur in non-wetlands.

AH - Annual herb. PG - Perennial grass.

PH - Perennial herb. PV - Perennial vine.

S - Shrub T - Tree

APPENDIX C

Wildlife Species List

Wildlife Species Observed at the Hwy 120 Lodging Hospitality Project Site, Tuolumne County, California

| Common Name/ Family | Scientific Name | Sensitivity / Listing Status ¹ |
|---|-------------------------|---|
| REPTILES | | |
| Western Fence Lizard | Sceloporus occidentalis | |
| BIRDS | | |
| California Quail | Callipepla californica | |
| Mourning Dove | Zenaida macroura | M |
| Anna's Hummingbird | Calypte anna | M |
| Turkey Vulture | Cathartes aura | M |
| Red-tailed Hawk | Buteo jamaicensis | M |
| Acorn Woodpecker | Melanerpes formicivorus | M |
| Nuttall's Woodpecker | Picoides nuttallii | M, BCC |
| Western Wood-Pewee | Contopus sordidulus | M |
| Black Phoebe | Sayornis nigricans | M |
| Ash-throated Flycatcher | Myiarchus cinerascens | M |
| California Scrub-Jay | Aphelocoma californica | M |
| Common Raven | Corvus corax | M |
| Violet-green Swallow | Tachycineta thalassina | M |
| Barn Swallow | Hirundo rustica | M |
| Oak Titmouse | Baeolophus inornatus | M, BCC |
| Bushtit | Psaltriparus minimus | M |
| House Finch | Haemorhous mexicanus | M |
| Lesser Goldfinch | Spinus psaltria | M |
| California Towhee | Melozone crissalis | M |
| Brewer's Blackbird | Euphagus cyanocephalus | M |
| MAMMALS | | |
| Black-tailed Hare | Lepus californicus | |
| Coyote | Canis latrans | |
| Raccoon | Procyon lotor | |
| Black-tailed Deer | Odocoileus hemionus | |
| Sensitivity / Listing Status ¹ | · | |

Sensitivity / Listing Status¹

M = Protected under the federal Migratory Bird Treaty Act (MBTA)

FE = Federally Endangered FT = Federally Threatened FDL = Federally Delisted

FDL = Federally Delisted FSS = Forest Service Sensitive SE = California State Endangered ST = California State Threatened

CSC = California Species of Special Concern FP = California Fully Protected Species BCC = USFWS Birds of Conservation Concern

WL = CDFW Watch List

APPENDIX D

CNDDB Results
USFWS Species List



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

Quad IS (Groveland (3712072) OR Tuolumne (3712082) OR Duckwall Mtn. (3712081) OR Jawbone Ridge (3712071) OR Buckhorn Peak (3712061) OR Coulterville (3712062) OR Penon Blanco Peak (3712063) OR Moccasin (3712073) OR Penon Blanco Peak (3712063) OR Taxonomic Group IS (Dune OR Standard (3712083) OR Herbaceous OR Herbaceous OR Herbaceous OR Herbaceous OR Forest OR Herbaceous OR Amphibians OR Herbaceous OR H

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|-----------------------------------|--------------|----------------|--------------|-------------|------------|--------------------------------------|
| Species Allium tuolumnense | PMLIL022W0 | None | None | G2 | S2 | 1B.2 |
| Rawhide Hill onion | T WEILOZZVVO | 140110 | 140110 | 02 | OL. | 10.2 |
| Antrozous pallidus | AMACC10010 | None | None | G5 | S3 | SSC |
| pallid bat | | | | | | |
| Athene cunicularia | ABNSB10010 | None | None | G4 | S3 | SSC |
| burrowing owl | | | | | | |
| Baeolophus inornatus | ABPAW01100 | None | None | G4 | S4 | |
| oak titmouse | | | | | | |
| Balsamorhiza macrolepis | PDAST11061 | None | None | G2 | S2 | 1B.2 |
| big-scale balsamroot | | | | | | |
| Banksula tuolumne | ILARA14090 | None | None | G1 | S1 | |
| Tuolumne cave harvestman | | | | | | |
| Bombus crotchii | IIHYM24480 | None | Candidate | G3G4 | S1S2 | |
| Crotch bumble bee | | | Endangered | | | |
| Clarkia australis | PDONA05040 | None | None | G2 | S2 | 1B.2 |
| Small's southern clarkia | | | | | | |
| Clarkia biloba ssp. australis | PDONA05051 | None | None | G4G5T3 | S3 | 1B.2 |
| Mariposa clarkia | | | | | | |
| Clarkia rostrata | PDONA050Y0 | None | None | G2G3 | S2S3 | 1B.3 |
| beaked clarkia | | | | | | |
| Corynorhinus townsendii | AMACC08010 | None | None | G3G4 | S2 | SSC |
| Townsend's big-eared bat | | | | | | |
| Cryptantha mariposae | PDBOR0A1Q0 | None | None | G2G3 | S2S3 | 1B.3 |
| Mariposa cryptantha | | | | | | |
| Cryptantha spithamaea | PDBOR0A2M2 | None | None | G2 | S2 | 1B.3 |
| Red Hills cryptantha | | | | | | |
| Desmocerus californicus dimorphus | IICOL48011 | Threatened | None | G3T2 | S2 | |
| valley elderberry longhorn beetle | | | | | | |
| Diplacus pulchellus | PDSCR1B280 | None | None | G2 | S2 | 1B.2 |
| yellow-lip pansy monkeyflower | | | | | | |



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



| | _ | | | | _ | Rare Plant Rank/CDFW |
|--|---------------------|----------------|--------------|-------------|------------|-------------------------|
| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | SSC or FP |
| Emys marmorata | ARAAD02030 | None | None | G3G4 | S3 | SSC |
| western pond turtle | | | | | | |
| Eryngium pinnatisectum | PDAPI0Z0P0 | None | None | G2 | S2 | 1B.2 |
| Tuolumne button-celery | | | | | | |
| Erythranthe filicaulis | PDSCR1B150 | None | None | G2 | S2 | 1B.2 |
| slender-stemmed monkeyflower | DMI II OLIOLIO | | | 0000 | 0000 | 40.0 |
| Erythronium tuolumnense | PMLIL0U0H0 | None | None | G2G3 | S2S3 | 1B.2 |
| Tuolumne fawn lily | AMA 0007040 | Name | Mana | 0.4 | 00 | 000 |
| Euderma maculatum | AMACC07010 | None | None | G4 | S3 | SSC |
| spotted bat | AMA O DO0044 | Name | Mana | 0574 | 0004 | 000 |
| Eumops perotis californicus western mastiff bat | AMACD02011 | None | None | G5T4 | S3S4 | SSC |
| | ADNIKDOGGG | Maria | Mana | 0.5 | 0.4 | 14/1 |
| Falco mexicanus | ABNKD06090 | None | None | G5 | S4 | WL |
| prairie falcon | DMI II 01/040 | Maria | Mana | 00 | 00 | 4.0 |
| Fritillaria agrestis stinkbells | PMLIL0V010 | None | None | G3 | S3 | 4.2 |
| | A DAUGO 4 0 0 4 0 | Deliated | Fradament d | 0.5 | 00 | ED. |
| Haliaeetus leucocephalus bald eagle | ABNKC10010 | Delisted | Endangered | G5 | S3 | FP |
| | DDDOCOWOCO | Nana | None | G2 | S2 | 1B.2 |
| Horkelia parryi Parry's horkelia | PDROS0W0C0 | None | None | G2 | 32 | ID.Z |
| Hydromantes brunus | AAAAD09010 | None | Threatened | G2G3 | S2S3 | FP |
| limestone salamander | AAAADU9010 | None | Tilleaterieu | G2G3 | 3233 | FF |
| Lasionycteris noctivagans | AMACC02010 | None | None | G5 | S3S4 | |
| silver-haired bat | AWACCOZOTO | None | None | 00 | 0004 | |
| Lasiurus blossevillii | AMACC05060 | None | None | G5 | S3 | SSC |
| western red bat | AWACCOSOCO | None | None | 00 | 00 | 000 |
| Lasiurus cinereus | AMACC05030 | None | None | G5 | S4 | |
| hoary bat | 7 11 17 10 00 00 00 | 110110 | 140.10 | | 0. | |
| Lavinia symmetricus ssp. 1 | AFCJB19021 | None | None | G4T3Q | S3 | SSC |
| San Joaquin roach | | | | | | |
| Lomatium congdonii | PDAPI1B0B0 | None | None | G2 | S2 | 1B.2 |
| Congdon's Iomatium | | | | | | |
| Lupinus spectabilis | PDFAB2B3P0 | None | None | G2 | S2 | 1B.2 |
| shaggyhair lupine | | | | | | |
| Margaritifera falcata | IMBIV27020 | None | None | G4G5 | S1S2 | |
| western pearlshell | | | | | | |
| Monadenia circumcarinata | IMGASC7020 | None | None | G1 | S1 | |
| keeled sideband | | | | | | |
| Monadenia tuolumneana | IMGASC7100 | None | None | G1 | S1 | |
| Tuolumne sideband | | | | | | |
| Manadanta caranttanata | IMGASZ3010 | None | None | C1 | S1S2 | |
| Monadenia yosemitensis | IIVIGASZSUTU | NOTIE | NOHE | G1 | 3132 | |



Selected Elements by Scientific Name

California Department of Fish and Wildlife California Natural Diversity Database



| | | | | | | Rare Plant Rank/CDFW |
|--|--------------|----------------|--------------|-------------|------------|-------------------------|
| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | SSC or FP |
| Myotis evotis | AMACC01070 | None | None | G5 | S3 | |
| long-eared myotis | | | | | | |
| Myotis thysanodes | AMACC01090 | None | None | G4 | S3 | |
| fringed myotis | | | | | | |
| Myotis volans | AMACC01110 | None | None | G5 | S3 | |
| long-legged myotis | | | | | | |
| Myotis yumanensis | AMACC01020 | None | None | G5 | S4 | |
| Yuma myotis | | | | | | |
| Navarretia miwukensis | PDPLM0C210 | None | None | G1G2 | S1S2 | 1B.2 |
| Mi-Wuk navarretia | | | | | | |
| Packera layneae | PDAST8H1V0 | Threatened | Rare | G2 | S2 | 1B.2 |
| Layne's ragwort | | | | | | |
| Rana boylii | AAABH01050 | None | Endangered | G3 | S3 | SSC |
| foothill yellow-legged frog | | | | | | |
| Rhynchospora capitellata | PMCYP0N080 | None | None | G5 | S1 | 2B.2 |
| brownish beaked-rush | | | | | | |
| Senecio clevelandii var. heterophyllus | PDAST8H0R2 | None | None | G4?T2Q | S2 | 1B.2 |
| Red Hills ragwort | | | | | | |
| Strix nebulosa | ABNSB12040 | None | Endangered | G5 | S1 | |
| great gray owl | | | | | | |
| Stygobromus harai | ICMAL05470 | None | None | G1G2 | S1S2 | |
| Hara's Cave amphipod | | | | | | |
| Stygobromus wengerorum | ICMAL05620 | None | None | G1 | S1 | |
| Wengerors' Cave amphipod | | | | | | |
| Vireo bellii pusillus | ABPBW01114 | Endangered | Endangered | G5T2 | S2 | |
| least Bell's vireo | | | | | | |
| Vulpes vulpes necator | AMAJA03012 | Candidate | Threatened | G5T1T2 | S1 | |
| Sierra Nevada red fox | | | | | | |

Record Count: 50



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: June 28, 2021

Consultation Code: 08ESMF00-2021-SLI-2194

Event Code: 08ESMF00-2021-E-06355

Project Name: Highway 120 Lodging Hospitality Project

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan

(http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 (916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2021-SLI-2194 Event Code: 08ESMF00-2021-E-06355

Project Name: Highway 120 Lodging Hospitality Project

Project Type: DEVELOPMENT

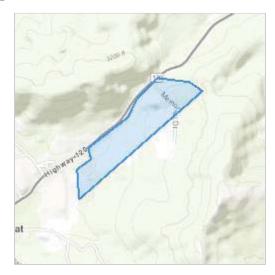
Project Description: SR 120 between Big Oak Flat and Groveland, Tuolumne County,

California. Proposed commercial (lodging) development of approximately

31-acre parcel.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.82884465,-120.24717648674618,14z



Counties: Tuolumne County, California

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME STATUS

Fisher *Pekania pennanti*

Endangered

Population: SSN DPS

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3651

Amphibians

NAME STATUS

California Red-legged Frog Rana draytonii

Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/2891

Fishes

NAME

Delta Smelt *Hypomesus transpacificus*

Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/321

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaCU.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

Tuolumne 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 species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
- 2. <u>NOAA Fisheries</u>, 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:

Mammals

NAME STATUS

Fisher Pekania pennanti

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/3651

Endangered

Amphibians

NAME STATUS

California Red-legged Frog Rana draytonii

Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/2891

Fishes

NAME STATUS

Delta Smelt Hypomesus transpacificus

Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

https://ecos.fws.gov/ecp/species/321

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 1 and the Bald and Golden Eagle Protection Act 2 .

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 <u>below</u>.

- 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 <u>USFWS Birds of Conservation Concern</u> (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 <u>below</u>. 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 <u>E-bird data mapping tool</u> (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 <u>below</u>.

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.

TFOR CO

https://ecos.fws.gov/ecp/species/1626

Common Yellowthroat Geothlypis trichas sinuosa

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/2084

Breeds May 20 to Jul 31

Breeds Jan 1 to Aug 31

Golden Eagle Aquila chrysaetos

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

Breeds Jan 1 to Aug 31

Lawrence's Goldfinch Carduelis lawrencei

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9464

Breeds Mar 20 to Sep 20

Nuttall's Woodpecker Picoides nuttallii

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/9410

Breeds Apr 1 to Jul 20

Oak Titmouse Baeolophus inornatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9656

Breeds Mar 15 to Jul 15

Rufous Hummingbird selasphorus rufus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/8002

Breeds elsewhere

Song Sparrow Melospiza melodia

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 20 to Sep 5

Spotted Towhee Pipilo maculatus clementae

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/4243

Breeds Apr 15 to Jul 20

White Headed Woodpecker Picoides albolarvatus

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/9411

Breeds May 1 to Aug 15

Wrentit Chamaea fasciata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

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 (I)

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 (–)

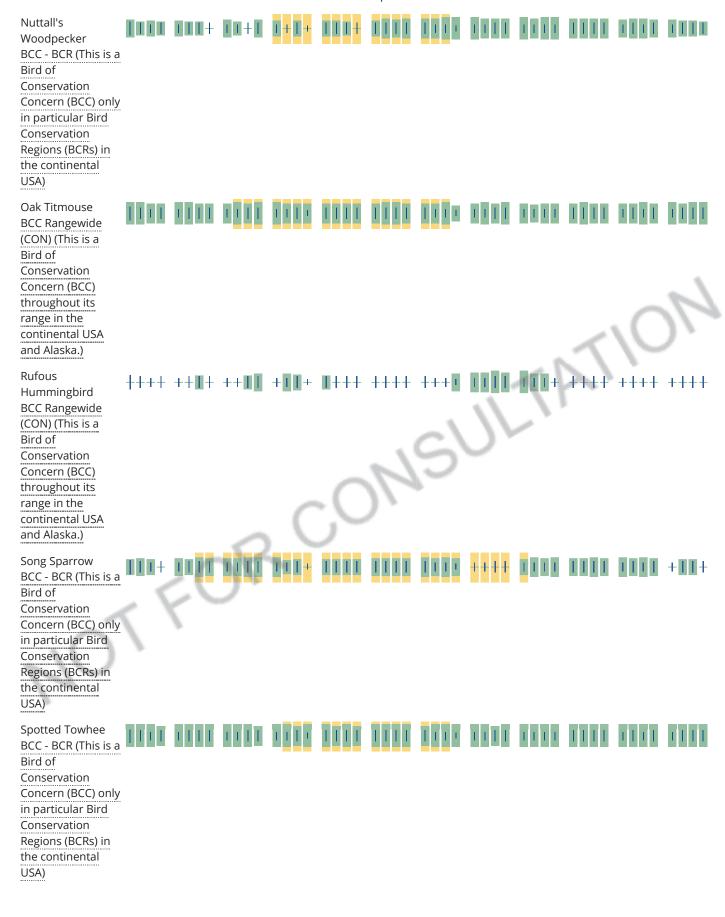
A week is marked as having no data if there were no survey events for that week.

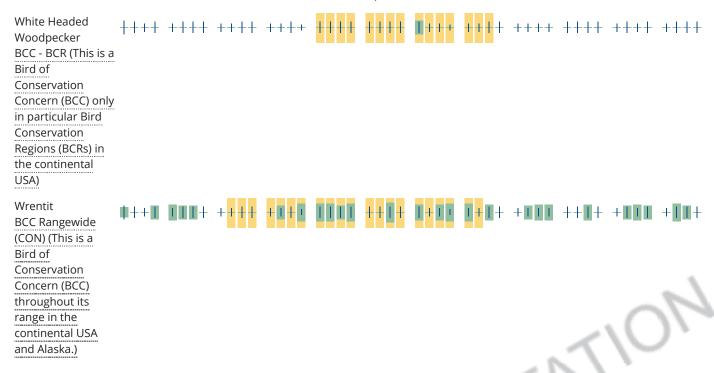
Survey Timeframe

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.

■ probability of presence ■ breeding season | survey effort — no data







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 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 <u>Birds of Conservation Concern (BCC)</u> 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 <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey, banding, and citizen science datasets</u> 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 (<u>Eagle Act</u> 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 <u>AKN Phenology Tool</u>.

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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen</u> 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 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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> 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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> 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

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers District</u>.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the <u>NWI map</u> to view 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 tuberficid 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.

APPENDIX E

Preliminary Aquatic Resources Delineation Report

PRELIMINARY FEDERAL AQUATIC RESOURCES DELINEATION AND STATE AQUATIC RESOURCE DELINEATION REPORT

HIGHWAY 120 LODGING HOSPITALITY PROJECT TULOUMNE COUNTY, CALIFORNIA

PROJECT NO. 2002-4722

Prepared for:

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OCTOBER 2020





TABLE OF CONTENTS

| 1.0 | INTRODUCTION | 1-1 |
|-----|---|-----|
| 1. | 1 PROJECT LOCATION | 1-1 |
| 1.3 | 2 PROJECT DESCRIPTION | 1-1 |
| 1.3 | 3 PROJECT SITE BACKGROUND | 1-1 |
| 1.4 | 4 CLIMATE SUMMARY | 1-1 |
| 1. | 5 PROJECT SETTING | 1-3 |
| 1.0 | 6 SITE GEOMORPHOLOGY AND LANDSCAPE SETTING | 1-3 |
| 2.0 | REGULATORY AUTHORITY | 2-1 |
| 2. | 1 FEDERAL REGULATIONS | 2-1 |
| | 2.1.1 Waters of the United States | 2-1 |
| | 2.1.2 Federal Wetlands | |
| | 2.1.3 Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) | |
| | 2 STATE REGULATIONS | |
| | 2.2.1 Porter-Cologne Water Quality Control Act | |
| | 2.2.2 California Department of Fish and Wildlife | 2-4 |
| 3.0 | METHODOLOGY | 3-1 |
| 3. | 1 WATERS OF THE UNITED STATES | 3-1 |
| 3. | 2 WETLANDS | 3-2 |
| | 3.2.1 Hydrophytic Vegetation | |
| | 3.2.2 Hydric Soils | |
| | 3.2.3 Wetland Hydrology | |
| 3.3 | 3 WATERS OF THE STATE | 3-3 |
| 4.0 | RESULTS | 4-1 |
| 4. | 1 SITE CONDITIONS | 4-2 |
| 4.: | 2 SEASONAL WETLANDS | 4-2 |
| | 4.2.1 Hydrophytic Vegetation | 4-2 |
| | 4.2.2 Wetland Hydrology | 4-3 |
| | 4.2.3 Hydric Soils | 4-3 |
| 4.3 | 3 INTERMITTENT CHANNEL | 4-3 |
| 4.4 | 4 EPHEMERAL RIPARIAN CHANNEL | 4-4 |
| 4. | 5 EPHEMERAL CHANNEL | 4-4 |
| 4. | 6 MAN-MADE POND | 4-4 |
| 5.0 | JURISDICTIONAL DETERMINATION | 5-1 |
| 5. | 1 FEDERAL JURISDICTION | 5-1 |
| | 5.1.1 Seasonal Wetlands | 5-1 |
| | 5.1.2 Intermittent Channel | 5-1 |
| | 5.1.3 Ephemeral Channels | 5-2 |
| 5. | 2 STATE JURISDICTION | |
| | 5.2.1 RWQCB Jurisdictional Waters | |
| | 5.2.2 CDFW 1600 Jurisdictional Waters | 5-3 |



| | ON-JURISDICTIONAL AQUATIC FEATURESONCLUSION | |
|------------|---|------|
| | ERENCES | |
| | TABLES | |
| Table 1-1. | Precipitation Analysis | .1-2 |
| Table 4-1. | Aquatic Resources Summary Table | .4-1 |
| | | |
| | FIGURES | |
| Figure 1 | Project Location | |
| Figure 2 | Preliminary Aquatic Resources Delineation Map | |
| Figure 3 | National Wetland Inventory and FEMA Map | |
| Figure 4 | Soils Map | |
| | APPENDICES | |
| Appendix A | A WETS Table | |
| Appendix I | B Wetland Delineation Data Forms | |
| Appendix (| C Photographs | |
| Appendix I | D Plant List | |
| Appendix | E OHWM Datasheet | |
| Appendix I | F Preliminary Wetland and ACOE Verification Map (LSA, 2010) | |
| Appendix | | |



1.0 INTRODUCTION

Padre Associates, Inc. (Padre) has prepared this Preliminary Aquatic Resources Delineation Report (Report) for the proposed Highway 120 Lodging Hospitality Project (Project). The purpose of this Report is to identify and delineate the geographic extent of aquatic resource features and determine Federal and/or State jurisdiction. The methodology used in this delineation is consistent with guidance provided by the U.S. Army Corps of Engineers (ACOE) and Environmental Protection Agency (EPA) for Federal jurisdictional Waters of the U.S. and wetlands and the State Water Resources Control Board (SWRCB) for Waters of the State.

1.1 PROJECT LOCATION

The site is located along State Highway 120 between Big Oak Flat and Groveland in Tuolumne County, in the NW¼ of Section 29, Township 1 south, Range 16 east within the Groveland 7.5-minute United States Geological Survey (USGS) quadrangle, and is comprised of ten parcels identified as Assessor's Parcel Number (APN) 066-140-013, 066-140-014, 066-140-015, 066-140-016, 066-140-017, 066-140-018, 066-140-019, 066-140-022, 066-140-031, and 066-140-032 (Project Site). The Project Site is bounded on the north by State Highway 120, on the east by undeveloped forest land, on the south by a cemetery and undeveloped forest land, and on the west by vacant land and a hardware store.

1.2 PROJECT DESCRIPTION

The Project proposes development of the approximately 31-acre property consisting of recreational development consisting of 200 guest room accommodations, which will include a combination of luxury units, family units, and classic units. The Project also includes a lodge, restaurant, events space, pool, and spa.

1.3 PROJECT SITE BACKGROUND

Over 30 years ago, the property was graded and cleared for proposed development by a previous owner, but then was abandoned. In 2010, a development project referred to as the Yosemite Gateway Project was proposed under new ownership, and a wetland delineation survey was completed during the initial permitting process by LSA Associates, Inc. (LSA) to determine the potential extent of waters of the United States (U.S.) including wetlands, and requested a verification of the delineation in a letter dated November 24, 2010 (LSA, 2010). Subsequently, ACOE conducted a site visit to verify the preliminary jurisdictional determination resulting in a final jurisdictional determination of Waters of the U.S. within the Yosemite Gateway Project Site (LSA, 2011). The proposed project was abandoned and has recently been re-initiated under new ownership with a new vision and low-impact design. In 2020, Padre completed an aquatic resources delineation survey within the property to document the extent of aquatic resources and to provide a preliminary jurisdictional determination of the resources. Padre used LSA and ACOE delineation results as guidance for completion of the 2020 aquatic resources field survey.

1.4 CLIMATE SUMMARY

The Project Site is situated in Climate Zone 12, which includes the Northern California Central Valley situated inland of the Bay Area (PEC, 2006). The climate in this zone is characterized by cooler winters and hotter summers than the Bay Area, and Tule fog is common



in the winter east of Mount Diablo. Most of the rainfall in this zone occurs between November and April. At the Groveland 2 Weather Station, located approximately 1.4 miles northwest of the Project Site, the average maximum temperature includes a range of 52.0°F in December to 91.6°F in July for the 72-year period between 1948 and 2020. The average minimum temperature for this time period includes a range of 30.5°F in December to 56.5°F in July. The average annual precipitation for this station is 35.55 inches with a range of 0.01 inches in July and 6.74 inches in December. Average snowfall for this site ranges between 0 inches in July through October and 1.2 inches in February.

Using climate data from the Groveland 2 Station, it was determined that the delineation field effort occurred during a period of average rainfall. Therefore, climatic conditions at the Project Site can be considered normal. Table 1-1 – Precipitation Analysis shows analysis of climate data obtained from the National Resources Conservation Service (NRCS) Climate Analysis for Wetlands Table (WETS table) used to determine site conditions at the time of surveys (NRCS, 2020b) (Appendix A – WETS table). The three months prior to the survey are shown on the left followed by the lower than average rainfall, average rainfall, and above average rainfall amounts as determined based on long-term rainfall records. Under the Rain Fall column are the actual precipitation values for each of the three months leading up to the survey. Each month's condition (dry, normal, wet) is assigned based on comparison to the long-term rainfall records and is considered against a weighted number that prioritizes the month prior to surveys over the two preceding months. The condition value and month weight value are then multiplied, and the results summed and compared to an index evaluating values from 6 to 18. The sum value of 12 that was generated using the Groveland 2 Station climate data indicates that the July 2020 delineation surveys were conducted at a time that had normal rainfall conditions.

Table 1-1. Precipitation Analysis

| | | rm Rainfall F f Record 194 | | | | | Analysis | | |
|--|-------|-------------------------------|---------------------|-------------------------------|-------------------------------|--------------------------|---------------------------------|--------------------------|--|
| Timing | Month | 3 yrs. in 10 < (Inches) | Average (Inches) | 3 yrs. in 10 > (Inches) | 2020 Rain Fall (Inches) | Condition ¹ : | Condition Value ¹ | Month Weight Value | Products of previous two columns |
| First month prior to surveys | June | 0.00 | 0.1 | 0.26 | 0.0 | N | 2 | 3 | 6 |
| Second month prior to surveys | May | 0.69 | 1.72 | 2.02 | 1.32 | N | 2 | 2 | 4 |
| Third month prior to surveys | April | 1.11 | 2.87 | 3.47 | 3.26 | N | 2 | 1 | 2 |
| | | | | | | | | Sum ² | 12 |



| | Long-term Rainfall Records (Period of Record 1948-2020) iming Month 3 yrs. in 10 < (Inches) Condition / Condition Value: D = Dry / 1 | | | | | Analysis | | | | | |
|------------------------|--|----------|---|-------------------------------|----------------|--------------------------|---------------------------------|--------------------------|----------------------------------|--|--|
| Timing | Month | 10 < | Ū | 3 yrs. in 10 > (Inches) | Rain Fall | Condition ¹ : | Condition Value ¹ | Month Weight Value | Products of previous two columns | | |
| ¹ Condition | on / Condition | n Value: | | ² Inc | Index for Sum: | | | | | | |
| D = Dry / | 1 | | | 6 - | 9 = period pr | eceding surve | ys has been | drier than | normal | | |
| N = Norn | nal / 2 | | | 10- | 14 = period p | receding surv | eys has bee | n normal | | | |
| W = Wet | / 3 | | | 15- | 18 = period p | receding surv | eys has bee | n wetter th | an normal | | |

Precipitation in the months preceding a delineation can influence wetland indicators observed in the field. It is important to understand the influence that precipitation in months leading up to the surveys may have on field conditions at the time surveys were conducted. The normal rainfall conditions concluded by the precipitation analysis was taken into consideration during analysis of the field data collected for this Report.

1.5 PROJECT SETTING

The Project Site is located in the foothills on the west slope of the Sierra Nevada mountain range, approximately 20 miles east of Yosemite National Park, at an elevation of approximately 3,000 feet above sea level. The surrounding land uses include transportation, light industrial, commercial, residential, forested open space, and a cemetery adjacent to the southern boundary of the Project Site. The regional topography is generally hilly to mountainous with moderate to steep slopes.

The United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map of the Project vicinity was reviewed prior to the delineation of waters and wetlands on the Site (USFWS, 2020a). The NWI depicted the eastern extent of Rattlesnake Creek, an NWI riverine feature, to occur approximately 800 feet from the western boundary of the Project Site, adjacent to an existing parking lot and hardware store.

1.6 SITE GEOMORPHOLOGY AND LANDSCAPE SETTING

The Project Site is located within the Lower Foothills Metamorphic Belt subsection of the Sierra Nevada Foothills ecological section of California (Cleland et al., 2007). The Project Site is located within the Central Sierra Nevada Foothills District of the Sierra Nevada Foothills Subregion within the Sierra Nevada Region of the California Floristic Province (Baldwin et al., 2012). United States Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey indicated that there were two soil types within the Project Site: Musick-Ultic Haploxeralfs, moderately well drained, complex, 1 to 8 percent slopes; and Musick-Hotaw complex, 8 to 30 percent slopes (Figure 4 – Soil Map). Musick soil series consists of fine-loamy, very deep, well drained soils formed in colluvium over residuum from intrusive igneous rocks. Hotaw soil series consists of fine-loamy, moderately deep, well drained soils formed in material weathered from granitic rocks (USDA, 2020).



2.0 REGULATORY AUTHORITY

2.1 FEDERAL REGULATIONS

2.1.1 Waters of the United States

The ACOE is responsible for the issuance of permits for the placement of dredged or fill material into Waters of the U.S. pursuant to Section 404 of the Clean Water Act (CWA) (33 USC 1344).

In non-tidal waters the lateral extent of federal jurisdiction is determined by the ordinary high water mark (OHWM), which is defined as the: "...line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." (33 CFR 328[e]). Additional physical characteristics, including matted vegetation, sediment sorting, multiple observed flow events, water staining, and others, have also been used to determine the OHWM (U.S. Army Corps of Engineers, 2005).

Wetlands could also be regulated as Waters of the U.S. if they were adjacent to jurisdictional waters (other than waters that are themselves wetlands). The ACOE regulation concerning wetlands adjacent to jurisdictional waters is defined at 33 CFR 328.4(c)(4):

Non-tidal Waters of the U.S. The limits of jurisdiction in non-tidal waters:

- In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
- When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.

The term adjacent is defined at 33 CFR 328.3(C) as:

The term adjacent means bordering, contiguous, or neighboring. Wetlands separated from other Waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."

The recently issued Navigable Waters Protection Rule offers further clarification that adjacent wetlands include the following:

- Wetlands that physically touch each other;
- Wetlands separated from a water of the U.S. by only a natural berm, bank, or dune;
- Wetlands inundated by flooding from a water of the U.S. in a typical year;
- Wetlands that are physically separated from a jurisdictional water of the U.S. by an artificial dike, barrier, or similar artificial structure with a direct hydrologic surface connection to the jurisdictional water in a typical year; and
- Wetlands that are divided by a road or similar artificial structure with a direct hydrologic surface connection through or over that structure in a typical year.



In 2015, the ACOE and EPA issued new definitions for waters/wetlands (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency, 2015), known as the 2015 Clean Water Rule. Immediately subsequent to issuance, the new Rule was challenged in federal courts, resulting in a nationwide hold on the new Rule, reverting to the 1986 regulations and subsequent guidance for Approved Jurisdictional Determinations. In 2017, the ACOE and EPA published their intent to "review and rescind or revise" the 2015 Clean Water Rule, and the EPA asked the courts to suspend the case while the Rule was under review. In 2018 the EPA delayed the effective date of the 2015 Clean Water Rule for two years, and the Sixth Circuit Court lifted its stay of the Rule. A federal judge then issued a nationwide injunction on the administrative delay of the Clean Water Rule for failure to comply with the Administrative Procedure Act. Pursuant to the Court order, the 2015 Clean Water Rule became effective in 22 states, including California (U.S. Army Corps of Engineers, 2018).

In December 2018 the ACOE and EPA proposed a revised definition of Waters of the U.S. that was published in the Federal Register in early 2019, and subsequently repealed the 2015 Clean Water Rule reverting regulation back to the 1986 regulations and subsequent guidance for Approved Jurisdictional Determinations. On January 23, 2020, the ACOE and EPA finalized the Navigable Waters Protection Rule to define Waters of the U.S. and streamline the definition so that it includes four categories of jurisdictional waters, provides clear exclusions for features not regulated, and defines terms in the regulatory text. The Navigable Waters Protection Rule fulfills Executive Order 13788 and became effective on June 23, 2020.

The four clear categories of waters that are considered Waters of the U.S. under the Navigable Waters Protection Rule include the following:

- Territorial seas and traditional navigable waters (TNW);
- Perennial and intermittent tributaries that contribute surface flow, directly or through non-jurisdictional surface water features, to a TNW in a typical year;
- Lakes, ponds, and impoundments of jurisdictional waters; and
- Adjacent wetlands (wetlands that are physically touching, separated by natural feature, or separated by artificial feature with direct hydrologic surface water connection).

The Navigable Waters Protection Rule also outlines what aquatic features are not Waters of the U.S. The most notable of these are groundwater, ephemeral features, many farm and roadside ditches, artificial lakes and ponds or water filled depressions excavated in upland, stormwater control and groundwater recharge features.

2.1.2 Federal Wetlands

Wetlands are a special category of waters of the U.S., and are defined at 33 CFR 328.3(b) as: "...those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

The ACOE utilizes the *Corps of Engineers Wetland Delineation Manual* (1987), herein referred to as 1987 ACOE Manual, to identify wetlands subject to regulatory jurisdiction



(jurisdictional wetlands) under the CWA. In central and southern California, Nevada, Arizona, and the other arid regions of the western U.S. the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* prepared by the ACOE's Engineer Research and Development Center (2008) is used to delineate jurisdictional wetlands.

The ACOE identifies jurisdictional wetlands based on a three-parameter definition using vegetation, soil, and hydrological characteristics. Excluding unusual conditions (atypical conditions or disturbed sites), all three parameters must be present for a site to be considered a jurisdictional wetland.

2.1.3 Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403)

The ACOE is also responsible for authorizing work affecting navigable waters of U.S. Structures or work under or over a navigable water of the U.S. is considered to have an impact on the navigable capacity of the waterbody (33 CFR 322.3[a]). There are no Section 10 waters on or near the Project Site.

2.2 STATE REGULATIONS

2.2.1 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (CA Water Code §§ 13000-13999.10) mandates that Waters of the State of California shall be protected. Current policy in California is that activities that may affect Waters of the State shall be regulated to attain the highest quality. Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state. The Porter-Cologne Act establishes that the state assumes responsibility for implementing portions of the federal CWA, rather than operating separate State and Federal water pollution control programs in California. Consequently, the state is involved in activities such as setting water quality standards, issuing discharge permits, and operating grant programs. Pursuant to Section 401 of the CWA, the ACOE cannot issue a Federal CWA permit until the State of California first issues a water quality certification to ensure that a project will comply with state water quality standards. The CWA's 401 certification requirement applies to many types of permits and is an important tool for the state to control projects that might degrade state waters.

In 2019, the State Water Resources Control Board adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material (Procedures), for inclusion in the Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) wetland delineation procedures; 3) a wetland jurisdictional framework; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Procedures took effect in May 2020.



2.2.1.1 Waters of the State

State Water Code defines Waters of the State broadly to include any surface water or groundwater including saline waters, within the boundaries of the State. These include:

- Natural wetlands;
- Wetlands created by modification of a water of the State;
- Wetlands that meet definition of waters of the U.S.; and
- Artificial wetlands that meet the following criteria:
 - o Agency approved mitigation projects,
 - Specifically identified in a water quality control plan as a wetland or other water of the State.
 - Resulting from historic human activity, not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape, and
 - Greater than or equal to one acre in size, unless constructed for one of a variety of industrial or land management purposes.

2.2.1.2 State Wetland

A State wetland is defined in the new Procedures as an aquatic feature that "...under normal circumstances has continuous or recurrent saturation of the upper substrate caused by groundwater, shallow surface water, or both; duration of saturation sufficient to cause anaerobic conditions in the upper substrate; and, vegetation that is dominated by hydrophytes or lacks vegetation."

If an aquatic feature meets the definition of a wetland it may be considered a water of the State.

2.2.2 California Department of Fish and Wildlife

The CDFW administers several laws and programs designed to protect fish and wildlife resources in the State of California, including Section 1602 of the California Fish and Game Code, which requires a Lake or Streambed Alteration Agreement between CDFW and any state or local governmental agency or public utility before the initiation of any construction project that will:

- Substantially divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake;
- Use materials from a streambed; or
- Result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake.

Therefore, the CDFW claims jurisdiction over the bed, bank, and channel of drainage features with regard to activities regulated under Section 1602 of the California Fish and Game Code. The CDFW has adopted the same wetland definition as the USFWS, classified by the presence of only one parameter; however, CDFW does not specifically regulate wetlands.



3.0 METHODOLOGY

The fieldwork for the delineation was conducted on July 21, 2020 within the Project Site and an approximately 250-foot buffer on the eastern boundary of the Project Site. Prior to the field delineation, Padre conducted a literature review to determine the general character of the proposed Project site, identify potential areas of concern, and to locate previously documented wetlands and waters. Documents and resources reviewed included the following:

- Environmental documents for other projects in the vicinity of the Project Site;
- U.S. Geological Survey (USGS) 7.5-minute topographic map for the Groveland, California quadrangle;
- Soil survey and hydric soil list for the Project region, California;
- USFWS NWI Map for the Project region;
- Request for Verification of Wetland Delineation, Yosemite Gateway Plaza Project, Tuolumne County, California (LSA, 2010);
- LSA Yosemite Gateway Project Figure 3 Waters of the United States, Field Verified by the ACOE on January 25, 2011 (provided by T/K Consulting);
- Memorandum for Biological Constraints Analysis for the Yonder Yosemite RV Park Development Project (Padre, 2020a); and
- Biological Resources Survey Report, Yonder Yosemite Hospitality Project, Tuolumne County, California (Draft) (Padre, 2020b).

3.1 WATERS OF THE UNITED STATES

Physical indicators of OHWM, such as the natural line on the bank, shelving, destruction of terrestrial vegetation, and the presence of litter and debris are used to record the location of OHWM within a Waters of the U.S. The Project Site contained numerous ephemeral channel features that exhibited distinct bed and bank. However, the Navigable Waters Protection Rule (see Section 2.1 Federal Regulations) outlines what aquatic features are not considered waters of the United States. The most notable of these are groundwater, ephemeral features, many farm and roadside ditches, artificial lakes and ponds or water filled depressions excavated in upland, stormwater control and groundwater recharge features. All channel features within the Project Site were ephemeral, with the exception of a section of the channel feature depicted as CF4 on Figure 2, determined to be an intermittent channel, and was evaluated to determine preliminary jurisdictional limits.

Evaluation of the intermittent channel followed the guidelines of A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar et al., 2008) and data was recorded on the Updated Datasheet for the Identification of the OHWM in the Arid West Region of the Western United States (Curtis and Lichvar, 2010).



3.2 WETLANDS

The ACOE has prescribed methodologies for delineating waters and wetlands pursuant to the CWA. Methods for delineating wetlands are detailed in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and further refined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Regional Supplement) (U.S. Army Corps of Engineers, 2008). These manuals require that, under normal circumstances, an area possess three technical criteria (parameters) to be designated as a jurisdictional wetland. These criteria are prevalence of hydrophytic vegetation, presence of hydric soils, and a wetland hydrology.

Sample plot locations were determined based on topography and vegetation communities within previously mapped seasonal wetlands (LSA, 2010, 2011), and any additional topographical depressions observed, to characterize the features and determine potential jurisdiction. The locations of sample plots were recorded using a Global Positioning System (GPS) unit. The GPS data were used to identify sample plot locations depicted on Figure 2 – Preliminary Aquatic Resources Delineation Map, attached to this Report. The vegetation, soil, and hydrology were examined at all sample plots and approved wetland data sheets were prepared (Appendix B – Wetland Delineation Data Forms). Sampling methods are discussed in this section.

3.2.1 Hydrophytic Vegetation

Hydrophytic vegetation is plant life that occurs in areas that are frequently flooded or have saturated soil for a prolonged duration during the growing season. In accordance with ACOE methodology, for a site to display a positive wetland vegetation indicator, a dominance or prevalence of hydrophytic (water-loving) plants species must be present.

To determine the dominance or prevalence of hydrophytic vegetation, a sample plot located in the lowest topographic area of each potential seasonal wetland was selected. The plot size was determined according to the Regional Supplement. A five-foot radius plot is used in areas with only herbaceous vegetation and a 15-foot radius plot is used in areas with shrubs and sub-shrubs, and a 30-foot radius plot is used in wooded areas (U.S. Army Corps of Engineers, 2008). The shape of the sample plot areas can be adjusted in order to fit within vegetation communities observed in the field. Within each plot, the plants were identified to species using standard taxonomic references (Baldwin et al., 2012; Mason, 1957). The hydrophytic class of each plant species was determined in accordance with the *National Wetland Plant List, version 3.4* (U.S. Army Corps of Engineers, 2018b) as facultative, facultative-wetland, or obligate wetland species.

3.2.2 Hydric Soils

At each sample plot location, a soil pit was excavated to a depth of approximately 18 inches below ground surface (bgs), where possible, to determine the extent of saturation and to examine the soil for evidence of wetland hydrology. Once the pit was excavated, a soil sample was obtained from below the A horizon, approximately 10 inches below ground surface (bgs), and examined for evidence of redoximorphic characteristics, such as low matrix chroma, gleying, and/or mottling resulting from anaerobic conditions. After moistening, the soil color was determined using Munsell soil color charts (Munsell Color, 1990). Soil texture was evaluated using field methods described by the ACOE (Environmental Laboratory, 1987). The characteristics of



the soils were then compared against descriptions of soil-mapping units detailed in the Natural Resources Conservation Service Web Soil Survey (Natural Resources Conservation Service [NRCS], 2020).

3.2.3 Wetland Hydrology

Hydrologic characteristics of the sample plots were evaluated by identifying primary and secondary indicators including evidence of inundation, free water in the soil pit, soil saturation, drainage patterns, oxidized root channels in the upper 12 inches of the soil, and/or surface soil cracking.

3.3 WATERS OF THE STATE

Waters of the State were delineated based on field survey results and/or desktop review and mapping. For State jurisdictional wetlands regulated by the Regional Water Quality Control Board (RWQCB), the methodology described for Federal wetland delineations was employed. For non-wetland Waters of the State regulated by RWQCB, field survey methodology primarily consisted of reconnaissance-level assessment and verification of presence/absence of bed, bank, and/or riparian vegetation. For non-wetland Waters of the State regulated by CDFW, the outside canopy boundary of riparian vegetation was used to delineate CDFW jurisdiction.



4.0 RESULTS

Aquatic features observed within the Project Site included seasonal wetlands, a manmade pond, an intermittent channel, an ephemeral riparian channel, and ephemeral channels. The results of the aquatic resources delineation field survey and the geographic extent of the preliminary jurisdictional limits of the ACOE, RWQCB, and CDFW for the aquatic features are discussed this section. Table 4-1 – Aquatic Resources Summary Table lists all aquatic resource features observed and documented within the Project Site. Descriptions of each feature follow Table 4-1. See Appendix C – Photographs for representative photographs of aquatic features.

Table 4-1. Aquatic Resources Summary Table

| | | | Ar | ea | Dimen | sions | S | Bus live in sure | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---------|--------------------------------------|----------------------|----------------|---------------------------------|-------|-------------|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-------------|
| Aquatic R | esource | Feature ID | Square Feet (ft²) | Acres (ac) | Length (ft) | Wic | lth (ft) | Preliminary Jurisdiction | | | | | | | | | | | | | | | | | | | | | | |
| Seasonal V | Vetland | SW2 | 1,205.32 | 0.028 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW5 | 1,614.35 | 0.037 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW6 | 8,105.69 | 0.186 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW7 | 1,638.32 | 0.038 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW9 | 1,663.37 | 0.038 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW10 | 139.32 | 0.003 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW11 | 60.43 | 0.001 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW12 | 58.16 | 0.001 | | | | | | | | | | | | | | | | | | | | | | | | | | ACOE, RWQCB |
| | | SW13 | 766.56 | 0.018 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | SW14 | 313.08 | 0.007 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | Subtotal | 15,564.60 | 0.357 | | | | ACOE, RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| Man-made | Pond | Pond 1 | 700.52 | 0.016 | | | | None | | | | | | | | | | | | | | | | | | | | | | |
| Intermittent Channel | t | CF4 | 3,004.00 | 0.069 | 300.40 | | 10 | ACOE, RWQCB, CDFW | | | | | | | | | | | | | | | | | | | | | | |
| Ephemeral Riparian Cl | | CF16 | 8,850.86 | 0.203 | 590.06 | | 15 | RWQCB, CDFW | | | | | | | | | | | | | | | | | | | | | | |
| Ephemeral Channel ¹ | | CF1-CF3, CF4- CF15, CF17- CF26 | TBD | TBD | 7,804.35 (combined total) | Va | riable | RWQCB | | | | | | | | | | | | | | | | | | | | | | |
| | | 7 | Total Prelimin | ary Jurisdicti | onal Area | | | | | | | | | | | | | | | | | | | | | | | | | |
| ACOE | Seasona | I Wetlands, Intermit | tent Channel | | | | 18, | 568.60 ft ² (0.426 ac) | | | | | | | | | | | | | | | | | | | | | | |
| RWQCB | Seasona | l Wetlands, Intermit | tent Channel, | Ephemeral Rip | parian Channe | l | 27,4 | 419.46 ft ² (0.629 ac) | | | | | | | | | | | | | | | | | | | | | | |
| CDFW | | ent Channel, Ephem | | | | | | 354.86 ft ² (0.272 ac) | | | | | | | | | | | | | | | | | | | | | | |
| Notoo: | I. | • | • | | | | · · · · · · | | | | | | | | | | | | | | | | | | | | | | | |

Notes:

¹ TBD - To be determined; total area was not calculated for existing ephemeral channels. Jurisdictional area of ephemeral channels will be calculated based on proposed Project footprint as presented in the Project Biological Resources Survey Report (Padre, 2020b).



4.1 SITE CONDITIONS

The Project Site has been disturbed through past grading and commercial development, vegetation clearing, and construction and abandonment of infrastructure and facilities (gas station overhead structure, building, and underground storage tank depression). Much of the Project Site supports woodland, shrub, and grassland vegetation, interspersed with areas of bare ground, open rocky slopes and outcrops, several topographical depressions, and numerous channels caused by erosion. Details on biological resources of the Project site including botanical, wildlife, and potentially occurring sensitive species can be found in the draft biological resources survey report (Padre, 2020b) completed in conjunction with the aquatic resources delineation survey and Report.

The topography ranges from steep, eroded slopes in the eastern portion adjacent to Memorial Road and the cemetery transitioning to rolling, moderate to level topography in the central and southwestern portion of the Project Site. The overall slope aspect is westerly.

Rattlesnake Creek (eastern terminus documented in NWI) is located approximately 2,000 feet southwest of the southwestern boundary of the Project site, on the eastern side of a commercially developed lot. Rattlesnake Creek flows southwest to the area of Priest, where it flows into both a northwest unnamed drainage into Moccasin Reservoir and southeast into Priest Reservoir. The Moccasin Reservoir drains into the Don Pedro Reservoir, an impoundment created by the Don Pedro Dam across the Tuolumne River. The Tuolumne River is a tributary to the San Joaquin River, a Traditionally Navigable Water (TNW) of the Unites States. All channels, seasonal wetlands, and the man-made pond were dry, with the exception of a section of CF4 (CF4 is also referred to as the "Arroyo" within this Report) that was designated as an intermittent channel within this Report. A description of the physical characteristics of the intermittent channel is provided in this section.

4.2 SEASONAL WETLANDS

There were ten seasonal wetland features identified during the field survey, after sampling 14 potential aquatic features. Padre evaluated all aquatic resources described in the Request for Verification of Wetland Delineation, Yosemite Gateway Plaza Project, Tuolumne County, California (LSA Wetland Delineation) (LSA, 2010), including the potential waters preliminary map and the Waters of the U.S. Map (Field Verified by the ACOE on January 25, 2011) (LSA, 2011). After locating each mapped seasonal wetland feature, the vegetation and hydrological indicators were assessed, then a soil test pit was dug for hydric soil assessment if deemed necessary. In addition, any previously unmapped aquatic features observed during the field survey were evaluated as necessary. If the three wetland parameters (hydrophytic vegetation, hydric soil, and hydrology) were present within a sampled feature, a paired upland sample plot was evaluated to determine the extent of the seasonal wetland boundary. Appendix B – Wetland Delineation Forms contains the wetland data forms completed during the field survey.

4.2.1 Hydrophytic Vegetation

The seasonal wetlands throughout the Project Site exhibited distinct stands of hydrophytic vegetation within generally open areas within Spanish clover fields and Buck brush scrub plant communities. The dominant vegetation within the seasonal wetland features consisted of lamp rush (*Juncus effusus*) and toad rush (*Juncus bufonius*), with intermittent occurrences of sedge



(Carex densa) creeping spikerush (Eleocharis macrostachya). These species are hydrophytic with an indicator status ranging from facultative wetland species (plants that occur in wetlands and non-wetlands) to obligate (plants that almost always occur in wetlands). Sparse cover of upland species observed within the seasonal wetlands included Spanish clover (Acmispon americanus), little quaking grass (Aira caryophyllea), and rattail grass (Festuca myuros). A complete list of plant species observed during the field survey is compiled and attached in Appendix D – Plant List.

4.2.2 Wetland Hydrology

Surveys were conducted on July 21, 2020. At the time of the survey, there was no water present in any of the seasonal wetlands within the Project Site. The primary indicators of wetland hydrology at the sampled features observed included the presence of a biotic crust (B12) as evidenced by algal matting as well as drainage patterns (B10). The majority of the seasonal wetlands were shallow depressional features located in slightly to moderately sloped topographical settings, surrounded by variable vegetation cover ranging from bare ground to dense cover of herbaceous vegetation. In these depressional features, it was common for the ground's surface to be covered in a thin algal matting. Several of the seasonal wetlands were distinct features within portions of shallow, ephemeral channels that apparently collect seasonal rainfall. These narrow features convey and collect seasonal rainfall with a long enough duration to provide suitable conditions for the presence of hydrophytic vegetation. Within these channeled seasonal wetlands, drainage patterns as well occasional drift deposits (B3) were signs of hydrology.

4.2.3 Hydric Soils

Presence of hydric soils was confirmed through soil test pit sampling. Three of the seasonal wetland sample plots showed the presence of hydric soil (SW2, SW6, and SW9). The remaining seasonal wetlands (SW5, SW7, SW10, SW11, SW12, SW13, SW14) were determined to have hydric soils based on observations of strong hydrophytic vegetation and hydrological indicators, exhibiting characteristics comparable and very similar to seasonal wetlands in which soil test pit sampling was performed, and were previously mapped as seasonal wetlands.

Hydric soil indicators observed included depleted matrix (F3) and the presence of dense redoximorphic features in problematic sandy soils with shallow granitic restrictive layers. Corresponding upland sample points were taken to delineate the extent of the seasonal wetlands. Hydric soils were assumed to be present at those features that exhibited comparable vegetative, hydrologic, and visual surface soil conditions to the seasonal wetlands in which soil test pit sampling was performed. The seasonal wetlands that were not sampled for soils were determined to meet the hydric soil parameter based upon past delineation, subsequent ACOE verification, and by determining the condition has remained similar since verification.

4.3 INTERMITTENT CHANNEL

A section of the Arroyo was determined to be an intermittent channel and is shown on Figure 2 as a section of CF4. A water was observed at a standpipe/culvert at the designated eastern terminus of the intermittent channel, as evidenced by shallow standing water and saturated soils that extended from this point approximately 55 feet downstream, where the soil became dry and hydrophytic vegetation cover decreased. The channel continued in a westerly



aspect off-site and into a culvert that appeared to convey run-off to Rattlesnake Creek. The average dimension of the intermittent channel was approximately ten feet in width and approximately four to 10 feet in depth. Hydrophytic vegetation included creek monkeyflower (*Erythranthe guttata*), lamp rush, tall flatsedge (*Cyperus eragrostis*), sedge, and curly dock (*Rumex crispus*), nit grass (Gastridium phleoides), sedge (*Carex densa*), and curly dock (*Rumex crispus*). See Appendix E – OHWM Datasheet for cross section sample results.

4.4 EPHEMERAL RIPARIAN CHANNEL

There was one ephemeral channel that supported a distinct stand of riparian scrub vegetation within and outside of the banks, depicted as CF16 on Figure 2. The ephemeral riparian channel runs in a northeasterly to southwesterly direction and was observed to connect to the intermittent channel. Riparian scrub plant species included red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), interior live oak, Himalayan blackberry (*Rubus aremeniacus*), white alder, lamp rush, and nit grass (*Gastridium phleoides*). The channel was dry at the time of the survey.

4.5 EPHEMERAL CHANNEL

There were numerous ephemeral channels observed throughout the Project Site. These features exhibited variable depths, widths, and vegetation cover. Channel widths ranged from approximately four feet to 22 feet, and depths ranged from approximately 12 inches to 10 feet. The majority of the channel bottoms were comprised of sandy, gravely, bare ground, and several supported intermittent to dense cover of upland grasses and forbs including Spanish clover, slender wild oat (*Avena barbata*), and stinkwort (*Dittrichia graveolens*). Several of the ephemeral channels located in rocky, steep, bare areas of the eastern portion of the Project Site were highly erodedwith no vegetation. All ephemeral channels were dry during the time of the survey and appeared to function as stormwater run-off features. During the 2020 field survey, physical characteristics (topography, width and depth range, and vegetation) of the ephemeral channels (referred to as "gullies" in the previous delineation [LSA, 2010]) were visually assessed, labeled as channel features and assigned a corresponding identification label on the Preliminary Aquatic Resources Delineation Map.

4.6 MAN-MADE POND

There was one man-made pond observed within the Project Site. The pond is located on the east side of the abandoned gas station structure and was dry at the time of the survey. It was approximately 700 square feet (0.016 acres) in size, approximately eight to ten feet deep and three buried tanks were visible at the bottom of the pond, along with some past construction debris. The bottom of the pond was comprised of gravel and did not support vegetation. The upper banks were vegetated with moderate cover of tall nutsedge, turkey mullein (*Croton setiger*), and remnant annual grasses transitioning into surrounding ruderal and scrub habitat.



5.0 JURISDICTIONAL DETERMINATION

Aquatic resources observed and documented during the July 2020 field survey includes ten seasonal wetlands, one intermittent channel, one ephemeral riparian channel, numerous ephemeral channels, and one man-made pond.

5.1 FEDERAL JURISDICTION

5.1.1 Seasonal Wetlands

Three newly identified seasonal wetlands were sampled and met all three of the wetland indicators (hydrophytic vegetation, hydric soil, and wetland hydrology), and seven previously identified seasonal wetlands met all three indicators based on field assessment and comparison to previously delineated seasonal wetlands. In total, the ten seasonal wetlands within the Project Site are determined to be preliminary Federal jurisdictional wetland features based on either the presence of the three wetland parameters as recorded in the field, or the LSA Preliminary Wetland Delineation verified by ACOE and observational confirmation that Project Site conditions had not changed.

All seasonal wetland features that met the three wetland indicators, had problematic wetland soils, or were previously verified as jurisdictional and have not been subject to changes in Project Site conditions since the jurisdictional verification (LSA, 2011), are determined to be preliminary Federal jurisdictional adjacent wetlands. Under the Navigable Waters Protection Rule, wetlands that are physically separated from jurisdictional waters can still be considered adjacent, and therefore jurisdictional, if they have a direct surface water connection to a jurisdictional water in a typical year. All mapped wetlands within the Project Site showed signs of surface water connection to the potentially jurisdictional section of the Arroyo and eventually Rattlesnake Creek. Many of the seasonal wetlands, including SW2, SW5-7, SW10, and SW14, were located on or directly connected to ephemeral channels that drain to the Arroyo. Seasonal wetlands that were not located directly on an ephemeral channel including SW9 and SW11-13 have potential surface water connections to the Arroyo via stormwater runoff from rainfall events that "sheets down slope" as described by LSA (LSA, 2010). Therefore, all seasonal wetlands mapped within the Project Site are considered preliminary ACOE jurisdictional as adjacent wetlands.

5.1.2 Intermittent Channel

The intermittent channel (a section of the Arroyo) was determined to be a preliminary ACOE jurisdictional feature based on presence of water during July, indicating that this section of the channel is an intermittent tributary to Rattlesnake Creek. Based upon data collected for the WETS analysis (Section 1.4 and Appendix A), climatic conditions at the Project Site were considered normal for that time of year and the Project Site had not received any rainfall during June or July prior to surveys, and as such, Padre concluded that the survey was conducted during a typical year per Federal regulations (ACOE and EPA, 2020). Therefore, any channel features with water present in July would not be considered ephemeral. The portion of CF4 designated as the intermittent channel extends from the standpipe/outfall where water was observed and extends downstream to the Project Site boundary where it continues through a culvert towards Rattlesnake Creek. The portion of CF4 designated as an ephemeral channel upstream extends



upstream from the standpipe/outfall. The WETS analysis and lack of water in the channels is used as the basis for ephemeral status.

Outside the Project Site, the Arroyo was observed to continue westward off-site to a culvert leading under the paved parking lot west of the Project Site, appearing to connect to Rattlesnake Creek (Appendix C - Photographs; Photo 5 and Photo 6). Rattlesnake Creek is a blue line stream that conveys flows to Priest Reservoir and through other blue line streams including Moccasin Creek, surface water flows into the Don Pedro Reservoir which flows to the Tuolumne River. The Tuolumne River flows into the San Joaquin River and then the San Francisco Bay Delta, all of which are traditionally navigable Waters of the U.S. Through these surface water connections, Rattlesnake Creek is a tributary to a traditional navigable water. Under the Navigable Waters Protection Rule, tributaries to traditional navigable waterways are considered jurisdictional if they are perennial or intermittent and contribute surface water flow to navigable waterways during a typical year. Tributaries can connect to traditional navigable water through channelized nonjurisdictional surface waters through artificial features including culverts and spillways; therefore, the Arroyo is considered a jurisdictional intermittent tributary to Rattlesnake Creek and traditionally navigable waters downstream (ACOE and EPA, 2020). Through the WETS analysis, climatic conditions at the Project Site were determined to be typical for the time of year that the survey was conducted and surface water was observed flowing out of the Project Site to Rattlesnake Creek via the onsite Arroyo.

5.1.3 Ephemeral Channels

As noted in the LSA Preliminary Wetland Delineation (LSA, 2010), the majority of the Project Site was previously graded which removed the majority of the vegetation and topsoil and exposed granitic sand which is a highly erodible substrate. This allowed for the creation of many ephemeral gullies to form conveying surface water immediately following precipitation events into the intermittent Arroyo feature. The ephemeral riparian channel and ephemeral channels mapped within the Project Site are not considered Waters of the U.S based on the Navigable Waters Protection Rule because they fail to meet the intermittent or perennial flow condition necessary to be considered a jurisdictional tributary. Specifically, ephemeral features including ephemeral streams, swales, gullies, rills, and pools, are not Waters of the U.S. (ACOE and EPA, 2020). Note that the ephemeral channels were previously determined to be Waters of the U.S. (LSA, 2011), however, in accordance with the Navigable Waters Protection Rule and 2020 field observations, these features are not Waters of the U.S, and therefore not under ACOE jurisdiction.

5.2 STATE JURISDICTION

5.2.1 RWQCB Jurisdictional Waters

5.2.1.1 Seasonal Wetlands and Intermittent Channel

Under the new Procedures, all Waters of the U.S. are also Waters of the State. Therefore, the seasonal wetlands and the intermittent channel portion of the Arroyo mapped within the Project Site are considered Waters of the State because they met the Federal definition of a wetland (three parameters) and/or they met "current or historic definitions of "waters of the U.S." as described in the Federal Jurisdiction Section above. Therefore, everything mapped as preliminary ACOE jurisdictional is also considered RWQCB jurisdictional.



5.2.1.2 Ephemeral Riparian Channel and Ephemeral Channels

As observed in July 2020, the ephemeral riparian channel and the numerous ephemeral channels exhibited a distinct bed and bank and also were previously determined to be a Waters of the U.S. (LSA, 2011). As such, these channels are preliminarily determined to be Waters of the State and therefore under RWQCB jurisdiction.

5.2.2 CDFW 1600 Jurisdictional Waters

The ephemeral riparian channel depicted on the Preliminary Aquatic Resources Delineation Map is preliminarily determined to be a Waters of the State due to the presence of bed and bank. The CDFW claims jurisdiction over the bed, bank, and riparian vegetation of drainages with regard to activities regulated under Section 1602 of the California Fish and Game Code as described in the Regulatory Authority section within this Report. Growing along the banks of this channel are arroyo willow (*Salix lasiolepis*) and red willow (*Salix laevigata*) scrub (Appendix C; Photo 7). This vegetation pattern is unique in the Project Site to this specific ephemeral channel.

5.3 NON-JURISDICTIONAL AQUATIC FEATURES

The man-made pond mapped within the Project Site is not considered a Water of the State because it is an artificial feature resulting from human activity that cannot be considered a permanent or natural part of the landscape. The bed of the pond is devoid of vegetation and contains fill material comprised gravel base and as well as the tops of three large tanks, presumably installed for some sort of liquid storage (Appendix C, Photo 8). As a result, this manmade feature contains temporary infrastructure and does not meet any of the approved criteria for artificial wetlands being considered a water of the State. Further because the man-made pond is ephemeral, it does not fall under Federal jurisdiction by definition.

5.4 CONCLUSION

On the basis of the field delineation and data analysis, it has been concluded that the proposed Highway 120 Lodging Hospitality Project Site supports approximately 0.426 acres of potentially Federal jurisdictional Waters of the U.S. (under ACOE jurisdiction), of which 0.357 acres are Federal wetlands and 0.069 acres are intermittent channels.

Additionally, it has been concluded that the Highway 120 Lodging Hospitality Project Site contains approximately 0.629 acres of potentially State jurisdictional aquatic resources (RWQCB and CDFW) including wetlands, intermittent channel and ephemeral riparian channel features, These preliminary jurisdictional findings are subject to the verification and approval of the ACOE, RWQCB, and/or CDFW.



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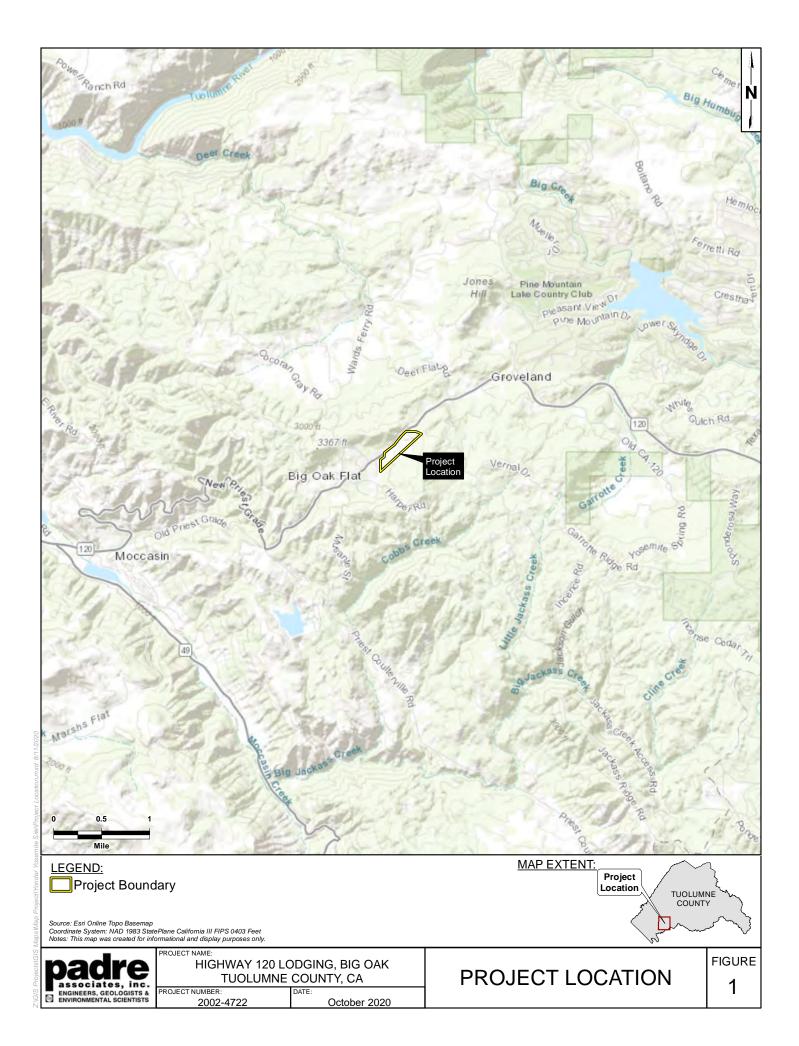
FIGURES

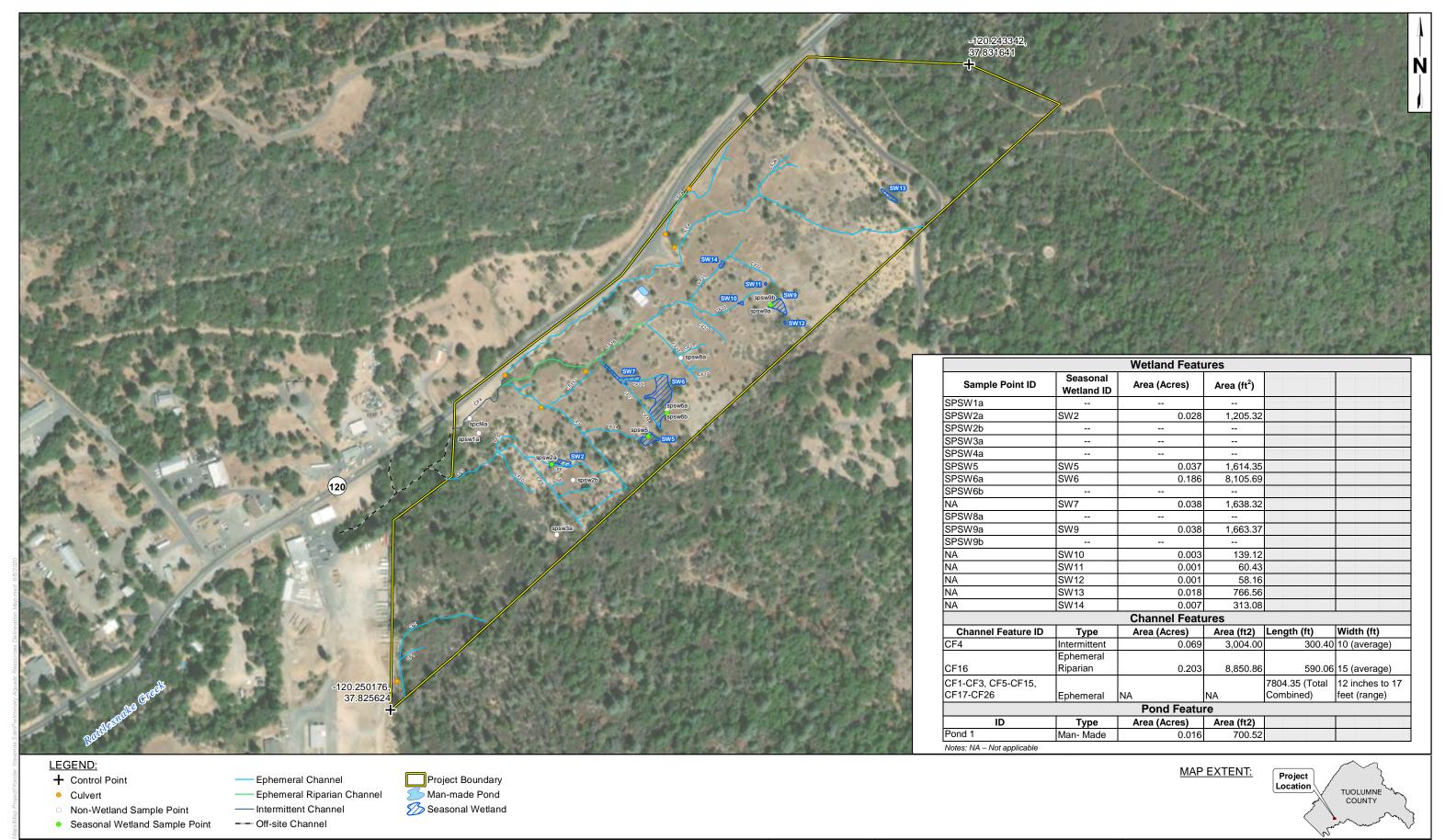
Figure 1. Project Location

Figure 2. Preliminary Aquatic Resources Delineation Map

Figure 3. National Wetland Inventory and FEMA Map

Figure 4. Soils Map





Source: Esri Online Imagery Basemap, County of Tuolumne, U.S. Fish and Wildlife Services Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet Notes: CF = Channel Feature; NMI = National Wetland Inventory This map was created for informational and display purposes only.



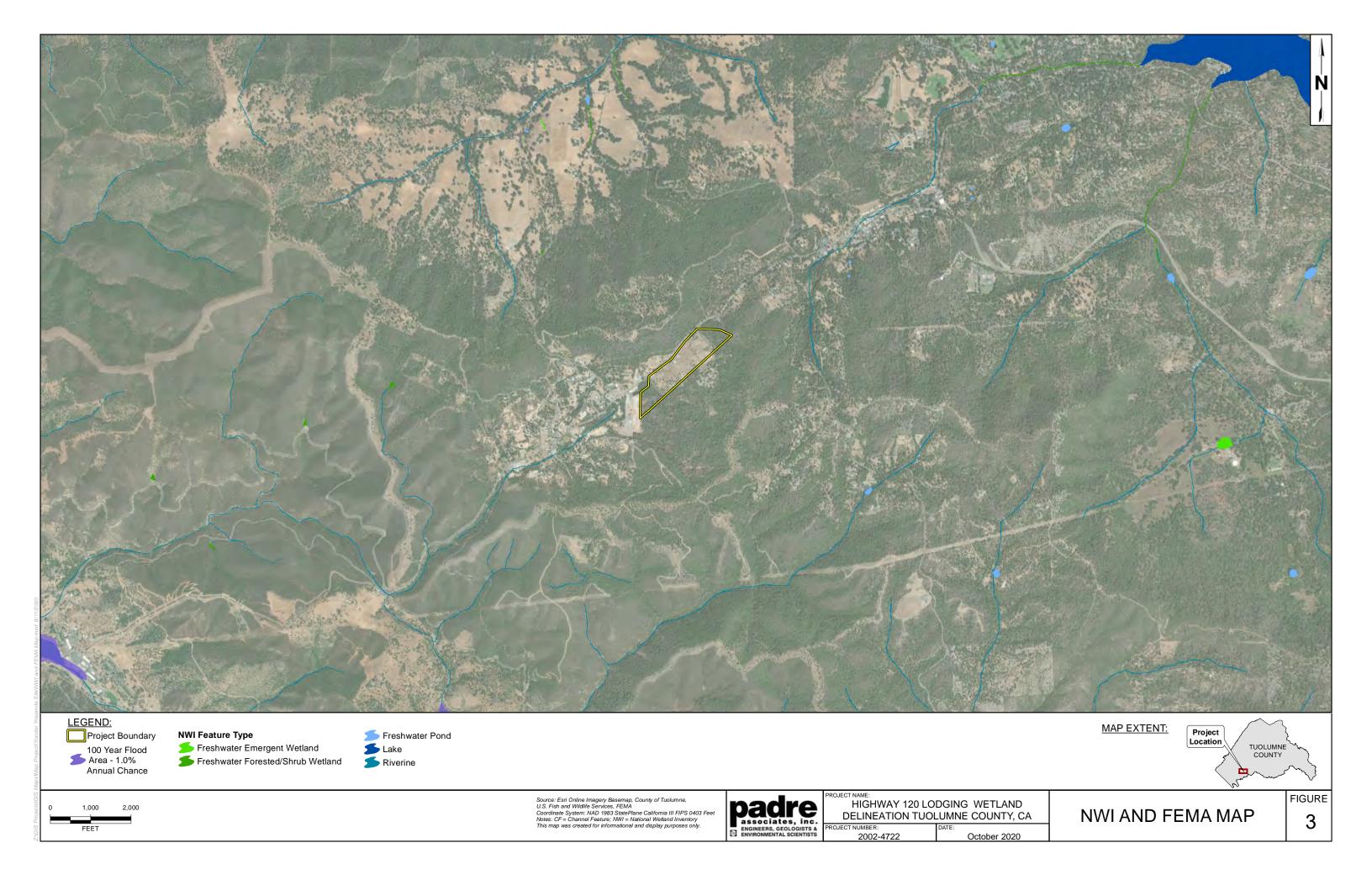
ROJECT NAME:
HIGHWAY 120 LODGING WETLAND
DELINEATION TUOLUMNE COUNTY, CA
ROJECT NUMBER:

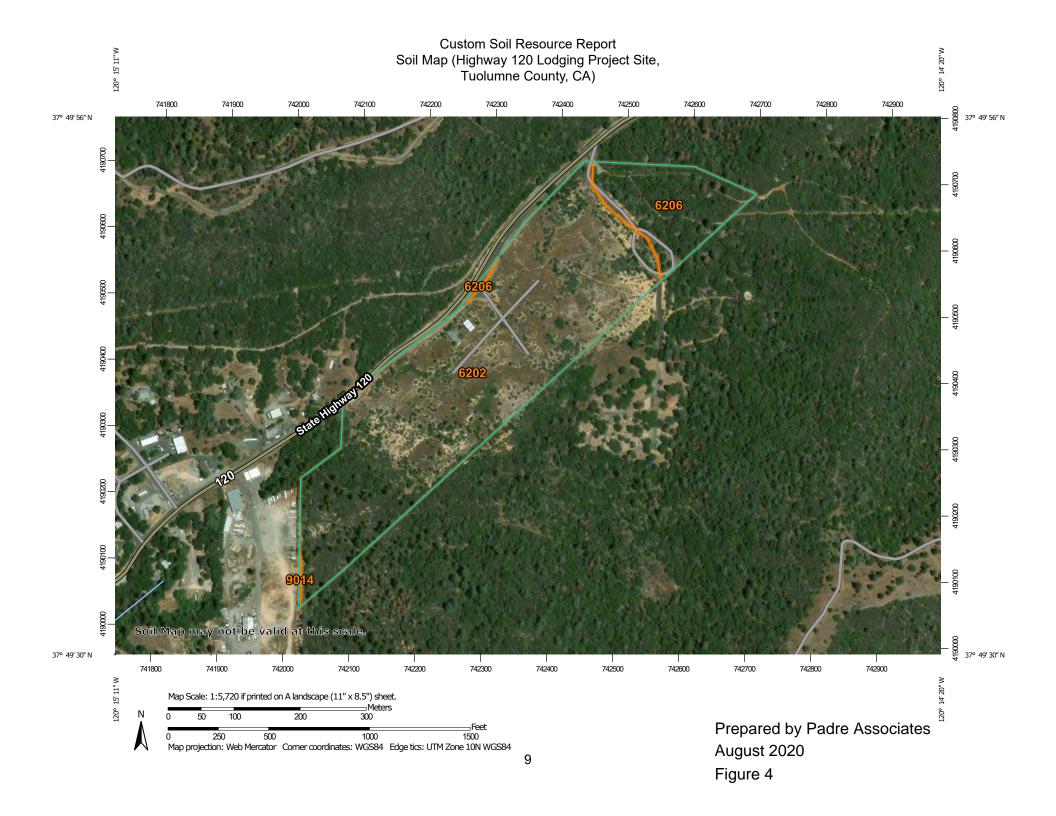
IDATE:

2002-4722

PRELIMINARY AQUATIC
RESOURCES DELINEATION MAP

FIGURE 2





APPENDIX A

WETS Table

| WETS Station: GROVELAND 2, CA | | | | | | | | | | | | | |
|---|----------------------|----------------------|-------------------------------|---------------|--------------------------------------|--------------------------------------|---|-----------------|----------|----------|-----------|----------|-----------|
| Requested years: 1948 - 2020 | | | | | | | | | | | | | |
| Month | Avg Max Temp | Avg Min Temp | Avg Mean Temp | Avg Precip | 30% chance precip less than | 30% chance precip more than | Avg number days precip 0.10 or more | Avg Snowfall | | | | | |
| Jan | 53.6 | 30.8 | 42.2 | 6.47 | 2.68 | 7.86 | 7 | 0.4 | | | | | |
| Feb | 55.2 | 31.7 | 43.4 | 5.64 | 2.74 | 6.75 | 7 | 1.2 | | | | | |
| Mar | 60.0 | 34.7 | 47.4 | 5.84 | 2.97 | 7.14 | 8 | - | | | | | |
| Apr | 65.0 | 37.9 | 51.5 | 2.87 | 1.11 | 3.47 | 5 | - | | | | | |
| May | 73.8 | 44.5 | 59.2 | 1.72 | 0.69 | 2.02 | 3 | - | | | | | |
| Jun | 84.2 | 50.3 | 67.2 | 0.26 | 0.00 | 0.10 | 0 | - | | | | | |
| Jul | 91.6 | 56.5 | 74.0 | 0.01 | 0.00 | 0.00 | 0 | 0.0 | | | | | |
| Aug | - | - | - | 0.07 | 0.00 | 0.00 | 0 | 0.0 | | | | | |
| Sep | 84.7 | 49.4 | 67.1 | 0.21 | 0.00 | 0.17 | 0 | 0.0 | | | | | |
| Oct | 72.9 | 41.2 | 57.0 | 1.94 | 0.63 | 2.07 | 3 | 0.0 | | | | | |
| Nov | 59.9 | 34.3 | 47.1 | 3.78 | 2.06 | 4.61 | 5 | 0.4 | | | | | |
| Dec | 52.0 | 30.5 | 41.2 | 6.74 | 3.07 | 8.02 | 8 | 8.0 | | | | | |
| Annual: | | | | | - | - | | | | | | | |
| Average Total | - | - | - | - 35.55 | - | - | - 47 | - | | | | | |
| Total | - | - | - | 35.55 | | | 47 | - | | | | | |
| GROWING SEASON DATES | | | | | | | | | | | | | |
| Years with missing data: | 24 deg = 56 | 28 deg = 55 | 32 deg = | | | | | | | | | | |
| rears with missing data. | 24 deg - 30 | 20 deg - 33 | 53 | | | | | | | | | | |
| Years with no occurrence: | 24 deg = 0 | 28 deg = 0 | 32 deg = 0 | | | | | | | | | | |
| Data years used: | 24 deg = 17 | 28 deg = 18 | 32 deg = 20 | | | | | | | | | | |
| Probability | 24 F or higher | 28 F or higher | 32 F or higher | | | | | | | | | | |
| 50 percent * | Insufficient data | Insufficient data | 4/30 to 10/25: 178 days | | | | | | | | | | |
| 70 percent * | Insufficient data | Insufficient data | 4/24 to 11/1: 191 days | | | | | | | | | | |
| * Percent chance of the growing season occurring between the Beginning and Ending dates. | | | , | | | | | | | | | | |
| STATS TABLE - total precipitation (inches) | | | | | | | | | | | | | |
| Yr | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annl |
| 1948 | | | | | - | | 0.00 | 0.00 | 0. 00 | 0. 74 | 0.71 | 7. 35 | 8.80 |
| 1949 | 3.07 | 4.66 | 9.45 | 0.09 | 0.85 | 0.03 | | 0.03 | 0. 00 | 0. 03 | 4.14 | 2. 56 | 24. 91 |
| 1950 | 8.21 | 4.53 | 5.46 | 3.57 | 1.37 | 0.01 | 0.04 | M0.00 | 0. 85 | 5. 83 | 11. 59 | 9. 56 | 51. 02 |
| 1951 | 6.04 | 2.85 | 3.06 | 2.58 | 2.10 | 0.16 | 0.00 | 0.00 | 0. 00 | | | | 16. 79 |
| 1952 | | | | | | | | | | | | | |
| 1953 | | | | | | | | | | | | | |
| 1954 | | | | | | | | | | | | | |
| 1955 | | | | | | | | M0.00 | | | | | 0.00 |
| 1956 | | | | | | | | | | | | | |
| 1957 | | | | | | | | | | | | | |
| 1958 | | | | | | | | | | | | | |

| 1959 | | | | | | | | | | | | | |
|--------------|--------|--------|---------|-------|-------|-------|------|------|----------|-----------|------------|-----------|-----------|
| 1960 | | | | | | | | | | | | | |
| 1961 | | | | | | | | | | | | | |
| 1962 | | | | | | | | | | | | | |
| 1963 | | | | | | | | | | | | | |
| 1964 | | | | | | | | | | | | | |
| 1965 | | | | | | | | | | | | | |
| 1966 | | | | | | | | | | | | | |
| 1967 | | | | | | | | | | | | | |
| 1968 | | | | | | | | | | | | | |
| 1969 | | | | | | | | | | | | | |
| 1970 | | | | | | | | | | | | | |
| 1971 | | | | | | | | | | | | | |
| 1972 | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| 1974 | | | | | | | | | | | | | |
| 1975 | | | | | | | | | | | | | |
| 1976 | | | | | | | | | | | | | |
| 1977 | | | | | | | | | | | | | |
| 1978 | | | | | | | | | | | | | |
| 1979 | | | | | | | | | | | | | |
| 1980 | | | | | | | | | | | | | |
| 1981 | | | | | | | | | | | | | |
| 1982 | | | | | | | | | | | | | |
| 1983 | | | | | | | | | | | | | |
| 1984 | | | | | | | | | | | | | |
| 1985 | | | | | | | | | | | | | |
| 1986 | | | | | | | | | | | | | |
| 1987 | | | | | | | | | | | | | |
| 1988 | | | | | | | | | | | | | |
| 1989 | | | | | | | | | | | | | |
| 1990 | | | | | | | | | | | | | |
| 1991 | | | | | | | | | | | | | |
| 1992 | | | | | | | | | | | | | |
| 1993 | | | | | | | | | | | | | |
| 1994 | | | | | | | | | | | | | |
| 1995 | | | | | | | | | | | | | |
| 1996 | | | | | | | | | | | | | |
| 1997 | | | | | | | | | | | | | |
| 1998 | | | | | | | | | | | | | |
| 1999 | | | | | | | | | | | | | |
| 2000 | M12.89 | M15.32 | M3.53 | M3.57 | M2.59 | M0.96 | Т | 0.05 | 0. | 4. | 0.93 | 0. | 45. |
| 2001 | 7.38 | 7.53 | 3.62 | 4.67 | 0.00 | 0.06 | Т | 0.00 | 60 0. | 24 1. | 5.84 | 78 M9. | 46 40. |
| 2001 | 1.30 | 1.55 | 3.02 | 4.07 | 0.00 | 0.00 | Į. | 0.00 | 68 | 38 | 3.04 | 64 | 80 80 |
| 2002 | 2.85 | 2.21 | 6.96 | 1.11 | 1.05 | Т | 0.00 | 0.00 | 0. | 0. | 5.36 | 11. | 30. |
| | | | | | | | | | 04 | 00 | | 07 | 65 |
| 2003 | 0.91 | 3.13 | 3.03 | 7.97 | 3.02 | 0.00 | 0.02 | 1.50 | 0. | 0. | 3.16 | 9. | 32. |
| 2004 | 4.04 | 6.05 | 1.50 | 0.06 | 0.57 | 0.00 | 0.00 | 0.00 | 00 | 00 | 2.02 | 96 | 70 |
| 2004 | 4.04 | 6.95 | 1.53 | 0.06 | 0.57 | 0.00 | 0.00 | 0.00 | 0. 12 | 8. 30 | 3.03 | 8. 08 | 32. 68 |
| 2005 | 13.16 | M4.38 | M7.84 | 2.00 | 5.12 | M0.09 | 0.00 | 0.10 | 1. | 1. | 1.14 | 12. | 48. |
| | | | | | | | | | 06 | 16 | | 52 | 57 |
| 2006 | 8.27 | 3.37 | 10.75 | M7.42 | 2.82 | 0.01 | 0.00 | 0.00 | 0. | M0. | M2. | 6. 54 | 42. 21 |
| 2007 | 2.16 | 9.95 | M0.66 | 2.32 | 0.73 | 0.00 | 0.04 | 0.01 | 01 0. | 80 M0 | 32 0.69 | 54 5. | 31 23. |
| 200 <i>1</i> | 2.10 | 9.95 | סס.טועו | 2.32 | 0.73 | 0.00 | 0.04 | 0.01 | 0. 25 | M0. 73 | 0.09 | 5. 73 | 23. 27 |
| 2008 | 14.08 | 7.43 | 0.76 | 0.11 | M0.50 | 0.02 | 0.00 | 0.00 | 0. | 1. | 3.13 | 3. | 30. |
| | | | | | | | | | 00 | 03 | | 74 | 80 |
| 2009 | 5.27 | 7.96 | 5.14 | 2.19 | 2.65 | 0.74 | 0.00 | 0.00 | 0. | 4. | 1.32 | 7. | 37. |

| | | | | | | | | | 07 | 83 | | 41 | 58 |
|------|-------|--------|--------|-------|-------|-------|-------|-------|-----------|-----------|-----------|-----------|-----------|
| 2010 | 8.42 | 6.38 | M4.61 | 7.53 | 2.20 | 0.00 | 0.00 | 0.00 | 0. 00 | M4. 60 | 7.56 | 13. 23 | 54. 53 |
| 2011 | M3.65 | 5.99 | 14.55 | 1.23 | 3.02 | 3.90 | 0.00 | 0.00 | 0. 10 | 1. 98 | 1.62 | 0. 00 | 36. 04 |
| 2012 | 4.62 | 0.32 | 5.97 | 6.45 | 0.11 | 0.54 | Т | 0.00 | 0. 02 | 0. 57 | 5.75 | 13. 82 | 38. 17 |
| 2013 | 0.98 | 0.88 | 2.12 | M0.90 | M0.62 | M0.49 | M0.00 | M0.00 | M0. 15 | 0. 97 | M1. 43 | M0. 29 | 8.83 |
| 2014 | M1.43 | M5.32 | M4.71 | M1.75 | M0.19 | 0.07 | M0.03 | M0.02 | M1. 06 | M0. 23 | M2. 71 | M4. 91 | 22. 43 |
| 2015 | M0.03 | M3.68 | M0.47 | 2.66 | M1.46 | 0.00 | M0.11 | M0.00 | M0. 03 | 0. 80 | 6.26 | M8. 58 | 24. 08 |
| 2016 | 9.70 | 1.67 | M10.17 | M3.02 | 0.22 | 0.00 | 0.00 | 0.00 | 0. 03 | M5. 25 | 3.70 | 7. 63 | 41. 39 |
| 2017 | 22.16 | 15.90 | M4.62 | M5.09 | M0.35 | 0.05 | 0.00 | 0.00 | 0. 41 | 0. 61 | 5.55 | 0. 17 | 54. 91 |
| 2018 | 4.77 | 0.64 | 16.34 | 2.96 | 0.53 | 0.00 | 0.00 | 0.00 | 0. 00 | 0. 63 | 6.94 | 1. 48 | 34. 29 |
| 2019 | 8.12 | M12.41 | 8.33 | 0.81 | 7.90 | 0.04 | 0.02 | 0.00 | 0. 36 | 0. 00 | 2.01 | 10. 02 | 50. 02 |
| 2020 | 3.00 | 0.00 | 6.54 | 3.26 | 1.32 | 0.00 | M0.00 | | | | | | 14. 12 |

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2016-07-22

APPENDIX B

Wetland Delineation Data Forms

| WEILAND DETERMINATION DATA FORM | |
|--|--|
| | |
| Applicant/Owner: Tk Consulting | |
| | ge: <u>29/15/16E</u> |
| Landform (hillstope, terrace, etc.): gully Local Relief (concave, | convex, none): <u>LUNCAUP</u> Slope (%): <u>Y</u> |
| Subregion (LRR): Lat: Long: | |
| Soil Map Unit Name: Musick - Ultic Haplaxen 18 NWI Class | |
| Are climatic/hydrologic conditions on the site typical for this time of years? Yes | No (if no, explain in Remarks) |
| Are Vegetation, Soil, or Hydrology significantly disturbed? 🚜 Are "No | |
| Are Vegetation, Soil, or Hydrology naturally problematic? **Jo** (If need | CAY IV INC. IN COUNTY OF THE C |
| SUMMARY OF FINDINGS Attach site map showing sampling point location | The state of the s |
| | s, transacts, important reatures, etc. |
| Hydrophytic Vegetation Present? Yes No No Is the Sampled Yes No No Is the Sampled | l Area |
| Within a Wetlan | nd? Yes No |
| Remarks: Lowbed . ~ crossum gully along roud-my. Main demone | Seal on Call 1-10 |
| mains touted a closent gully along roundy . I ain decide | country for 1 Pt 2016 |
| | |
| VEGETATION | |
| Absolute Dominant Indicator | Barriago Zantina da |
| Tree Stratum (Plot size:) | Dominance Test Worksheet: |
| 1 | Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
| 2 | Total Number of Dominant |
| 3 | Species Across All Strata: |
| - Total Cover | Percent of Dominant Species |
| Sapling/Shrub Stratum (Plot size: -SA) Saliz Lac. of a | That Are OBL, FACW, or FAC: 2/3: 66 7_ (A/B) |
| 2. Salix laciota de V FACW | Prevalence Index Worksheet: |
| 3. | OBL species X1 |
| 4 | FACW species X2 |
| L = Total Cover | FAC species X3 FACU species X4 |
| Herb Stratum (Plot size: 1564 C) | FACU speciesX4UPL speciesX5 |
| 1. Lypons eragiosis 15 V FACU 2. Trippopar manager on Villian I | Column Totals:(A)(B) |
| 2. Tracono manager esta Vald 1002 Unh | Prevalence Index = B/A = |
| 3. Carex densa 5 | Hydrophytic Vegetation Indicators: |
| 4. Juneus ethers Unit get 10 FACU | Dominance Test is >50% |
| 6. <u>Numispon alicery</u> 10 V FACU | Prevalence Index is ≤3.0¹ |
| 7. Rume cris pw 1 FAC | Morphological Adaptations ¹ (Provide |
| 8. Ep: lob: no Brachycerpum 1 FAC | supporting data in Remarks or on a separate |
| XOV g 40 = Total Cover | Sheet) |
| Woody Vine Stratum (Plot size:) | Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be |
| 17 badridian phlooides | present, unless disturbed or problematic. |
| 2 | Hydrophytic |
| = Total Cover | Vegetation Yes No |
| % Bare Ground in Herb Stratum: 60 % Cover of Biotic Crust | Present? |
| Remarks: | |
| | |
| | |
| | |



| Profile Des | cription: (Describe | the depth need | ed to document the i | ndicator or conf | firm the absenc | e of indica | ators) | | |
|--|---|--|--|--|--------------------|--|---|--|----------|
| Depth | Ma | atrix | | Redox Fe | atures | | | | (|
| (inches) | Color (moist) | Percent 9 } | 2. STR 4/6 | Percent | | Loc² | Texture | Remarks | - |
| | | | | | | | | | |
| Type: C = | Concentration, D = I | Depletion, RM = | Reduced Matrix, CS = | Covered or Coate | ed Sand Grains. | ²Locatio | on: PL = Pore | Lining, M = Ma | trix |
| lydric Soil | I Indicators: (Appli | cable to all LRR | s, unless otherwise n | oted) | Ind | licators fo | r Problematic | Hydric Soils ³ : | |
| Histi Blac Hyd Stra 1 cm Dep Thic | iosol (A1) tic Epipedon (A2) ck Histic (A3) frogen Sulfide (A4) atified Layers (A5) (Li m Muck (A9) (LRR D oleted Below Dark Suck Dark Surface (A12 tdy Mucky Mineral (St |) ırface (A11) 2) 51) | Loamy Gleye Depleted Ma Redox Dark | rix (S6) y Mineral (F1) ed Matrix (F2) trix (F3) Surface (F6) rk Surface (F7) essions (F8) | V | 2 cm Redu Red I Other | Muck (A9) (LR Muck (A10) (L Ided Vertic (F1) Parent Material r (Explain in Re f hydrophytic vidrology must bur problematic. | RR B) 8) 1 (TF2) emarks) egetation and | SS |
| Туре: | Pule San | 7910 | aved from | yram.te | Hydri | c Soil Pre | sent? Yes | No <u>L</u> | _ |
| HYDROLO | OGY | | | | | | | | |
| Primary Ind Surface High Wi Saturati Water N Sedime Drift De Surface Inundat | dicators (minimum of e Water (A1) /ater Table (A2) iton (A3) Marks (B1) (Nonrive ent Deposits (B2) (No eposits (B3) (Nonrive e Soil Cracks (B6) tion Visible on Aerial Stained Leaves (B9) | one required; cherine) onriverine) erine) Imagery (B7) | eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Red Recent Iron Red Thin Muck Surfa Other (Explain in | 2) rates (B13) e Odor (C1) pheres along Livi luced Iron (C4) uction in Plowed ce (C7) | | Wa Sec /Drii Dry Cra Sat Sha | ter Marks (B1) diment Deposit ft Deposits (B3) ainage Patterns -Season Wate ayfish Burrows turation Visible allow Aquitard (C-Neutral Test | (Riverine) s (B2) (Riverine) (Riverine) (B10) r Table (C2) (C8) on Aerial (C9) (D3) | e) |
| Water Table Saturation I (includes ca | ater Present? Y le Present? Y Present? Y apillary fringe) | /es No /es No /es No | Depth (inches | s): s): | | | Present? Y | es <u> </u> | . |
| Describe R | lecorded Data (stream | m gage, monitori | ng well, aerial photos, | previous inspecti | ons), if available | : | | | |
| Remarks: | | na maria da maria de la companio de | nd rulo wea | | | | of to Hu | y ho. | |



| | | | – Arid West Region <u>~^^</u> (_{~~} ^+y | Sampling Date: 7/21/20 |
|--|-------------------------|----------------|--|--|
| Project/Site: Youler Youen te Property | | | | |
| Applicant/Owner: TK Consulting | | | | Sampling Point: SPSUIA |
| estigator(s): N. Tullmen C. Suntula | - 5599 | | | |
| Landform (hillslope, terrace, etc.): bothor | | | | VISION CONTROL OF SECURIOR SEC |
| Subregion (LRR): C Lat: | | | | |
| Soil Map Unit Name: Masick - Ultre Hay | | | | |
| Are climatic/hydrologic conditions on the site typical | for this time of years? | Yes | No (if no, explain i | n Remarks) |
| Are Vegetation, Soil, or Hydrology | significantly disturbe | d? No Are "No | ormal Circumstances" preser | 1t? Yes / No |
| Are Vegetation, Soil, or Hydrology | naturally problematic | 7 ال | ed, explain any answers in F | temarks) |
| SUMMARY OF FINDINGS Attach site ma | p showing sampling | point location | s, transects, important t | eatures, etc. |
| Hydrophytic Vegetation Present? Yes | | I- 4- CI- | | |
| Hydric Soil Present? Yes | No/ | Is the Sampled | nd? Yes | No. |
| Wetland Hydrology Present? Yes | No/_ | | | |
| Remarks: Located on the slope of | smull Aill of Cea | inothus Chapa | mel. Was delingated | LAS SWA |
| | | | | |
| VEGETATION | | | VI | |
| | Absolute Domina | int Indicator | Dominance Test Worksh | not: |
| Tree Stratum (Plot size:) | % Cover Species | Status | Number of Dominant Spec | • 200 |
| 1 | | | That Are OBL, FACW, or f | ales 2 (A) |
| 2 | | _ | Total Number of Dominant | 2 |
| 4. | | | Species Across All Strata: | 2 (B) |
| Sapling/Shrub Stratum (Plot size:) | = Total Cove | er | Percent of Dominant Spec | ies FAC: 2/2 = 100% (A/B) |
| | | | Prevalence Index Works | |
| 2. | | | | X1 |
| 3 | | _ | 1 | X2 |
| 4 | = Total Cove | | FAC species | |
| 201 | = Total Cove | : F | FACU species | |
| Herb Stratum (Plot size: -54) | | | UPL species | X5 |
| 1. Junius bubous | 37 | FALW | Column Totals: | (A) (B) |
| 2. Acrispon americans | - | UPL | Prevalence Index = B |)/A = |
| 3. Aira compophyllen | _ — | FALU | Hydrophytic Vegetation | ndicators: |
| 4. Dentramadira fitchii | | FALU | Dominance Test | |
| 5. Fritar promis | 74 N | FAC | Prevalence Inde | |
| 6 | - | | | daptations¹ (Provide |
| 8 | | - | | in Remarks or on a separate |
| | = Total Cove | er = | sheet) | w w |
| Woody Vine Stratum (Plot size:) | 9 | | No. of the control of | rophytic Vegetation¹ (Explain) |
| 1 | | | I 'Indicators of hydric soil ar present, unless disturbed (| nd wetland hydrology must be or problematic. |
| 2. | | | Hydrophytic | |
| 10.5 | = Total Cove | er | Vegetation Yes_ | No |
| % Bare Ground in Herb Stratum: 43 | % Cover of Biotic Crus | t | Present? | |
| Remarks: | | | - Sona I | 1 5 T |
| | | | | 400 |
| | | | | |
| | | | | Adda 4 |



| SOIL | | | 3 | | | | | Sampling Point S | psui, |
|---|--|--------------------------|--|--|-------------------|---|--|--|---------|
| | | | led to document the i | | | ence of ind | icators) | | (|
| Depth | Mat | rix | Redox Features | | | | | | 1 |
| (inches) | 7.5tp.6/8 | Percent 9 g | Color (moist) | Percent | Type ¹ | Loc² | Texture | Remarks | |
| 0-10 | 7.511/20/8 | | 2 5 YR 4/4 | | | | Lang Jan | <u> </u> | _ |
| | | | | | | | | 4.5 (F | |
| | | | | | | | | | |
| Type: C = | Concentration, D = De | epletion, RM = I | Reduced Matrix, CS = | Covered or Coat | ed Sand Gra | ins. ² Loca | tion: PL = Pore | Lining, M = Matri | × |
| lydric Soil | Indicators: (Applica | able to all LRR | s, unless otherwise r | oted) | | Indicators f | for Problematic | : Hydric Soils ³ : | |
| Histi Blac Hyd Stra 1 cm | osol (A1) ic Epipedon (A2) :k Histic (A3) rogen Sulfide (A4) tified Layers (A5) (LRI n Muck (A9) (LRR D) leted Below Dark Surf | | Loamy Gleye Depleted Ma Redox Dark | rix (S6) y Mineral (F1) ed Matrix (F2) trix (F3) | | 2 cr Rec | n Muck (A9) (Li n Muck (A10) (L duced Vertic (F1 d Parent Materia er (Explain in R | RR B) 8) II (TF2) | |
| Thic | k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) |) | Redox Depre Vernal Pools | essions (F8) | | wetland h | of hydrophytic v ydrology must b or problematic. | egetation and e present, unless | i |
| | Layer (if present): Compart earth ches): 10 H | | | | Ну | dric Soil Pr | esent? Yes | No U | _ |
| Remarks: | Rehap cons | not return | had a sandz - | talum and m | os Wyry | shall. | | | —(|
| IYDROLO | DGY | | | | | | | 190-001 | |
| Vetland Hy | /drology Indicators: | | 199 198 A | | (2.5) | Seco | ndary Indicator | s (2 or more req | uired) |
| Primary India Surface High Wa Saturati Water M Sedimer Drift Der Surface Inundati | icators (minimum of or Water (A1) ater Table (A2) | ne) riverine) ine) | eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfide Oxidized Rhizos Presence of Red Recent Iron Red Thin Muck Surfa Other (Explain in | rates (B13) e Odor (C1) pheres along Livi luced Iron (C4) uction in Plowed ce (C7) | | W Se Di Di Di Di Di Di Di D | ater Marks (B1) | (Riverine) s (B2) (Riverine)) (Riverine) s (B10) r Table (C2) (C8) on Aerial (C9) (D3) | o ≈o √± |
| ield Obse | rvations: | | | | N | | | | |
| | | | Depth (inches | | Wetland | d Hydrolom | / Present? Y | es No | / |
| Vater Table Saturation F includes ca | | s No_ s No_ | Depth (inches | | - Fostali | , 0.09; | , | | |
| | | gage, monitorin | g well, aerial photos, p | previous Inspection | ons), if availa | ble: | | | |
| Remarks: | | | of in Control. Types ophily ponded wher | دوسه محمد | tose-1 | in the | brical bioson | t no indicate | ° (|



| | TERMINATION DAT | and a | | Market Market and the second |
|--|----------------------------|-------------------------|--|---------------------------------|
| Project/Site: Youder Yosente Property | City/Cou | nty: <u> ~ 0 w</u> | ant County | Sampling Date: 7/11/10 |
| Applicant/Owner: TK Consulting | | | | Sampling Point: Sesul |
| estigator(s): N. Tullam, C. Suntale | Section/1 | Fownship/Rang | e: <u>29/15/16</u> | <u> </u> |
| Landform (hillslope, terrace, etc.): 9-14 50:11 6 | Local Re | | onvex, none): Corcave | Slope (%): 5 -10 % |
| Subregion (LRR): Lat: | | Long: | | Datum: |
| Soil Map Unit Name: Musick - Ultic Hupl | oxeralfs | NWI Classi | fication: None | |
| Are climatic/hydrologic conditions on the site typical | for this time of years? Ye | es <u> </u> | lo (if no, explain i | n Remarks) |
| Are Vegetation, Soil, or Hydrology | significantly disturbed? | N Are "No | rmal Circumstances" prese | nt? Yes No |
| Are Vegetation, Soil, or Hydrology | naturally problematic? | N。 (If needs | ed, explain any answers in I | Remarks) |
| SUMMARY OF FINDINGS Attach site ma | | | . transects, important | features, etc. |
| The state of the s | | State | | , |
| Hydrophytic Vegetation Present? Yes | | s the Sampled | Area | / |
| Wetland Hydrology Present? Yes √ | No I | | d? Yes | |
| Remarks: Located in a Sudo the | is part of a s | hellow yull | y. At smale out | location the |
| hydro phylic vegetatan spills o | out into large are | u | , | |
| | | | <u> </u> | |
| VEGETATION | | | | |
| Tens Startum (Distrine | Absolute Dominant | Indicator | Dominance Test Works | neet: |
| Tree Stratum (Plot size:) 1 | % Cover Species? | Status | Number of Dominant Spe | |
| 2. | | | That Are OBL, FACW, or | FAC:(A) |
| 3 | | | Total Number of Dominar Species Across All Strata | |
| 4 | = Total Cover | | | |
| Sapling/Shrub Stratum (Plot size: 10 Ct ,) | | al i | Percent of Dominant Spe That Are OBL, FACW, or | FAC: 2/3 - 66 % (A/B) |
| (conothes (weeks | 10 / | NL | Prevalence Index Works | |
| 2 | | | OBL species | X1 |
| 3 | | | The state of the s | X2 |
| ** | 10 = Total Cover | 71. | FAC species | W-2 Co |
| Herb Stratum (Plot size: SAc) | | | FACU species UPL species | X4 |
| 1. July (Husus | 18 | FKU | Column Totals: | |
| 2. Junius sp | 55 V | FACU/OIS | | B/A = |
| 3. Anspor queriens | 10 | UPL | Hydrophytic Vegetation | |
| 4. Unid gass | -3 - | FALU | Dominance Tes | |
| 5. Aira ruzophyllea 6. | | Prico | Prevalence Ind | ex is ≤3.0¹ |
| 7. | | | Morphological | Adaptations¹ (Provide |
| 8 | | | supporting data sheet) | in Remarks or on a separate |
| 41/17.1 | = Total Cover | | 2000000000 | drophytic Vegetation¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | | | and wetland hydrology must be |
| 1 | | - | present, unless disturbed | or problematic. |
| 2 | = Total Cover | | Hydrophytic Yes | √ No |
| % Bare Ground in Herb Stratum: | % Cover of Biotic Crust | 12 | Present? | |
| | | | L. M. A. J. | 1 1- |
| Remarks: Some (constlus was dy | ty in commenty | but was | healthy just o | atside - perhaps due |
| Remarks: Some Consilus was dy | within facture | | | · |
| 40 100 harry | C COL | | | |
| | | | | |



| epth | Mat | rix | | Redox Fe | aturee | | | |
|---|--|---|---|--|--|--|---|--|
| inches) | Color (moist) | | Caladada | | | | _ | |
| 0-19 | 10tr 4/3 | 85 | 7. 57A 5/8 | Percent 15 | | M | Sundy low | Remarks |
| | | | | | | | | |
| ype: C = | Concentration, D = De | epletion, RM = I | Reduced Matrix, CS = 0 | Covered or Coat | ed Sand Grains | . ²Loca | ion: PL = Pore | Lining, M = Matrix |
| Histo Histi Blace Hyde Stra 1 cm Depi | osol (A1) ic Epipedon (A2) ck Histic (A3) rogen Sulfide (A4) tified Layers (A5) (LRI n Muck (A9) (LRR D) leted Below Dark Surfa | R C) | | ((S5) rix (S6) y Mineral (F1) d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) | Inc | 1 cr 2 cr Red | or Problematic n Muck (A9) (LR n Muck (A10) (L luced Vertic (F18 l Parent Material er (Explain in Re | RR C) RR B) 3) (TF2) |
| Sand | k Dark Surface (A12) dy Mucky Mineral (S1) dy Gleyed Matrix (S4) | | Redox Depre | | | vetland hy | of hydrophytic ve drology must be or problematic. | egetation and present, unless |
| Type: | Layer (if present): | _ | | | Hydri | ic Soil Pr | esent? Yes_ | /_ No |
| marks: | Soil does | not men | t classical hy dephytic engetati | dic indicati | irs, how | res, a | rea was pr | eviously maps |
| as a | well and, has | strong hy | dobud in redesati | ien and hydro | יישונים ליף | s, and | Mas 4 17 | 06 |
| | | | alures in soil. | ien and hydro | 197 MAILING | s, and | K45 & 117 | |
| YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatio | r thexes drology Indicators: icators (minimum of on Water (A1) ater Table (A2) | e required; che ne) riverine) ne) | alures on soil, | ales (B13) Odor (C1) heres along Livi uced Iron (C4) action in Plowed S e (C7) | ng Roots (C3) | Secon Wa Se Dri Dri Cri Sa Sh | dary Indicators | Riverine) (B2) (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) C8) on Aerial (C9) |
| YDROLO etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si | reductions: reductions (minimum of on Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverince) Soil Cracks (B6) on Visible on Aerial Imitained Leaves (B9) | ne required; che ne) riverine) ne) agery (87) | ck all that apply) Salt Crust (B11) Blotic Crust (B12) Aquatic Invertebre Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfac Other (Explain in I | ates (B13) Odor (C1) heres along Livinuced Iron (C4) iction in Plowed Se (C7) Remarks) | ng Roots (C3) | Secon Wa Se Dri Dri Cri Sa Sh | adary Indicators ater Marks (B1) (diment Deposits ft Deposits (B3) ainage Patterns y-Season Water ayfish Burrows (turation Visible of allow Aquitard (I | Riverine) (B2) (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) C8) on Aerial (C9) |
| YDROLO detland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si eld Obser urface Wat ater Table aturation P icludes ca | rdrology Indicators: icators (minimum of on Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Soil Cracks (B6) on Visible on Aerial Imitained Leaves (B9) rvations: ter Present? Present? Yes Present? Yes pillary fringe) | ne required; che ne) riverine) ne) agery (B7) No | ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfac Other (Explain in i | ales (B13) Odor (C1) heres along Livingced Iron (C4) iction in Plowed Se (C7) Remarks) | ng Roots (C3) Soils (C6) Wetland H | Secon Wasses Dri Dri Cri Sa Sh FA | adary Indicators ater Marks (B1) (diment Deposits ft Deposits (B3) ainage Patterns y-Season Water ayfish Burrows (turation Visible of allow Aquitard (I | Riverine) (B2) (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) C8) on Aerial (C9) |
| etland Hy imary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic Water-Si eld Obser rface Water Table turation P cludes ca | rdrology Indicators: icators (minimum of on Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverint Soil Cracks (B6) on Visible on Aerial Imitained Leaves (B9) rvations: ter Present? Present? Yes Present? Yes pillary fringe) | ne required; che ne) riverine) ne) agery (B7) No | ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfac Other (Explain in I | ales (B13) Odor (C1) heres along Livingced Iron (C4) iction in Plowed Se (C7) Remarks) | ng Roots (C3) Soils (C6) Wetland H | Secon Wasses Dri Dri Cri Sa Sh FA | adary Indicators ater Marks (B1) (diment Deposits ft Deposits (B3) ainage Patterns y-Season Water ayfish Burrows (turation Visible of allow Aquitard (I C-Neutral Test (| Riverine) (B2) (Riverine) (B2) (Riverine) (Riverine) (B10) Table (C2) C8) on Aerial (C9) |



| WETLAND DE | | | Arid West Region | · · · · · · · · · · · · · · · · · · · |
|---|---------------------------|------------------|---|---------------------------------------|
| Project/Site: tonder toganile Propert | City/C | ounty: Two | unne County | Sampling Date: 1/1/10 |
| Applicant/Owner: Tk Consulting | | | State: CA | Sampling Point: SPSV2B |
| restigator(s): N. Tullman, C. Santo | | | ge: 29/15/16E | |
| Landform (hillslope, terrace, etc.): Lilslape | | Relief (concave, | convex, none): 10 - e | Slope (%): 5-15% |
| Subregion (LRR): Lat: | | Long: | A P | Datum: |
| Soil Map Unit Name: Musick-Ult. c Hap | loxeralfs | NWI Class | ification: No ~9 | |
| Are climatic/hydrologic conditions on the site typica | I for this time of years? | Yes/_ | No (if no, explain i | n Remarks) |
| Are Vegetation, Soil, or Hydrology | | | | |
| Are Vegetation, Soil, or Hydrology | | 7/ | ed, explain any answers in F | |
| SUMMARY OF FINDINGS Attach site ma | | | | |
| | | | | |
| Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes | No V | Is the Sampled | | |
| Malland Underland December Voc. | NI= | within a Wetlar | | No |
| | Ortviends massed | as CLIB | Surrounding en | vicanumant links |
| | Leanny they | 300. | Suraciany | months pack |
| any understory | | | | |
| VEGETATION | | | | |
| | Absolute Domina | nt Indicator | Dominance Test Worksh | neet: |
| Tree Stratum (Plot size:) | % Cover Species | ? Status | Number of Dominant Spec | |
| 1 | | | That Are OBL, FACW, or | |
| 3. | | | Total Number of Dominan | |
| 4. | | | Species Across All Strata: | (8) |
| Sapling/Shrub Stratum (Plot size:) | = Total Cove | r | Percent of Dominant Spec That Are OBL, FACW, or I | cies FAC: 2/0:0 (A/B) |
|) | | | Prevalence Index Works | |
| 2. | | | ABI sesses se sesse | X1 |
| 3 | - | _ | FACW species | 140 |
| 4. | = Total Cove | | | X3 |
| 60 | | • | FACU species | X4 |
| Herb Stratum (Plot size: SA r | 30 | .141 | UPL species | 2X5 <u>lo</u> |
| 1. Aunispan angricums | 30 | - OPC | Column Totals: | (A) <u>1/</u> (B) |
| 2. Brown hardeactus 3. Lh mus uput-medusae | 37 / | FACU | Prevalence Index = 8 | B/A = 17/7: 4. 25 |
| 3. Clymus expert-medisae 4. Collabium brach, carpum | <u> </u> | - Nr | Hydrophytic Vegetation | Indicators: |
| | <u> </u> | FAC | Dominance Tes | |
| 5 | | | Prevalence Inde | ex is ≤3.0¹ |
| 7. | | | | daptations1 (Provide |
| 8 | | - | supporting data | in Remarks or on a separate |
| 50/20 | 140 = Total Cove | <u>r</u> | sheet) | |
| Woody Vine Stratum (Plot size:) | | | | drophytic Vegetation¹ (Explain) |
| 1 | | | Indicators of hydric soil ar present, unless disturbed | nd wetland hydrology must be |
| 2. | | | Hydrophytic | a productinato. |
| ======================================= | = Total Cove | r | | No |
| % Bare Ground in Herb Stratum: | % Cover of Biotic Crus | t <u> </u> | Present? | |
| 200 | | (commen | 40 | |
| Remarks: Pinns ponderosa (FAU) y ro | In harman | | 7 | |
| 100 | | | | |
| | | | | |
| 2 | | | | |



| epth | S52 S | trix | fed to document the in | Redox Fe | | | | |
|---|--|--|--|--|--------------|-----------------------------------|---|--|
| nches) | Color (moist) | Percent 9 8 | Color (moist) 51/R 5/8 | Percent | | Loc² | Texture | Remarks |
| | | | | | | | | |
| | | 75 % | Reduced Matrix, CS = 0 | | ed Sand G | | tion: PL = Pore | 15.6 |
| Histo Histi Blact Hydr Strat 1 cm Depl Thick | osol (A1) c Epipedon (A2) k Histic (A3) rogen Sulfide (A4) tified Layers (A5) (LR D) Muck (A9) (LRR D) leted Below Dark Sur k Dark Surface (A12) dy Mucky Mineral (S1 dy Gleyed Matrix (S4) | R C) face (A11) | Sandy Redox Stripped Matr Loamy Mucky Loamy Gleye Depleted Mat | (S5) ix (S6) y Mineral (F1) d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8) | | 1 cr 2 cr Rec Rec Oth | n Muck (A9) (LF n Muck (A10) (L luced Verlic (F1 ! Parent Materia er (Explain in Ro of hydrophytic v | RR C) RR B) 8) 1 (TF2) emarks) |
| Туре: | ches): [1] h | | es pascul thru | ghout Soil | | | esent? Yes | |
| (DDC) (| in spswaA | | | | | | | |
| YDROLC | | • | | | | Saco | ndary Indicator | s (2 or more requirer |
| rimary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Surface Inundatic | rdrology Indicators: icators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver at Deposits (B2) (Nonriver soil Cracks (B6) on Visible on Aerial In | ne required; ch ine) nriverine) rine) | eck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebric Hydrogen Sulfide Oxidized Rhizosp Presence of Redi Recent Iron Redu Thin Muck Surfac Other (Explain in | ates (B13) Odor (C1) Theres along Livi Liced Iron (C4) Liction in Plowed (C7) | | | ater Marks (B1) | s (B2) (Riverine)) (Riverine) (B10) r Table (C2) (C8) on Aerial (C9) |
| | ter Present? Ye Present? Ye | es No es No | | : <u> </u> | Wetla | and Hydrolog | y Present? Y | es <u>/</u> No |
| ncludes ca | pillary fringe) | | ng well, aerial photos, p | | ons), if ava | ilable: | | 1445 PE |
| emarks: | Spesse alpal rom ponding | met preso | nt in some . | creas, fos | silly | Cron solu | ruled soil | more than |



| | TERMINATION DATA | | And the state of t | |
|---|---------------------------------------|---|--|--|
| Project/Site: Yorker Posemite Prop | city/County | 4.5 | ne lundy | Sampling Date: 7/1/1/20 |
| Applicant/Owner: Tk Consulty | | | | Sampling Point: SPSw3 A |
| Pestigator(s): N. Tullnan, C. Sant | | | je: <u> </u> | |
| Landform (hillslope, terrace, etc.): hillslope | | | convex, none): Leachup | Slope (%): |
| Subregion (LRR): Lat: | | | | Datum: |
| Soil Map Unit Name: Musick -Ullic- | | | | |
| Are climatic/hydrologic conditions on the site typical | | | STREET, STREET | / |
| Are Vegetation, Soil, or Hydrology | 200 | | | |
| Are Vegetation, Soil, or Hydrology | naturally problematic? . W | (If need | ed, explain any answers in R | emarks) |
| SUMMARY OF FINDINGS Attach site ma | p showing sampling poin | t location: | s, transects, important f | eatures, etc. |
| Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks: Local et al whole was provided | No No with | nin a Wetlar | nd? Yes | Fed. ce was Strubble |
| concave on the hill but did | and show signs of | over lere | y blom | realize was sugary |
| VEGETATION | | | 77 173 | |
| Tree Stratum (Plot size:) | Absolute Dominant % Cover Species? | Indicator Status | Dominance Test Workship | eet: |
| 1 | | | Number of Dominant Spec That Are OBL, FACW, or F | ies FAC:(A) |
| 2. | | | Total Number of Dominant | |
| 3. | · · · · · · · · · · · · · · · · · · · | | Species Across All Strata: | <u>}</u> (B) |
| Sapling/Shrub Stratum (Plot size:) | = Total Cover | *************************************** | Percent of Dominant Speci That Are OBL, FACW, or F | les FAC: 1/3 = 33% (A/B) |
| 2 |) <u> </u> | | Prevalence Index Workst | neet: |
| 3. | | | OBL species | X1 |
| 4 | | | FACW species | X2 |
| | = Total Cover | | The second secon | 2 X4 8 |
| Herb Stratum (Plot size: 56) | 1/ | Fu | UPL species | 2 X5 10 |
| 1. Navaritia inexerta 2. Avar corrupty Ilsa | $\frac{1\zeta}{2}$ | FALV | Column Totals: | |
| 3. Festuca my wros | 11 | FALU | Prevalence Index = B | IA = <u>23/6:3.8</u> |
| 4. Sciodistner californians | | NL | Hydrophytic Vegetation I | ndicators: |
| 5. Erisinum capitulum | <u> </u> | NL | Dominance Test | |
| 6. Romer esispus | | FAL | Prevalence Inde | |
| 7 8. | | | | daptations ¹ (Provide in Remarks or on a separate |
| 35/10 | SO = Total Cover | 2 | sheet) | |
| Woody Vine Stratum (Plot size:) | | | 1 Name 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | rophytic Vegetation¹ (Explain) |
| 1 | | | I 'Indicators of hydric soil an present, unless disturbed of | nd wetland hydrology must be or problematic. |
| 2. | | | Hydrophytic | |
| Min of dead plant material % Bare Ground in Herb Stratum: 50 | = Total Cover % Cover of Biotic Crust | | | No V |
| Remarks: | | | | |
| Remarks. | | | | glic Net |
| | | | | |
| | | | | |



| SOIL | | | | | | Sampling Point & | psv3A |
|---|--|---|-------------------|----------------------------|---|---|-----------------------------|
| Profile Description: (Describe the depth nee | eded to document the in | dicator or confi | m the abs | ence of indi | cators) | | |
| Depth Matrix | | Redox Fea | itures | | | | |
| (Inches) Color (moist) Percent 7.574 6/8 97 | L.S PR YAG | Percent 3 | Type ¹ | Loc² | Soul, lun | Remarks | |
| | | | | \equiv | | | |
| | | | | | | | |
| ¹ Type: C = Concentration, D = Depletion, RM = | Reduced Matrix, CS = C | overed or Coated | d Sand Grai | ins. ² Locat | ion: PL = Por | e Lining, M = Matri | x |
| Hydric Soil Indicators: (Applicable to all LR | Rs, unless otherwise no | ted) | ; | Indicators fe | or Problemat | ic Hydric Soils³: | |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) | Sandy Redox of Stripped Matrix Loamy Mucky Loamy Gleyed Depleted Matrix Redox Dark Stripped Dark Redox Depres Vernal Pools (| x (S6) Mineral (F1) Matrix (F2) ix (F3) urface (F6) Surface (F7) sions (F8) | , | 2 cm Red Red Othe | | (LRR B) F18) ial (TF2) Remarks) vegetation and be present, unless | |
| Restrictive Layer (if present): Type: Depth (inches): | | | Ну | rdric Soil Pre | esent? Ye: | s No / | - |
| Remarks: | | | * | | | | |
| | | | | | | | |
| HYDROLOGY | | | | | | | |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) | heck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebra Hydrogen Sulfide Oxidized Rhizosph Presence of Redu Recent Iron Reduc Thin Muck Surface Other (Explain in F | tes (B13) Odor (C1) heres along Living ced Iron (C4) ction in Plowed S e (C7) | | Walls Se | ater Marks (B1 diment Depos ft Deposits (B ainage Patterr y-Season Wat ayfish Burrow | its (B2) (Riverine) (B) (Riverine) (B) (B10) (B) (B) (B) (C2) (B) (C3) (B) (C3) (B) (C3) (B) (C3) (B) (C3) | 1 to Therman (1 to tall • 1 |
| Water Table Present? Yes No | Depth (inches): Depth (inches): Depth (inches): | | Wetland | d Hydrology | Present? | Yes No _ | <u></u> |
| Describe Recorded Data (stream gage, monitor | ing well, aerial photos, pro | evious inspection | s), if availal | ble: | | | |
| Remarks: No algal mattery | or signs of dri | (t or Sed. | ment dep | ousils fi | our overi | and the | |



| Project/Site: Yoskenite Apper | | | – Arid West Region <u>سمو</u> لاسماح | Sampling Date: 7/21/20 |
|--|------------------------------------|---|--|--|
| Applicant/Owner: Tk Consulting | | | State: CA | Sampling Point: 5PSV 6 A |
| estigator(s): N. Tallans C. Santula | Sectio | | ge: <u>29/15/168</u> | Sampling Point. 21 20 074 |
| Landform (hillstope, terrace, etc.): L:11 slapt | | | convex, none): Lucur | Slope (%): \$ - 10 % |
| Subregion (LRR): Lat: | | SATESTATIONES NO COMMISSIONAL CONTRACTOR OF THE COMMISSION OF THE | | Datum: |
| Soil Map Unit Name: Musick - Ultic | | | ification: None | -104 |
| Are climatic/hydrologic conditions on the site typical | | | | in Remarks) |
| Are Vegetation, Soil, or Hydrology | | | | ent? Yes V No |
| Are Vegetation, Soil, or Hydrology | | | ed, explain any answers in | |
| | | | \$ 1 | |
| SUMMARY OF FINDINGS — Attach site ma | p showing sampling | point location | s, transects, important | teatures, etc. |
| Hydrophytic Vegetation Present? Yes | | Is the Sampled | Area | / |
| Hydric Soil Present? Yes | No | within a Wetlar | | No |
| Wetland Hydrology Present? Yes | No | | | |
| VEGETATION | | | | |
| Tree Stratum (Plot size:) | Absolute Domina % Cover Species | | Dominance Test Works | heet: |
| 1. | | | Number of Dominant Spe That Are OBL, FACW, or | FAC:(A) |
| 2 | | | Total Number of Dominar Species Across All Strata | nt 🥎 |
| 4 | = Total Cove | <u> </u> | Percent of Dominant Spe | |
|) | | | Prevalence Index Works | |
| 2. | | | OBL species | X1 |
| 3 | * | | The second policy of the second secon | X2 |
| 7- | = Total Cove | 7 | | X3 |
| Herb Stratum (Plot size: 5fl r | | | | X4 |
| 1 | 75 | FALU/OBL | The same of the sa | X5(B) |
| 2. Almopon ampirano | 15 | UR | _ | |
| 3. Trifoling sp | 4 | Unk | | B/A = |
| 4. Oittrickia Tuveolos | } | NL_ | Hydrophytic Vegetation | |
| 5. <u>Chodris murslarly</u> a | 23 V | 064 | Dominance Tes | AND |
| 6. Plantezo langestatio | | FAL | Prevalence Ind | |
| 7 | | | | Adaptations¹ (Provide a in Remarks or on a separate |
| | = Total Cove | r | | drophytic Vegetation¹ (Explain) |
| Woody Vine Stratum (Plot size:) 1 | | | The same of the sa | and wetland hydrology must be |
| 2. | = Total Cove | | Hydrophytic Vegetation Yes Present? | |
| % Bare Ground in Herb Stratum: | | | | |
| Remarks: (area dry and not ident | stiuble, however, e | other FACE | or. OBL and a | hydrophy tic species |



| SOIL | | - | - | | | | | Sampling Point SPSW6 |
|------------------------------|--|------------------------|--------------------------------------|-----------------------------------|-------------------|-----------------------|--------------------------------------|-------------------------|
| Profile Des | cription: (Describe t | he depth need | led to document the i | indicator or con | firm the abse | ence of ind | icators) | |
| Depth | Matr | rix | | Redox Fe | atures | | | |
| (inches) | _Color (moist) | Percent | Color (moist) | Percent | Type ¹ | Loc2 | Texture | Remarks |
| 3-10 | 10 4V 2/7 | <u>100</u> 84 | 7.Str 5/9 | 15+ | | | Sandy loo | shiph organic root was |
| 3=10 | 1011/1/2 | _01 | OFR 2/1 | - 13. | | M | jurdy low | monganese conc. |
| | | | | | | | | 70-10-10- |
| | | | | | | | | |
| | | | | | | | | |
| | | | <u> </u> | | | | | - |
| ¹Type: C = | Concentration, D = De | pletion, RM = I | Reduced Matrix, CS = | Covered or Coate | ed Sand Grain | ns. ² Loca | tion: PL = Pore | Lining, M = Matrix |
| Hydric Soil | Indicators: (Applica | ble to all LRR | s, unless otherwise n | oted) | | ndicators | for Problemati | : Hydric Soils³: |
| | osol (A1) | | Sandy Redox | | | 1 c | m Muck (A9) (L | RR C) |
| | c Epipedon (A2) k Histic (A3) | | Stripped Mat | rix (S6) y Mineral (F1) | | | m Muck (A10) (duced Vertic (F | |
| Hydr | rogen Sulfide (A4) | | Loamy Gleye | ed Matrix (F2) | | | d Parent Materia | |
| Strat | tified Layers (A5) (LRR n Muck (A9) (LRR D) | (C) | Depleted Ma Redox Dark | trix (F3) Surface (F6) | | Oth | er (Explain in F | emarks) |
| Depl | leted Below Dark Surfa | ace (A11) | Depleted Dar | rk Surface (F7) | | | | |
| | k Dark Surface (A12) dy Mucky Mineral (S1) | | Redox Depre | | | 3Indicators | of hydrophytic | recetation and |
| | dy Gleyed Matrix (S4) | | | (. 5) | | wetland h | ydrology must b | pe present, unless |
| Restrictive | Layer (if present): | | | **** | | disturbed | or problematic. | |
| | compact earth | | | | Hyd | dric Soil Pi | resent? Yes | No |
| Depth (inc | | | | | | | | |
| Remarks: | Very light : | soil mol a | observed anywher is | e glac on set | e. Sort 1 | has eno. | -gh lown co | inentralin to |
| meet a | group "F" indice | iters and implessed as | light coloration is observed at a | likely due He sample | to leaching/ | depletion | , not sust | due to light |
| HYDROLO | | | | | Pigis | | | |
| | drology Indicators: | | | | | Seco | ndary Indicato | rs (2 or more required) |
| | cators (minimum of on- Water (A1) | e required; che | eck all that apply) Salt Crust (B11) | | | W | ater Marks (B1) | (Riverine) |
| | iter Table (A2) | | Biotic Crust (B12 | .) | | S | ediment Deposi | is (82) (Riverine) |
| _ Saturation | | -1 | Aquatic Invertebr | rates (B13) | | | rift Deposits (B3 rainage Pattern | |
| Sedimen | larks (B1) (Nonriverin nt Deposits (B2) (Noni | riverine) | Hydrogen Sulfide Oxidized Rhizosp | e Odor (CT) pheres along Livid | ng Roots (C3) | \ | ry-Season Wate | r Table (C2) |
| Drift Dep | oosits (B3) (Nonriveri | | Presence of Red | uced Iron (C4) | | Ci | rayfish Burrows aturation Visible | (C8) on Aerial (C9) |
| Surface | Soil Cracks (B6) on Visible on Aerial Im: | agery (B7) | Recent Iron Redu Thin Muck Surface | uction in Plowed : ce (C7) | Soils (C6) | SI | hallow Aquitard | (D3) |
| Water-Si | tained Leaves (B9) | | Other (Explain in | | | _ F/ | AC-Neutral Test | (D5) |
| Field Obser | vations: | | | | | 3 1 6 | 15. | |
| Surface Wat | | | Depth (inches | | | | | . / |
| Water Table | | No _ | 9294 82 | | Wetland | Hydrology | y Present? Y | es No |
| Saturation P (includes ca | resent? Yes pillary fringe) | No_ | Depth (inches |): | | | | |
| | | jage, monitorin | g well, aerial photos, p | revious inspectio | ns), if availab | le: | | |
| Remarks: | South alout | matter | present in 1 | parties of | comment | | | |
| 1 | Should aide. | 1 | Cueran iix (| 22. 1. 0.03 D. 1 | , , |) | | |
| | | | | | | | | |
| | | | | | | | | 1 |



| A A | LIERWINATION DATA FORWI | |
|--|---|--|
| Project/Site: Yander Kosenile Proper | '7 | June (onty Sampling Date: 7/21/20 |
| Applicant/Owner: Tk Consulting | | |
| estigator(s): N. Tulinum C. Sant | Section/Township/Ran | ge: 29/15/16E |
| Landform (hillslope, terrace, etc.): | Local Relief (concave, | convex, none): Co-Ve): 10-15 % |
| Subregion (LRR): Lat: _ | Long: | Datum: |
| Soil Map Unit Name: Musick - Ultic | Haplorera 165 NWI Class | sification: None |
| Are climatic/hydrologic conditions on the site typical | al for this time of years? Yes | No (if no, explain in Remarks) |
| Are Vegetation, Soil, or Hydrology _ | | ormal Circumstances" present? Yes V |
| Are Vegetation, Soil, or Hydrology _ | | led, explain any answers in Remarks) |
| SUMMARY OF FINDINGS Attach site m | ap showing sampling point location | s, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes | No. V | |
| Hydric Soil Present? Yes | No Is the Sample | , |
| Wetland Hydrology Present? Yes | within a Wetla | nd? Yes No |
| Remarks: | - | - |
| | | |
| | | _ |
| VEGETATION | | |
| Tree Stratum (Plot size:) | Absolute Dominant Indicator % Cover Species? Status | Dominance Test Worksheet: |
| 1 | | Number of Dominant Species |
| 2 | | That Are OBL, FACW, or FAC:(A) |
| 3. | | Total Number of Dominant Species Across All Strata: (B) |
| 4 | = Total Cover | |
| sapling/Shrub Stratum (Plot size:) | = 10tal Cover | Percent of Dominant Species That Are OBL, FACW, or FAC: 0/1 = 0 (A/B) |
|) | | Prevalence Index Worksheet: |
| 2. | | OBL species X1 |
| 3 | | FACW species X2 |
| 4 | = Total Cover | FAC speciesX3 |
| | | FACU species 3 X4 12 |
| Herb Stratum (Plot size:) | 64 \ NI | UPL species X5 /0 |
| 1. Difference queenks | | Column Totals: (A) Ad (B) |
| 3. Noney hordenes | 3 NL FALU | Prevalence Index = B/A = |
| 3. frances hardeners 4. Vicio SP | b FALU-U | |
| 5. Fisher nyuros | | Dominance Test is >50% |
| 6. | TO INCO | Prevalence Index is ≤3.01 |
| 7 | | Morphological Adaptations ¹ (Provide |
| 8 | | supporting data in Remarks or on a separate |
| 42/17 | gs = Total Cover | sheet) |
| Woody Vine Stratum (Plot size:) | | Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be |
| 1 | | present, unless disturbed or problematic. |
| 2 | | Hydrophytic |
| Oral plant material | = Total Cover | Vegetation Yes No |
| % Bare Ground in Herb Stratum: 15 | % Cover of Biotic Crust | Present? |
| Remarks: | | |
| of Accommodistration for | | |
| | | |
| | | |
| | | |



| SOIL | | | | | | | | Sampling Point 595168 |
|---|---|--|---------------------------------------|--|--|--|--|---------------------------|
| Profile Description: | (Describe t | he depth neede | ed to document the i | ndicator or conf | rm the absen | ice of indi | cators) | |
| Depth | Mat | rix | Redox Features | | | | | (|
| B. B. L. C. | r (moist) | Percent | Color (moist) | <u>Percent</u> | Type ¹ | Loc² | Texture | Remarks |
| | | | | | | | | |
| NEW YEARS HE THE GOOD IS | ACCES 1944 | | educed Matrix, CS = (| La Mass | AND THE STREET OF STREET STREE | | to some to be to the | e Lining, M = Matrix |
| Hydric Soil Indicate Histosol (A1) Histic Epiped Black Histic (Hydrogen Su Stratified Lay 1 cm Muck (A Depleted Bel Thick Dark St Sandy Mucky Sandy Gleyer | on (A2) A3) lifide (A4) ers (A5) (LRI 9) (LRR D) ow Dark Surfi urface (A12) Mineral (S1) | ₹ C) ace (A11) | Loamy Gleye Depleted Mai Redox Dark S | ((S5) iv (S6) y Mineral (F1) d Matrix (F2) trix (F3) Surface (F6) k Surface (F7) ssions (F8) | - - - - - - | 1 cr 2 cr Red Red Oth | n Muck (A9) (L n Muck (A10) (luced Vertic (F I Parent Materi er (Explain in F of hydrophytic | LRR B) 18) al (TF2) |
| Restrictive Layer (if Type: Depth (inches): Remarks: No | | | ntiens of an | y kink fi | Hydi | ric Soll Pr | | yellovish simpar |
| HYDROLOGY | | | | | | | | |
| HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) High Water Table (A2) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Thin Muck Surface (C7) Other (Explain in Remarks) | | | | | W Se | ater Marks (B1 ediment Depos ift Deposits (B rainage Patterr y-Season Wat rayfish Burrows | its (B2) (Riverine) 3) (Riverine) is (B10) er Table (C2) 5 (C8) e on Aerial (C9) (D3) | |
| Field Observations: Surface Water Prese Water Table Present Saturation Present? (includes capillary fri | nt? Yes ? Yes Yes | S No | Depth (inches |): | | | y Present? | YesNo |
| Management & States of States and Assessment (ASTA) | 30 00 0 | #1 12# 30# NO 30# | FOR THE TOTAL PROPERTY OF | The total statement lakes to | 53-75 4 10 20 8 | | ne w ro | obvious sill or |



| | TERMINATION DA | | STONE STONE STONE AND A STONE | |
|--|---------------------------|-------------------|---|---------------------------------|
| Project/Site: Yorder Yosen:le Property | | | une County | Sampling Date: 1/11/10 |
| Applicant/Owner: TK Consulting | | | State: | Sampling Point: SPS-8 A |
| estigator(s): N. Tellmn C Santal | <u> </u> | /Township/Rang | e: 19/15/16E | |
| Landform (hillslope, terrace, etc.): | Local R | elief (concave, c | convex, попе): Сольск | Slope (%): |
| Subregion (LRR): Lat: | 4 | Long: | 9/9/ | Datum: |
| Soil Map Unit Name: Mus.ck-Ultic the | lo xerulfs | _ NWJ Classi | fication: Nont | |
| Are climatic/hydrologic conditions on the site typical | for this time of years? Y | res 1 | No (if no, explain i | n Remarks) |
| Are Vegetation, Soil, or Hydrology | | - | | nt? Yes No |
| Are Vegetation, Soil, or Hydrology | | | ed, explain any answers in F | |
| SUMMARY OF FINDINGS Attach site ma | | | | |
| | | John Toddiloni | , transcots, important | icatares, etc. |
| Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes | No No | Is the Sampled | Area | / |
| Wetland Hydrology Present? Yes | | within a Wetlan | d? Yes | No V |
| Remarks: | | | | |
| | | | | |
| | | | | |
| VEGETATION | | | _ | |
| Tons Cheshum (Blot sing) | Absolute Dominant | | Dominance Test Worksh | eet: |
| Tree Stratum (Plot size:) 1 | % Cover Species? | Status | Number of Dominant Spec | cies |
| 2. | | | That Are OBL, FACW, or I | FAC:(A) |
| 3. | | | Total Number of Dominant | |
| 4 | = Total Cover | | Species Across All Strata: | |
| Sapling/Shrub Stratum (Plot size:) | = 10@1 Cover | | Percent of Dominant Spec That Are OBL, FACW, or I | AC: 1/2:50% (A/B) |
| <u></u> | | | Prevalence Index Works | |
| 2 | | · - | OBL species | X1 / |
| 3 | - | - | [[[[]]]] [[] [] [] [] [] [| 3 x2 6 |
| 4 | = Total Cover | - | FAC species | X3 <u></u> |
| Herb Stratum (Plot size: 5 × 31) -1 New d | | | FACU species | X4 <u>4</u> |
| And the control of th | 33 ./ | FACW | UPL species3 | X5 |
| 1. June (Hours 2. (upports projection | 60 / | | Column Totals: 9 | (A) <u>19</u> (B) |
| 3. Aunispon anticons | -3 — | FALW | Prevalence Index = 6 | 3/A = <u>19/9=3.1</u> |
| 4. Plunturo lanceolata | | FAL | Hydrophytic Vegetation | Indicators: |
| 5. Browns situanis var. constas | 39 | NL | Dominance Test | t is >50% |
| 6. Junes bulonus | | FALL | Prevalence Inde | x is ≤3.0¹ |
| 7. Erythranthe gutt ata | lλ | OBL | | daptations1 (Provide |
| 8. Oroban ohn will Sp. | | UNK | supporting data sheet) | in Remarks or on a separate |
| Herb Cort. | = Total Cover | | | frophytic Vegetation¹ (Explain) |
| Woody-Vine Statum (Plot size:) | | | | nd wetland hydrology must be |
| 1. Browns diadres | <u> </u> | NL | present, unless disturbed | |
| 2. Nira caryodyla 50/20 | Total Cover | FALU | Hydrophytic | |
| 5 192 | | | Vegetation Yes_ Present? | No |
| % Bare Ground in Herb Stratum: | % Cover of Biotic Crust _ | | | |
| Remarks: Located in a previously and started to pond none grusses. Perh | y mapped ephen | -oral channel | that may have | widenest out |
| and started to pond none | mater. Similar | r to sw | 17 Gut with all | of upland |
| Garles Duch | | | - F = | |
| Alman, Edin | | | | |



| | Mat | rix | 2 22 | Redox Fe | eatures | k: | |
|---|--|--|--|--|-----------------------|--|---|
| nches) | Color (moist) | Percent | Color (moist) | Percent | Type ¹ | Loc ² Texture | Remarks |
| 0-18 | 1078 4/4 | 85 | 10 tr 3/2 | 10 | | M loany for | 1 Softer ILm other S |
| | | | 15 TR 5/6 | _\$ | | <u>w</u> | 12- |
| | | | | 2 | | | |
| | | | | | | | |
| | | - | - | | | | 3 |
| ype: C= | Concentration, D = Do | epletion, RM = F | Reduced Matrix, CS = | Covered or Coat | ed Sand Grains. | ² Location: PL = Po | re Lining, M = Matrix |
| 1000 | Indicators: (Applica | able to all LRRs | | WANT OF | Ind | icators for Problema | |
| | osol (A1) ic Epipedon (A2) | | Sandy Redo Stripped Mal | | _ | 1 cm Muck (A9) (2 cm Muck (A10) | |
| Blac | k Histic (A3) | | Loamy Muck | y Mineral (F1) | _ | Reduced Vertic (| F18) |
| Hyd Stra | lrogen Sulfide (A4) itified Layers (A5) (LR | R C) | Loamy Gleye Depleted Ma | ea Matrix (F2) trix (F3) | · | Red Parent Mate Other (Explain in | |
| 1 cn | n Muck (A9) (LRR D) | The state of the s | Redox Dark | Surface (F6) | | | |
| | ileted Below Dark Surf k Dark Surface (A12) | | Depleted Da | rk Surface (F7) | | | |
| San | dy Mucky Mineral (S1 |) | Vernal Pools | | | dicators of hydrophyti | |
| San | dy Gleyed Matrix (S4) | | | | | vetland hydrology mus listurbed or problemati | |
| strictive | Layer (if present): | | | | | | |
| Type: _ | | | | | Hydri | c Soil Present? Ye | es No/_ |
| Depth (in | iches): | | | | | | |
| emarks: | = | | | or total | | | a' |
| | OGY | | | | | | |
| | | | | | | Secondary Indica | tors (2 or more required |
| etland H | ydrology Indicators: | aa raauiradi aha | | | | Mater Marke /E | 1) (Riverine) |
| letland Hyrimary Ind Surface | licators (minimum of o | ne required; che | ck all that apply) Salt Crust (B11) | | | | |
| rimary Ind Surface High W | licators (minimum of or Water (A1) ater Table (A2) | ne required; che | Salt Crust (B11) Biotic Crust (B12 | 2) | | Sediment Depo | sits (B2) (Riverine) |
| rimary Ind Surface High W Saturati | licators (minimum of or Water (A1) ater Table (A2) ion (A3) | • | Salt Crust (B11) Biotic Crust (B12 Aquatic Inverteb | 2) rates (B13) | | Sediment Depo Drift Deposits (| sits (B2) (Riverine) B3) (Riverine) ms (B10) |
| rimary Ind Surface High W Saturati Water M | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriveri ent Deposits (B2) (Nor | ne) nriverine) | Salt Crust (B11) Biotic Crust (B12 Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos | 2) rates (B13) e Odor (C1) pheres along Livi | ing Roots (C3) | Sediment Depo Drift Deposits (Drainage Patte Dry-Season Wa | sits (B2) (Riverine) B3) (Riverine) ms (B10) ater Table (C2) |
| rimary Ind Surface High W Saturati Water N Sedime | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriveri int Deposits (B2) (Nor iposits (B3) (Nonriver | ne) nriverine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec | 2) rates (B13) e Odor (C1) pheres along Livi duced Iron (C4) | | Sediment Depo Drift Deposits (Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit | sits (B2) (Riverine) B3) (Riverine) ms (B10) ater Table (C2) vs (C8) ble on Aerial (C9) |
| etland Hyrimary Ind Surface High W. Saturati Water M Sedime Drift De Surface Inundat | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriveri int Deposits (B2) (Nor eposits (B3) (Nonriver e Soil Cracks (B6) ion Visible on Aerial In | ne) nriverine) ine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa | 2) rates (B13) e Odor (C1) pheres along Livi duced Iron (C4) luction in Plowed ice (C7) | | Sediment Depo Drift Deposits (Drainage Patte Dry-Season Water Crayfish Burrov Saturation Visit Shallow Aquita | sits (B2) (Riverine) B3) (Riverine) ms (B10) ater Table (C2) vs (C8) ble on Aerial (C9) rd (D3) |
| etland Hyrimary Ind Surface High W. Saturati Water M Sedime Drift De Surface Inundat | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriveri int Deposits (B2) (Nor eposits (B3) (Nonriveri e Soil Cracks (B6) | ne) nriverine) ine) | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec | 2) rates (B13) e Odor (C1) pheres along Livi duced Iron (C4) luction in Plowed ice (C7) | | Sediment Depo Drift Deposits (Drainage Patte Dry-Season Wa Crayfish Burrov Saturation Visit | sits (B2) (Riverine) B3) (Riverine) ms (B10) ater Table (C2) vs (C8) ble on Aerial (C9) rd (D3) |
| etland Hyimary Ind Surface High Wasturati Water Manager Sedime Drift Des Surface Inundati Water-Seld Obse | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriveri int Deposits (B2) (Nor iposits (B3) (Nonriver e Soil Cracks (B6) ion Visible on Aerial In Stained Leaves (B9) | ne) riverine) rine) nagery (B7) | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain in | 2) rates (B13) e Odor (C1) pheres along Livi suced Iron (C4) suction in Plowed ce (C7) n Remarks) | | Sediment Depo Drift Deposits (Drainage Patte Dry-Season Water Crayfish Burrov Saturation Visit Shallow Aquita | sits (B2) (Riverine) B3) (Riverine) ms (B10) ater Table (C2) vs (C8) ble on Aerial (C9) rd (D3) |
| rimary Ind Surface High W. Saturati Water N. Sedime Drift De Surface Inundat Water-S | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriverient Deposits (B2) (Norriveries Soil Cracks (B6) ion Visible on Aerial In Stained Leaves (B9) ervations: ater Present? | ne) rriverine) ine) nagery (B7) s No _ | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain in | 2) rates (B13) e Odor (C1) pheres along Livi fuced Iron (C4) fuction in Plowed foe (C7) n Remarks) | Soils (C6) | Sediment Deport Drift Deposits (Inc.) Drainage Patte Dry-Season William Crayfish Burrow Saturation Visit Shallow Aquita FAC-Neutral Telegraphs | esits (B2) (Riverine) B3) (Riverine) ms (B10) ater Table (C2) vs (C8) ble on Aerial (C9) rd (D3) est (D5) |
| rimary Ind Surface High W. Saturati Water N Sedime Drift De Surface Inundat Water-S | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriverient Deposits (B2) (Norriverient Soil Cracks (B6) ion Visible on Aerial InStained Leaves (B9) ater Present? Ye e Present? Ye | ne) nriverine) ine) nagery (B7) s No _ s No _ | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain in | 2) rates (B13) e Odor (C1) pheres along Livi duced Iron (C4) uction in Plowed ce (C7) n Remarks) | Soils (C6) | Sediment Depo Drift Deposits (Drainage Patte Dry-Season Water Crayfish Burrov Saturation Visit Shallow Aquita | esits (B2) (Riverine) B3) (Riverine) ms (B10) ater Table (C2) vs (C8) ble on Aerial (C9) rd (D3) est (D5) |
| rimary Ind Surface High W. Saturati Water N. Sedime Drift De Surface Inundat Water-S leld Obse urface Water Table | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriverient Deposits (B2) (Norriverient Soil Cracks (B6) ion Visible on Aerial InStained Leaves (B9) ater Present? Ye e Present? Ye | ne) rriverine) ine) nagery (B7) s No _ | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa Other (Explain in | 2) rates (B13) e Odor (C1) pheres along Livi duced Iron (C4) uction in Plowed ce (C7) n Remarks) | Soils (C6) | Sediment Deport Drift Deposits (Inc.) Drainage Patte Dry-Season William Crayfish Burrow Saturation Visit Shallow Aquita FAC-Neutral Telegraphs | esits (B2) (Riverine) B3) (Riverine) rms (B10) alter Table (C2) vs (C8) ble on Aerial (C9) rd (D3) est (D5) |
| rimary Ind Surface High W. Saturati Water N Sedime Drift De Surface Inundat Water-S eld Obse urface Water-S dater Table | licators (minimum of or water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriverient Deposits (B2) (Norriveries Soil Cracks (B6) ion Visible on Aerial InStained Leaves (B9) ervations: ater Present? Present? Ye Present? Yeservations: | ne) nriverine) rine) nagery (B7) s No _ s No _ s No _ | Salt Crust (B11) Biotic Crust (B12) Aquatic Inverteb Hydrogen Sulfid Oxidized Rhizos Presence of Red Recent Iron Red Thin Muck Surfa Other (Explain in | e Odor (C1) pheres along Livi suced Iron (C4) uction in Plowed ice (C7) in Remarks) | Soils (C6) Wetland H | Sediment Deport Drift Deposits (Inc.) Drainage Patte Dry-Season William Saturation Visit Shallow Aquita FAC-Neutral Telephone Saturation Visit Satu | esits (B2) (Riverine) B3) (Riverine) rms (B10) alter Table (C2) vs (C8) ble on Aerial (C9) rd (D3) est (D5) |



| | TERMINATION DATA | A FORM | Arid West Region | |
|--|--|----------------|---|--|
| Project/Site: Youler Vegenite Rocarty | City/County | y: Inolu | and County | Sampling Date: 7/21/20 |
| Applicant/Owner: Tk Cosulting | | | State: (A | Sampling Point: 5950 |
| estigator(s): N. Tallan. C. Surdul | | | | <u> </u> |
| Landform (hillslope, terrace, etc.): hillslope | Local Relie | ef (concave, o | convex, none): Law(out | Slope (%): |
| Subregion (LRR): | | Long: | 1 | Datum: |
| Soil Map Unit Name: Musick - Ultic Huplox | | | | |
| Are climatic/hydrologic conditions on the site typical | | | | n Remarks) |
| Are Vegetation, Soil or Hydrology | significantly disturbed? N | Are "No | ormal Circumstances" preser | it? Yes No |
| Are Vegetation, Soil, or Hydrology | | | ed, explain any answers in R | |
| SUMMARY OF FINDINGS Attach site map | showing sampling poir | nt locations | s, transects, important f | eatures. etc. |
| | | | | = - |
| Hydrophytic Vegetation Present? Yes V Hydric Soil Present? Yes | No. IST | he Sampled | | |
| Wetland Hydrology Present? | No with | hin a Wetlar | nd? Yes | No |
| | | 1 | 0-2-1 | 4 2 1 1 2 |
| Remarks: Localed in depressional for | A South (1- 1) | Curex. | Lienomin unboug | of extent of a |
| species composition and | a sept circuly di | efectual co | warright from strike | among area dut to |
| VEGETATION | <u> </u> | | | |
| | Absolute Dominant | Indicator | Dominance Test Worksh | ant: |
| Tree Stratum (Plot size:) | % Cover Species? | Status | | CC 900-00. |
| 1 | | | Number of Dominant Spec That Are OBL, FACW, or f | |
| 2 | | | Total Number of Dominant | - · · · · · |
| 3 | | 25 | Species Across All Strata: | |
| Sapling/Shrub Stratum (Plot size:) | = Total Cover | - | Percent of Dominant Spec | les FAC: 1/1:100 % (A/B) |
| (Flot size:) | | | | 2. 16302 37 999 |
| 2. | - 1 | 1 | Prevalence Index Works OBL species | |
| 3 | | | FACW species | X1 |
| 4 | | | FAC species | 1222 |
| - 60 | = Total Cover | | FACU species | 10 mm |
| Herb Stratum (Plot size: 58 c | . / | OBL | UPL species | X5 |
| 1. CATER AMA | 83 / | | Column Totals: | (A)(B) |
| 2. Poly poyon monopellog; 5 | <u>S</u> | FALW | Prevalence Index = E | 3/A = |
| 3. Junius sp 4. Briza minor | 3 | FALVIUAL | Hydrophytic Vegetation | Indicators: |
| | <u> </u> | FAC | Dominance Test | |
| 56 | | - | Prevalence Inde | x is ≤3.0¹ |
| 7. | | 3.00 | Morphological A | daptations1 (Provide |
| 8. | | | | in Remarks or on a separate |
| | 9 3 = Total Cover | | sheet) | (replytic Vesstation) (Evaluis) |
| Woody Vine Stratum (Plot size:) | | | 100 | Irophytic Vegetation¹ (Explain) Ind wetland hydrology must be |
| 1 | - <u></u> | | present, unless disturbed | |
| 2 | | 11 | Hydrophytic | |
| | = Total Cover | | Vegetation Yes_ | No |
| % Bare Ground in Herb Stratum: | | | Present? | |
| Remarks: Lacex 15 deal and died | ant. Fruit not obv | المم د-١٥٠ | potential to be diff | erent spruis, Lovever |
| certainly either an OBL or | | | 6-30 4 - X | *************************************** |
| 00.50) (1.50 50 50 | ·· · · · · · · · · · · · · · · · · · · | | | |
| | | | | |



| Depth | Mat | latrix | | Redox Features | | | | |
|--|---|---------------------------|--|--|------------------------|--|---|---|
| (inches) ()-2 | Color (moist) | Percent \$6 | Color (moist) | Percent | Type¹ C | Loc² | Sandy Lour | Remarks |
| | | | | | | | | |
| Type: C = | Concentration, D = Do | epletion, RM = R | educed Matrix, CS = C | overed or Coat | ed Sand Grain | s. ² Local | ion: PL = Pore | Lining, M = Matrix |
| Hister Hister Hister Hyder Stra | I Indicators: (Applications) I Indicators: (Applications) Ic Epipedon (A2) Ick Histic (A3) Irogen Sulfide (A4) Itified Layers (A5) (LRI In Muck (A9) (LRR D) Ideted Below Dark Surf Ick Dark Surface (A12) | R C) ace (A11) | Sandy Redox Stripped Matri: Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Stripped Dark Redox Depres | (S5) x (S6) Mineral (F1) Matrix (F2) x (F3) urface (F6) Surface (F7) | ir - - - - | 1 cn 2 cn Red | or Problemation Muck (A9) (Lin Muck (A10) (Induced Vertic (F1) Parent Materia Parent Materia Parent Materia Parent Materia | LRR B) 18) al (TF2) |
| San San Restrictive | dy Mucky Mineral (S1 dy Gleyed Matrix (S4) Layer (if present): |) | Vernal Pools (| | | wetland hy disturbed | of hydrophylic v ydrology must b or problematic. | pe present, unless |
| | | shorel refus | al at 2" thr | summed du | marty - h | rony hy | of redex | feetutive in |
| HYDROLO | | | 7-0 10 10 | | | | | |
| Primary Ind Surface High Wa Saturati Water M Sedimel Drift Del Surface | ydrology Indicators: icators (minimum of or Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriverint Deposits (B2) (Nonriverint Deposits (B3) (Nonriverin | ne) iriverine) ine) | ck all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebra Hydrogen Sulfide (Oxidized Rhizosph Presence of Reduction Red | Odor (C1) neres along Livi ced Iron (C4) ction in Plowed (C7) | | Walls See Driver Driver Driver Critical See See See See See See See See See Se | ater Marks (B1) | (B2) (Riverine) (Riverine) (B10) (B10) (Table (C2) (C8) (C8) (D3) |
| Water Table | ter Present? Yes Present? Yes Present? Yes pillary fringe) | s No _ s No _ | Depth (inches): | | | | Present? Y | es <u>/</u> No |
| includes ca | | | well, aerial photos, pre | and a complete and a Com- | | o' | | |



| Project/Site: / / sente Property Applicant/Owner: Tk Cunsulting estigator(s): N. Tallown C. Santalu Landform (hillslope, terrace, etc.): Lat: Subregion (LRR): Lat: Soil Map Unit Name: Musich - Ultic Haplexer alfo Are climatic/hydrologic conditions on the site typical for this time Are Vegetation Soil or Hydrology significant Are Vegetation , Soil or Hydrology naturally SUMMARY OF FINDINGS - Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No | Section/To Local Relie of years? Yes ntly disturbed? A problematic? N sampling poli | wnship/Rang of (concave, c Long: NWI Classi Are "No (If neede | e: |
|---|---|---|---|
| estigator(s): N. Tallance C. Santala Landform (hillslope, terrace, etc.): L. I. Log c Subregion (LRR): Lat: Soil Map Unit Name: Mrs. L Ult. L. Haplax et al f Are climatic/hydrologic conditions on the site typical for this time Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS - Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | Section/To Local Relie of years? Yes ntly disturbed? A problematic? N sampling poin | wnship/Rang of (concave, cong): NWI Classi Are "No | e: |
| Landform (hillslope, terrace, etc.): Lat: Subregion (LRR): Lat: Soil Map Unit Name: Musich - Ultic Haplexer alts Are climatic/hydrologic conditions on the site typical for this time Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS — Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | of years? Yes ntty disturbed? My sampling police. | Long:NWI Classi | Slope (%): ()-5 % Datum: fication: (if no, explain in Remarks) ormal Circumstances" present? Yes No ed, explain any answers in Remarks) |
| Subregion (LRR): Lat: Soil Map Unit Name: No Lat: Lat: Soil Map Unit Name: No Lat: | of years? Yes ntly disturbed? A problematic? N sampling poin | Long:NWI ClassiN Are "No | fication: |
| Soil Map Unit Name: Musick - Ultic Huplexer also Are climatic/hydrologic conditions on the site typical for this time Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS - Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | of years? Yes ntty disturbed? A problematic? N sampling poin | NWI Classi Are "No (If neede | fication: (if no, explain in Remarks) ormal Circumstances" present? Yes No ed, explain any answers in Remarks) |
| Soil Map Unit Name: Mrs. Lk-Ulic Haplager alfs Are climatic/hydrologic conditions on the site typical for this time Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS — Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | of years? Yes ntty disturbed? A problematic? N sampling poin | NWI Classi Are "No (If neede | fication: (if no, explain in Remarks) ormal Circumstances" present? Yes No ed, explain any answers in Remarks) |
| Are climatic/hydrologic conditions on the site typical for this time Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS — Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | of years? Yes ntly disturbed? A problematic? N sampling poin | Are "No | No (if no, explain in Remarks) ormal Circumstances" present? Yes/ No ed, explain any answers in Remarks) |
| Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS — Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | problematic? N | Are "No | ormal Circumstances" present? Yes Noed, explain any answers in Remarks) |
| Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS — Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | problematic? N | (If neede | ed, explain any answers in Remarks) |
| SUMMARY OF FINDINGS — Attach site map showing Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | sampling poin | * | |
| Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No | Ist Ist | | , transcots, important reatures, etc. |
| Hydric Soil Present? Yes No | 1 15 1 | | 7 7 |
| Wetland Hydrology Present? Yes No | | he Sampled | |
| | wit | hin a Wetlan | Yes No |
| Remarks: Area previously mapped as a vetland - | wetland from | tures app | ear to have shrunk to smaller concove |
| depression around Sps. JA. This regelation has community | weak signs | of wetla | nd parameters but does not most the |
| wetland definition. | <i>t</i> | F 200 A 27 - 18 | |
| VEGETATION | | | |
| Absolute | Dominant | Indicator | Dominance Test Worksheet: |
| <u>Tree Stratum</u> (Plot size:) | Species? | Status | Number of Dominant Species That Are OBL FACW or FAC: |
| 2 | | | That Are OBL, FACW, or FAC:(A) |
| 3. | | | Total Number of Dominant Species Across All Strata: (B) |
| 4 | Total Cover | | Percent of Dominant Species |
| Sapling/Shrub Stratum (Plot size:) | - Total Cover | | That Are OBL, FACW, or FAC: 0/1=0 (A/B) |
|) | | | Prevalence Index Worksheet: |
| 2 | * | | OBL species |
| 3 | - | | FACW species 0/1 X2 0/2 |
| | Total Cover | | FAC species 3 X3 9 |
| Herb Stratum (Plot size: SA) | | 1000 | FACU species |
| | | FALL/OBL | Column Totals: (A) 25/3/6 (B) |
| 1. June 50 2. Briza n. ~61 4 | | FAL | Prevalence Index = B/A = 15, 16/8:3.1 pr 3. |
| 3. Horden marmin sip bysenow 8 | | EAC | Hydrophytic Vegetation Indicators: |
| 4. Festive myuros 6 5. Bruns sitelensis var. enjoylas 66 | | FALU | Dominance Test is >50% |
| 6. Eratwarder guttata 3 | | OBL | Prevalence Index is ≤3.01 |
| 7. Runge clisyns 1 | | FAL | Morphological Adaptations¹ (Provide |
| 8. Epilobium Coliosum | T-1-1 O | _NL_ | supporting data in Remarks or on a separate sheet) |
| 92 = | = Total Cover | | Problematic Hydrophytic Vegetation¹ (Explain) |
| Woody Vine Stratum (Plot size:) | | | ¹ Indicators of hydric soil and wetland hydrology must be |
| 1 | - | | present, unless disturbed or problematic. |
| | = Total Cover | | Hydrophytic Vegetation Yes No |
| "Bare Ground in Herb Stratum: 8 % Cover o | f Biotic Crust | | Present? |
| 500000 10-00 1X 3X 38X 5X | | rand . | |
| Remarks: Small amounts of hydrophylic ver that is now shrinking or due to | petation pre | serer - pp | thaps remnants of older larger wetland |
| that is now shrinking or due to | partial s | oil satu | ration, |
| | | | |



| SOIL | | | | | | V | S | ampling Point SPS | v9B |
|---|--|------------------------------|---|--|-------------|---------------------------|---|--|------|
| Profile Desi | cription: (Describe | the depth need | ed to document the i | ndicator or conf | irm the al | bsence of ind | icators) | | |
| Depth | Mat | trix | 1 | Redox Fe | atures | - | | | (|
| (inches) 0-/0 | 2.57 5/3 | Percent 93 | Color (moist) 1.57k 5/6 | Percent 7 | Type¹ | M Loc² | Texture | Remarks | |
| | | | | | | | | | |
| ¹Type: C = 0 | Concentration, D = Do | epletion, RM = R | reduced Matrix, CS = | Covered or Coate | ed Sand G | rains. ² Loca | tion: PL = Pore | Lining, M = Matrix | |
| Hydric Soil | Indicators: (Applica | able to all LRRs | , unless otherwise n | oted) | | Indicators f | for Problematic | Hydric Soils ³ : | |
| Histir Black Hydr Strat 1 cm Depl Thick | osol (A1) c Epipedon (A2) k Histic (A3) ogen Sutfide (A4) ified Layers (A5) (LRI Muck (A9) (LRR D) eted Below Dark Surf k Dark Surface (A12) dy Mucky Mineral (S1) | face (A11) | Loamy Gleye Depleted Ma Redox Dark | rix (S6) y Mineral (F1) ed Matrix (F2) trix (F3) Surface (F6) rk Surface (F7) essions (F8) | | 2 cr Rec Rec Oth | m Muck (A9) (LR m Muck (A10) (L duced Vertic (F18 d Parent Material er (Explain in Re | RR B) 3) (TF2) marks) egetation and | |
| Sand | dy Gleyed Matrix (S4) | li . | | | | | ydrology must be or problematic. | present, unless | ļ. |
| Type: Depth (inc | | 20 | Value than Sp | SU 9A and | | Hydric Soil Pr | esent? Yes_ | No_V | -0 |
| HYDROLO | IGY | | | | | | | - | |
| | drology Indicators: | | 2000 | | | Sacai | ndanı İndicatori | : /2 or mara requir | /bos |
| Primary India Surface High Wa Saturatic Water M Sedimen Drift Dep Surface | cators (minimum of or Water (A1) ster Table (A2) | ine) nriverine) rine) | ck all that apply) Salt Crust (B11) Biotic Crust (B12 Aquatic Invertebric Hydrogen Sulfide Oxidized Rhizosperesence of Red Recent Iron Reder Thin Muck Surfar Other (Explain in | rates (B13) a Odor (C1) pheres along Livir luced Iron (C4) luction in Plowed S ce (C7) | | | ater Marks (B1) | (B2) (Riverine) (Riverine) (B10) Table (C2) C8) on Aerial (C9) D3) | edj |
| Field Obser | vations: | | | | ĺ | | | | 8 |
| Water Table Saturation P | Present? Yes | s No _ s No _ s No _ | |): | Wetla | and Hydrology | y Present? Ye | es No/ | _ |
| Describe Re | corded Data (stream | gage, monitoring | g well, aerial photos, p | revious inspectio | ns), if ava | ilable: | | | |
| Remarks: Could res | No obvious int on drainage sumple plot | hydric indices to the Spsw9A | utors present. Site. No a | Potentially Igal matting | a ver | s slight although | concure top | ography which | |



APPENDIX C

Photographs





Photo 1. Representative view of a portion of Seasonal Wetland (SW) 6 (aspect west; 7/21/20).



Photo 2. Representative view of SW9 (aspect northeast; 7/21/20).





Photo 3. View of standpipe/culvert at the eastern terminus of the saturated section of the Intermittent Channel (CF4) (aspect southeast; 7/21/20).



Photo 4. Representative view of saturated section of Intermittent Channel (aspect southwest; 7/21/20).





Photo 5. Intermittent Channel (Arroyo) continuing off-site (aspect southwest; 7/21/20).



Photo 6. Off-site culvert where Intermittent Channel (Arroyo) flows under adjacent parking lot towards Rattlesnake Creek (7/21/20).





Photo 7. Representative view of Ephemeral Riparian Channel (CF16) (aspect west; 7/21/20).



Photo 8. Man-made pond (aspect north, 7/21/20).





Photo 9. Representative view of Channel Feature (CF) 9 (aspect southeast; 7/21/20).



Photo 10. Representative view of CF14 (aspect northeast; 7/21/20).





Photo 11. Representative view of CF26 (aspect east; 7/21/20).



Photo 12. Representative view of the ephemeral portion of CF4 (Arroyo) east of the Intermittent Channel section (aspect northeast; 7/21/20).





Photo 13. View from Memorial Drive (aspect southwest; 7/21/20).



Photo 14. Representative view of the northeastern portion of the Project Site along Highway 120 (aspect west; 7/21/20).

APPENDIX D

Plant List

Vascular Plant List Species Observed within the BSA

Yonder Yosemite Property, Tuolumne County, California

| Scientific Name | Common Name | Habit | Indicator Status | Family |
|-----------------------------------|------------------------|-------|------------------|----------------|
| Acmispon americanus | Spanish lotus | AH | UPL | Fabaceae |
| Alnus rhombifolia | White alder | Т | | Betulaceae |
| Acrotstaphylos manzanita | Manzanita | S | | Ericaceae |
| Aira caryophyllea* | Silver hairgrass | AG | FACU | Poaceae |
| Arctostaphylos viscida | White-leaved manzanita | S | | Ericaceae |
| Artemisia douglasiana | California mugwort | PH | FAC | Asteraceae |
| Avena barbata* | Slim oat | AG | | Poaceae |
| Brassica nigra* | Black mustard | AH | | Brassicaceae |
| Briza minor* | Little quaking grass | AG | FAC | Poaceae |
| Bromus sitchensis var. carinatus | California brome | AG | | Poaceae |
| Bromus diandrus* | Ripgut brome | AG | | Poaceae |
| Bromus hordeaceus* | Soft chess brome | AG | | Poaceae |
| Carex densa | Sedge | PH | OBL | Cyperaceae |
| Ceanothus cuneatus | Buck brush | S | | Rhamnaceae |
| Centromadia fitchii | Spikeweed | AH | FACU | Asteraceae |
| Centaurea solsticialis* | Yellow starthistle | AH | | Asteraceae |
| Centaurea stoebe ssp. micranthos* | Spotted knapweed | AH | • | Asteraceae |
| Croton setiger | Turkey-mullein | AH | • | Euphorbiaceae |
| Cynodon dactylon* | Bermuda grass | PG | FACU | Poaceae |
| Cyperus eragrostis | Tall flatsedge | PH | FACW | Cyperaceae |
| | Kern tarweed | AH | FACVV | Asteraceae |
| Deinandra pallida | | | • | |
| Dittrichia graveolens* | Stinkwort | AH | • | Asteraceae |
| Elymus caput-medusae* | Medusa head | AG | | Poaceae |
| Eleocharis macrostachya | Creeping spikerush | PH | FACW | Cyperaceae |
| Elymus elymoides | Squirreltail | PG | FACU | Poaceae |
| Epilobium brachycarpum | Willow herb | AH | | Onagraceae |
| Epilobium foliosum | California willow herb | AH | | Onagraceae |
| Ericameria arborescens | Golden-fleece | S | | Asterceae |
| Eriogonum nudum | Buckwheat | S | | Polygonaceae |
| Eriodictyon californicum | Yerba santa | S | | Boraginaceae |
| Erysimum capitatum var. capitatum | Western wallflower | AH | | Brassicaceae |
| Erythranthe guttata | Creek monkeyflower | AH | OBL | Phrymaceae |
| Festuca microstachys | Small fescue | AG | | Poaceae |
| Festuca myuros* | Rattail fescue | AG | • | Poaceae |
| Festuca perennis* | Italian rye grass | PG | FAC | Poaceae |
| Galium sp. | Bedstraw | AH | | Rubiaceae |
| Gastridium phleoides* | Nit Grass | AG | FACU | Poaceae |
| Grindelia camporum | Gumweed | PH | FACW | Asteraceae |
| Heteromeles arbutifolia | Toyon | S | | Rosaceae |
| Hirschfeldia incana* | Mediterranean mustard | AH | | Brassicaceae |
| Holocarpha virgata | Narrow tarplant | AH | | Asteraceae |
| Hordeum brachyantherum | Meadow barley | PH | FACW | Poaceae |
| Hordeum marinum ssp. gussoneaum* | Foxtail barley | AG | FACU | Poaceae |
| Juncus bufonius | Toad rush | AG/H | FACW | Juncaceae |
| Juncus effuses | Lamp rush | PG/H | FACW | Juncaceae |
| Lactuca Serriola* | Prickly lettuce | AH | FACU | Asteraceae |
| Lathyrus latifolius* | Perennial sweet pea | PH | 17100 | Fabaceae |
| Lupinus sp. | Lupine | Н | • | Fabaceae |
| Mentha pulegium | Pennyroyal | PH | OBL | Lamiaceae |
| Navarretia intertexta | Needleleaf navarretia | AH | FACW | Polemoniaceae |
| | | | | |
| Pinus ponderosa | Yellow pine | T | FACU | Pinaceae |
| Pinus sabiana | Foothill pine | T | | Pinaceae |
| Plantago lanceolata* | English plantain | PH | FAC | Plantaginaceae |
| Polygpogon monspeliensis* | Rabbitsfoot grass | AG | FACW | Poaceae |
| Pseudognaphalium californicum | California everlasting | AH | | Asteraceae |
| Quercus douglasii | Blue oak | T | | Fagaceae |
| Quercus Kelloggii | California black oak | Т | | Fagaceae |
| Quercus wislizeni | Interior live oak | Т | | Facaceae |
| Rubus ulmifolius* | Elmleaf blackberry | V/S | | Rosaceae |
| | | | | |

Vascular Plant List

Species Observed within the BSA

Yonder Yosemite Property, Tuolumne County, California

| Scientific Name | Common Name | Habit | Indicator Status | Family |
|----------------------------|----------------------|-------|------------------|----------------|
| Rubus aremeniacus* | Himalayan blackberry | S | FAC | Rosaceae |
| Rumex crispus* | Curly dock | AH | FAC | Polygonaceae |
| Rumex acetosella* | Sheep sorrel | PH | FACU | Polygonaceae |
| Salix laevigata | Red willow | S/T | FACW | Saliaceae |
| Salix lasiolepis | Arroyo willow | Т | FACW | Salicaceae |
| Torilis arvensis* | Tall sock destroyer | AH | | Apiaceae |
| Toxicodendron diversilobum | Poison Oak | PH | | Anacardiaceae |
| Tribulus terrestris* | Puncture vine | AH | | Zygophyllaceae |
| Trichostema lanceolatum | Vinegarweed | AH | FACU | Lamiaceae |
| Vicia sp. | Vetch | AH | | Fabaceae |
| Xanthium strumarium | Rough cocklebur | AH | FAC | Asteraceae |

Notes: Scientific nomenclature follows Baldwin (2012).

An "*" indicates non-native species which have become naturalized or persist without cultivation.

An "." indicates that no indicator has been assigned dur to lack of information to determine indicator status; or is not listted and assumed upland species.

Habit definitions:

Wetland indicator status (Lichvar and Kartesz, 2016): OBL (Obligate Wetland Plants)- Almost always occur in wetlands. AG - Annual grass.

FACW (Facultative Wetland Plants) - Usually occur in wetland, but may occur in non-wetla

PG - Perennial grass. FAC (Facultative Wetland Plants) - Occur in wetlands and non-wetlands.

FACU (Facultative Upland Plants) - Usually occur in non-wetlands, but may occu

UPL (Upland Plants) - Almost always occur in non-wetlands.

AH - Annual herb.

PH - Perennial herb. PV - Perennial vine.

S - Shrub T - Tree

APPENDIX E

OHWM Datasheet

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

| Project: YYWetland Delineation | Date: 7/21/20 Time: 0845 | | | | | |
|---|--|--|--|--|--|--|
| Project Number: 2002-4721 | Town: Groveland State: CA | | | | | |
| Stream: Arroyo (CF4) | Photo begin file#: Photo end file#: | | | | | |
| Investigator(s): C. Santala, N. Tallman | , phone Phone as | | | | | |
| Y ☑/N ☐ Do normal circumstances exist on the site? | Location Details: Adjacent to Highway 120; Between Greveland & Big Oak Flot | | | | | |
| Y ⋈ / N ☐ Is the site significantly disturbed? | Projection: Datum: NAD 1983 Coordinates: | | | | | |
| Potential anthropogenic influences on the channel system: Past grading, construction (gas station), facilities abandonment, adjoicent impormable pavid roads | | | | | | |
| Brief site description: Approximately 31 acres, sluping generally we tree, should herbaceous vegetation sparse to bare, rocky soils. | St, previously cleared a graded, with dense, palchy cover throughout, Atlas of | | | | | |
| X Vegetation maps ☐ Results X Soils maps ☐ Most r ☐ Rainfall/precipitation maps ☐ Gage l | ber: | | | | | |
| Hydrogeomorphic F | Floodplain Units | | | | | |
| Active Floodplain | Low Terrace | | | | | |
| Low-Flow Channels | OHWM Paleo Channel | | | | | |
| Procedure for identifying and characterizing the flood | plain units to assist in identifying the OHWM: | | | | | |
| Walk the channel and floodplain within the study area vegetation present at the site. Select a representative cross section across the channel. Determine a point on the cross section that is character a) Record the floodplain unit and GPS position. Describe the sediment texture (using the Wentworth floodplain unit. Identify any indicators present at the location. Repeat for other points in different hydrogeomorphic floodplain. | Draw the cross section and label the floodplain units. istic of one of the hydrogeomorphic floodplain units. class size) and the vegetation characteristics of the | | | | | |
| 5. Identify the OHWM and record the indicators. Record | | | | | | |
| Mapping on aerial photograph | GPS | | | | | |
| Digitized on computer | Other: | | | | | |

| Project ID: 2002-472 Cross section ID: C | F4 Date: 7/21/20 Time: 0845 |
|---|---|
| Cross section drawing: | |
| OHWM LE AF | |
| <u>OHWM</u> | |
| GPS point: <u>CF4-OHWM</u> | |
| Indicators: Change in average sediment texture Change in vegetation species Change in vegetation cover | Break in bank slope Other: Other: |
| Comments: Incised channel, bands almost vertice narrow | al, other indicators slightly above LF |
| | |
| Floodplain unit: Low-Flow Channel | ☐ Active Floodplain ☐ Low Terrace |
| GPS point: CF4 - LF | |
| Characteristics of the floodplain unit: Average sediment texture: redum Sand + pebl Total veg cover: 40 % Tree: 6 % Shrul Community successional stage: NA Early (herbaceous & seedlings) | ble/wbble b: 2 % Herb: 38 % Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) |
| Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches | Soil development Surface relief Other: Other: Other: |
| Comments: Vegetation sparse to moderate over- Junas sp., willow (s. laevigala), d | Sedge (C. densa), Nitgrass (6. phleoides), |

| Project ID: 2002-4672 Cross section ID: CF4 Date: 7/21/20 Time: 0900 |
|---|
| Floodplain unit: Low-Flow Channel |
| GPS point: <u>CFY-AF</u> |
| Characteristics of the floodplain unit: Average sediment texture: |
| Indicators: Mudcracks Soil development Surface relief Drift and/or debris Presence of bed and bank Benches Other: Other: |
| Comments: |
| Namow finersed channel, regulation (spark to moderate & dumpy) mustly @ LF, AF delivation generally at sundy break out the of vertical ended bounk |
| |
| |
| Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace |
| GPS point: CF4- LT |
| Characteristics of the floodplain unit: Average sediment texture: Sandy it gravel Total veg cover: 50 % Tree: 6 % Shrub: 5 % Herb: 45 % Community successional stage: NA Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees) |
| Indicators: Mudcracks Soil development Surface relief Drift and/or debris Presence of bed and bank Benches Comments: |
| Dng, topography flot, come madride grading adjacent to north vegetation remnant/lax siara |
| |

APPENDIX F

Preliminary Wetland Delineation (LSA, 2010) Final Waters of the United States Map (LSA, 2011) November 24, 2010

Kathy Norton, Project Manager U.S. Army Corps of Engineers 1325 J Street, Room 1480 Sacramento CA 95814-2922

Subject: Request for Verification of Wetland Delineation, Yosemite Gateway Plaza Project

Site, Tuolumne County, California

Dear Ms. Norton:

On behalf of Strange Resource Management, LSA Associates, Inc. (LSA) is requesting confirmation of the extent of U.S. Army Corps of Engineers (Corps) jurisdiction under Section 404 of the Clean Water Act on the Yosemite Gateway Plaza Project Site, Tuolumne County, California. This letter reports the results of a delineation by LSA of the potential extent of waters of the United States, including wetlands, on the project site.

SITE DESCRIPTION

The study site is an approximately 42 acre property located along the southwestern side of State Highway 120, approximately ½ mile northeast of the Village of Big Oak Flat and 1 mile southwest of the Town of Groveland in unincorporated Tuolumne County (Figures 1 and 2). The study site comprises assessors parcels 06-380-04, 06-380-49, 06-380-52, 06-380-53, 06-380-56, 06-401-03, and portions of 06-380-61, 06-380-62, and 06-380-63 in Tuolumne County. The site is located within the northwestern 1/4 of Sections 29, Township 1 South, Range 16 East on the Groveland, California, 7.5 minute USGS quadrangle. The study site centered at approximately 37.830° N latitude and 120.246° W longitude.

The site is accessed from Highway 12, with parking available in an abandoned gas station pull-out located near the center of the project site or off Memorial Drive, which extends southeast from the highway through the project site to the Divide Cemetery.

The majority of the project site is a graded and filled pad, graded for mixed-use commercial development in approximately 1986. The central portion of the site contains abandoned gas station buildings along the highway and depressions where underground fuel tanks were removed. An abandoned above-ground water tank straddles the eastern site boundary. The northeastern and eastern portions of the site are relatively undisturbed hillside with some roadways and power poles. The site has no other structures. Site elevations range from approximately 2,900 to 3,300 feet above mean sea level. The site slopes to the west, gently on the graded pad and more steeply on the hillsides. Adjacent land uses are industrial and residential to the west; forest and chaparral to the north, east, and south; and a cemetery to the south.

Trees on the graded and filled pad includes ponderosa pine (*Pinus ponderosa*), interior live oak (Quercus wislizeni), and whiteleaf manzanita (Arctostaphylos viscida), along with arroyo and red willow (*Salix lasiolepis* and *S. laevigata*) in wetter areas. Shrubs on the graded pad include buckbrush (*Ceanothus cuneatus*), Himalayan blackberry (*Rubus discolor*), and yerba santa (*Eriodictyon californicum*). Grasses and forbs on the graded pad include wild oats (*Avena* sp.), Italian rye (*Lolium multiflorum*), medusa head (*Taeniatherum caput-medusae*), ripgut (*Bromus diandrus*), nit grass (*Gastridium ventricosum*), tarweed (*Holocarpa virgata*), spotted knapweed (*Centaurea maculosa*), and Spanish clover (*Lotus pursheanus*). Vegetation in the more undisturbed forested areas also includes gray pine (*Pinus sabiniana*), California black oak (*Quercus kelloggii*), scrub oak (*Q. berberidifolia*), white alder (*Alnus rhombifolia*), toyon (*Heteromeles arbutifolia*), poison oak (*Toxicodendron diversilobum*), and deer brush (*Ceanothus integerrimus*).

Highway 120 drains onto the graded pad. The relatively undisturbed eastern portions of the site drain to the graded pad via swales and sheet flow. No channels or gullies were observed upslope from the graded pad. The graded pad is drained by a combination of underground stormwater piping, constructed ditches, and eroded gullies that flow generally westward into a natural, incised channel which flows into a 2-foot diameter culvert at the western site boundary. The culvert daylights into the continuation of the incised channel approximately 100 feet to the southwest of the site. This channel continues to the southwest and is shown on the Groveland, California, 7.5 minute USGS quadrangle as a dashed-line intermittent blue-line stream named Rattlesnake Creek, starting approximately 700 feet southwest of the site. Rattlesnake Creek flows southwestward to the settlement of Priest where the USGS quadrangle shows it draining both northwestward into an un-named stream that drains to the Moccasin Reservoir and southeastward into Priest Reservoir. Overflow from Priest Reservoir drains back into Rattlesnake Creek, which is tributary to Moccasin Creek and the Moccasin Reservoir. The Moccasin Reservoir drains to the Don Pedro Reservoir, an impoundment of the Tuolumne River. The Tuolumne River is tributary to the San Joaquin River, a traditional navigable water of the United States

METHODS

LSA soil scientist Chip Bouril and Strange Resource Management biologist Terry Strange investigated the site on 11 and 12 September 2010.

The presence of potential wetlands was determined by applying the parameters outlined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the revised procedures in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (U.S. Army Corps of Engineers 2008). This method assesses the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. All of these parameters must be satisfied for an area to be considered a jurisdictional wetland.

LSA established 12 sample points on the study site.

Wetland boundaries and sample point locations were mapped using a global position system (GPS) receiver with sub-meter accuracy. Wetland boundaries were determined by following a combination of the limits of hydrophytic vegetation species, the limits of observed wetland hydrology, and topographic breaks.

OBSERVATIONS

Headwater of Rattlesnake Creek

The entire study site drains to a natural appearing, incised channel located in the westernmost corner of the site. This incised channel extends upstream from a culvert inlet at the western site boundary for approximately 550 feet to where it transitions into be what appear to be recently gullied channels which have cut sub-rectangular patterns across the recently graded portions of the site. After passing through a 100-foot long culvert, this channel continues to the southwest and is shown on the Groveland, California, 7.5 minute USGS quadrangle as a dashed-line intermittent blue-line stream named Rattlesnake Creek, starting approximately 700 feet southwest of the site. The 550-foot reach of channel is contained within a gradually-sloped ravine which is vegetated with mature trees and almost total understory cover, thus appearing to be naturally formed and relatively undisturbed. This reach of the channel is therefore interpreted as a jurisdictional stream.

The channel is this reach is approximately 4 feet wide and was flowing during the September 2010 site investigation. None of the upstream gullies contained any water at this time. This entire reach of stream bed was coated with orange-colored iron bacteria deposits, indicating that this reach of stream was being fed by iron-laden spring water surfacing along the steeper-gradient eastern portion of its reach.

Outfall from a culvert crossing under the highway drains into this stream reach in a 2-foot wide channel (RC1-1) that shows sufficient scour and bed and bank development that it may be interpreted as jurisdictional.

Gullies

The majority of the study site is a graded pad that slopes toward the west, which is also somewhat toward the highway and toward the headwater channel of Rattlesnake Creek. The average pad slope is approximately 7 percent, but ranges from 5 to 25 percent. The graded pad was constructed in approximately 1986 for a mixed-use commercial development, but the project was soon abandoned and the grading, underground storm drains, and surface drainage features were never completed. The surface of the graded pad consists of either granitic grus sand or grusified weathered granitic bedrock, with very little soil development, typically only a slight increase in organic matter and fines near the surface. The pad is covered with a relatively dense pattern of gullies, some flowing directly down slope, but most flowing diagonal to the slope, following either stormwater pipe trenches, which are mostly parallel to the highway, or excavated drainage ditches, which are mostly perpendicular to the highway.

The combination of two factors has favored the formation of so many gullies. First, the site vegetation and topsoil were removed, leaving unprotected bare surfaces. When the site development project was abandoned, the incompleted drains and ditches were also abandoned and not maintained.

Second, the granitic sand and grusified granitic bedrock exposed on the surface are both highly erodible materials, susceptible to water erosion and gullying.

The gullies range in size from 1-foot wide and 6-inches deep to vertical sided 2 to 4-foot wide and 8-foot deep reaches near the Rattlesnake Creek headwater channel. Most of the gullies begin on the graded pad. Two of the gullies extend to locations on the steep cut slope at the edge of the pad. One begins at a shotgun culvert under Memorial Drive, where the culvert's outfall has carved a 60' long by 10-foot deep chasm. Downstream of the chasm, the gully becomes shallow and only 1 to 2 feet wide. The second begins at a location where drainage from part of the cemetery and adjacent hillside meets the cut bank. At this location, stormwater runoff has carved a similar chasm in the cut bank. Below the cut bank's eroded and slumped chasm, the gully is similarly shallow and only 1 to 2 feet wide.

None of the adjacent lands upslope from the graded pad has any gullies or any drainage channels with scour or bed and bank; stormwater runoff from larger rainfall events sheets down slope in wide swales that are completely vegetated and don't show any signs of sediment movement. An approximately 6-acre watershed that drains toward the pad in a culvert under Memorial Drive and into the underground stormwater piping has no concentrated flow channel, only a wide swale. The up-to-8-acre watershed that drains to the shotgun culvert has no defined drainage channels, only a constructed ditch along the upslope side of Memorial Drive. The approximately 20-acre watershed, which includes the cemetery and drains to the eroded and slumped chasm at the edge of the graded pad, similarly has no concentrated drainage channels with bed and bank or sediment movement. Similarly, the hill slopes that drain westward across the ungraded southern end of the study site have only wide, completely vegetated swales, no channels with bed and bank.

The watersheds upslope from the graded pad, with their natural chaparral and forest vegetation and their natural topsoil, do not erode into gullies or develop any concentrated drainage channels. The lack of any defined channels or gullies in the undisturbed watersheds upslope of the graded pad argues strongly that the gullying on the pad is the result of the grading and subsequent abandonment of a very erodible granite sand substrate without any erosion protection or management. The Corps generally does not assert CWA jurisdiction over purely erosional features. Thus, it appears that at least most of the gullies on the graded pad would be determined by the Corps to be non-jurisdictional.

Alternatively, potential former upstream reaches of the existing natural headwaters channel of Rattlesnake Creek, located on the westernmost corner of the site, may have been disturbed or removed by past site grading. Therefore, some segments of the gully segments observed on the graded pad could be interpreted as replacing natural stream channels segments present on the site prior to grading. These gully segments could therefore be considered potentially jurisdictional as replacing natural jurisdictional stream segments.

For this preliminary version of the delineation, no jurisdictional determination is being made for the gullies on the graded pad, pending on-site consultation with Corps staff. Instead, the preliminary version of the Figure 3 delineation map included with this report is being submitted with a provisional distinction between the larger and longer gullies and smaller, shorter gullies, but no jurisdictional determination.

These ditches, culverts, and gullies are mapped as non-jurisdictional features on Figure 3.

Seasonal Wetlands

Sample Points 3 and 4 were placed at an extremely shallow northward-draining basin created by past site grading. The basin contains an algal mat indicating seasonal ponding and a patch of needle-leaved navarretia (*Navarretia intertexta*), not seen elsewhere on the site. No redoximorphic mottling was observed in the upper six inches of soil, but this may be a consequence of the sandy soil texture or some other factor. Hydric soil criteria are arguably met by the clear evidence of wetland hydrology. The basin is thus mapped as Seasonal Wetland A, with a potentially jurisdictional area of 215 sq. ft (0.005 acre).

Sample Point 5 was placed in a wide basin within one of the ephemeral gullies that is predominantly vegetated with toad rush (*Juncus bufonius*). The soil contains common redoximorphic mottling and vegetation debris in the basin had water stains. This area meets jurisdictional wetland criteria to the limit of its hydrophytic vegetation and is mapped Seasonal Wetland B, with potentially jurisdictional area of 170 sq. ft (0.004 acre).

A 2-foot wide and approximately 85-foot long segment of gully has a shallow gradient and is predominantly vegetated with rabbit's-foot grass (*Polypogon monspeliensis*), soft rush (*Juncus effuses*), and seep-spring monkey flower (*Mimulus gutattus*), indicating seasonal ponding and soil saturation. No sample point was placed in this segment. This gully segment is mapped as Seasonal Wetland C, with potentially jurisdictional area of 170 sq. ft (0.004 acre).

Sample Point 1 was placed in a similar, but 20-foot long, segment of gully, which is predominantly vegetated with Mediterranean barley (*Hordeum marinum*), Italian rye, and toad rush. Redoximorphic soil mottling and algal matting indicate seasonal ponding. This gully segment is mapped as Seasonal Wetland H, with potentially jurisdictional area of 40 sq. ft (0.001 acre).

Seasonal Seep Wetlands

Young willows growing at some locations on the graded pad indicate seasonal seepage from the granitic bedrock underlying the pad. All soil observed on the pad, including at the areas surrounding the willows, was dry during the field investigation and most locations with willows did not have any other hydrophytic plant species present. Therefore, other than in exceptions described below, the willows do not indicate jurisdictional wetland characteristics.

Sample Point 11 was placed in a flat and possibly slightly concave area vegetated with nut sedge (*Cyperus eragrostis*) and an unidentified sedge (*Carex* sp.) that appears to be the location of a weak seasonal seep. No surface indicators of wetland hydrology were observed, but the soil displays common redoximorphic mottling that indicates seasonal soil saturation and reduction. The vegetation in this feature also includes Spanish clover, an upland indicator species, which increases in cover surrounding the feature (Sample Point 12). This feature is mapped, to the limit of the area with vegetation that meets jurisdictional hydrophytic plant criteria, as Seasonal Wetland E, with a potentially jurisdictional area of 285 sq. ft (0.007 acre).

Another flat and possibly shallowly concave area just down slope from Seasonal Wetland E is vegetated with rabbit's-foot grass and a rush species, and which shows evidence of seasonal soil saturation from the uphill seep is mapped as Seasonal Wetland D, with a potentially jurisdictional area of 160 sq. ft (0.004 acre).

Sample Points 8 and 9 were placed at a shallow basin vegetated with brown-headed rush (*Juncus phaeocephalus*), rabbit's-foot grass, and little quaking grass (*Briza minor*), which appears influenced by as seasonal seep. The soil shows common redoximorphic mottling and algal matting at the surface, indicating seasonal soil saturation and ponding (Sample Point 8). The surrounding area has predominantly non-hydrophytic plant species and no evidence of soil saturation or ponding (Sample Point 9). The area vegetated with rush and rabbit's-foot grass, including a willow thicket, is mapped as Seasonal Wetland G, with a potentially jurisdictional area of 1,070 sq. ft (0.025 acre).

Sample Point 10 was placed in a flat and possibly slightly concave area down slope from Seasonal Wetland G, which is predominantly vegetated with Italian rye, but also supports curly dock (*Rumex crispus*) and Mediterranean barley. This area appears influenced by the upslope seep at Seasonal Wetland G. The soil shows common redoximorphic mottling and algal matting at the surface, indicating seasonal soil saturation and ponding. This feature is mapped, to the limit of the area with vegetation that meets jurisdictional hydrophytic plant criteria, as Seasonal Wetland F, with a potentially jurisdictional area of 135 sq. ft (0.003 acre).

Other Areas Investigated

Sample Point 2 was placed in a Himalayan blackberry patch on a terrace near the Rattlesnake Creek headwater channel. While the vegetation meets jurisdictional hydrophytic plant criteria, no hydric soil or wetland hydrology evidence was observed.

Sample Point 6 was placed in a flat area vegetated with soft rush and Himalayan blackberry, and which may be influenced by a weak seasonal seep. While the vegetation meets jurisdictional hydrophytic plant criteria, no wetland hydrology or convincing hydric soil evidence was observed.

Sample Point 7 was placed in a willow patch along the trenched route of underground stormwater piping and the route of current stormwater runoff. The understory includes a mix of upland plant species (poison oak and yerba santa) and hydrophytic species (soft rush and a sedge species). While the vegetation meets jurisdictional hydrophytic plant criteria, no evidence of hydric soil or wetland hydrology was observed.

No other evidence of potential waters of the United States was observed on the site.

RAPANOS JURISDICTIONAL DETERMINATION ANALYSIS

This section provides a description and data that the Corps will use to analyze potential changes to jurisdiction based on Corps/EPA guidance on how to comply with the U.S. Supreme Court Rapanos decision.

The headwater of Rattlesnake Creek channel terminates on the study site without any jurisdictional tributaries other than a short culvert outfall channel. Therefore this feature would be classified as a first order or possibly a second order stream on the study site. The downstream continuation of this stream is shown on the Groveland, California, 7.5 minute USGS quadrangle as a dashed-line intermittent blue-line stream named Rattlesnake Creek, starting approximately 700 feet southwest of the site. The bed of the headwater of Rattlesnake Creek channel on the site is soil with sands and cobbles transported by the stream. The watershed upstream of where this channel leaves the study site is approximately 116 acres. The headwater of Rattlesnake Creek channel was flowing during the

September field investigation and therefore likely has perennial flow. Therefore, this channel would likely be interpreted as a relatively permanent water with perennial flows within the study site.

Each of the potential seasonal wetlands delineated on the study site appear to probably overflow down slope through gullies into the headwater of Rattlesnake Creek channel during large rainfall events. Therefore, these potential wetlands would likely be interpreted as wetlands adjacent to a relatively permanent water with perennial flows.

CONCLUSIONS

Preliminary potential waters of the United States identified on the Yosemite Gateway Plaza Study Site are a stream and seasonal wetlands with a total potential jurisdictional area of 0.11 acres as summarized in Table A, below. In this preliminary report, no jurisdictional determination has been made for the gullies on the graded pad portion of the study site.

Table A: Potential Waters of the United States

| POTENTIAL WATERS OF THE UNITED STATES | | | | | | | |
|---------------------------------------|----------------|-----------------|-------------------|-----------------|--|--|--|
| | | | | | | | |
| | Width (ft.) | Length (ft.) | Area (sq. ft.) | Area (acres) | | | |
| Other Waters of the United States | | | | | | | |
| Streams (including culverts) | | | | | | | |
| Rattlesnake Creek | | | | | | | |
| RC-1 | 4 | 535 | 2,140 | 0.049 | | | |
| RC1-1 | 2 | 115 | 230 | 0.005 | | | |
| RC1-2 (culvert) | 2 | 30 | 60 | 0.001 | | | |
| Subtotal Other Waters | | 145 | 2,430 | 0.056 | | | |
| Wetlands | | | | | | | |
| Seasonal Wetlands | | | | | | | |
| SW-A | - | - | 215 | 0.005 | | | |
| SW-B | - | - | 170 | 0.004 | | | |
| SW-C | 2 | 85 | 170 | 0.004 | | | |
| SW-D | - | - | 160 | 0.004 | | | |
| SW-E | - | - | 285 | 0.007 | | | |
| SW-F | - | - | 135 | 0.003 | | | |
| SW-G | - | - | 1,070 | 0.025 | | | |
| SW-H | 2 | 20 | 40 | 0.001 | | | |
| Subtotal Wetlands | | 105 | 2,245 | 0.052 | | | |
| | | | | | | | |
| TOTAL WATERS OF THE UNITED STATES | | 250 | | 0.11 | | | |

The study site boundaries and sample point locations are mapped on Figure 3, which is attached.

The findings and conclusions presented in this report, including the location and extent of other waters subject to regulatory jurisdiction, represent the professional opinion of LSA. These findings and conclusions should be considered preliminary until verified by the Corps.

Please feel free to contact me or Malcolm Sproul at 510/236-6810 to schedule a verification visit.

Sincerely,

LSA ASSOCIATES, INC.

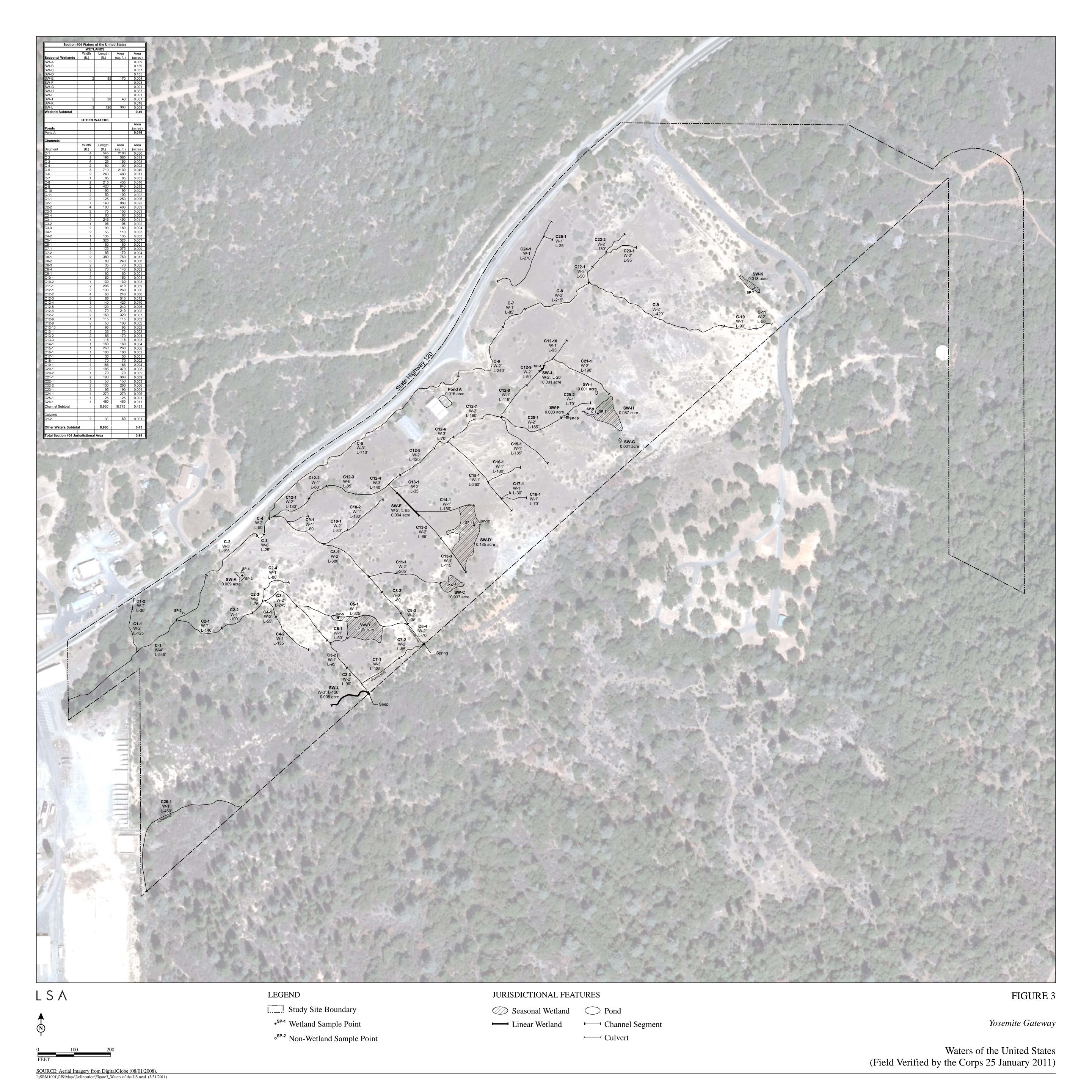
Chip Bouril Wetland Scientist

cc: Terry Strange, Strange Resource Management, PO Box 129, Wilseyville, CA 95257

Attachments: Figure 1 - Regional Location Map

Figure 2 - Site Location Map Figure 3 - Delineation Map Data Sheets 1 through 12

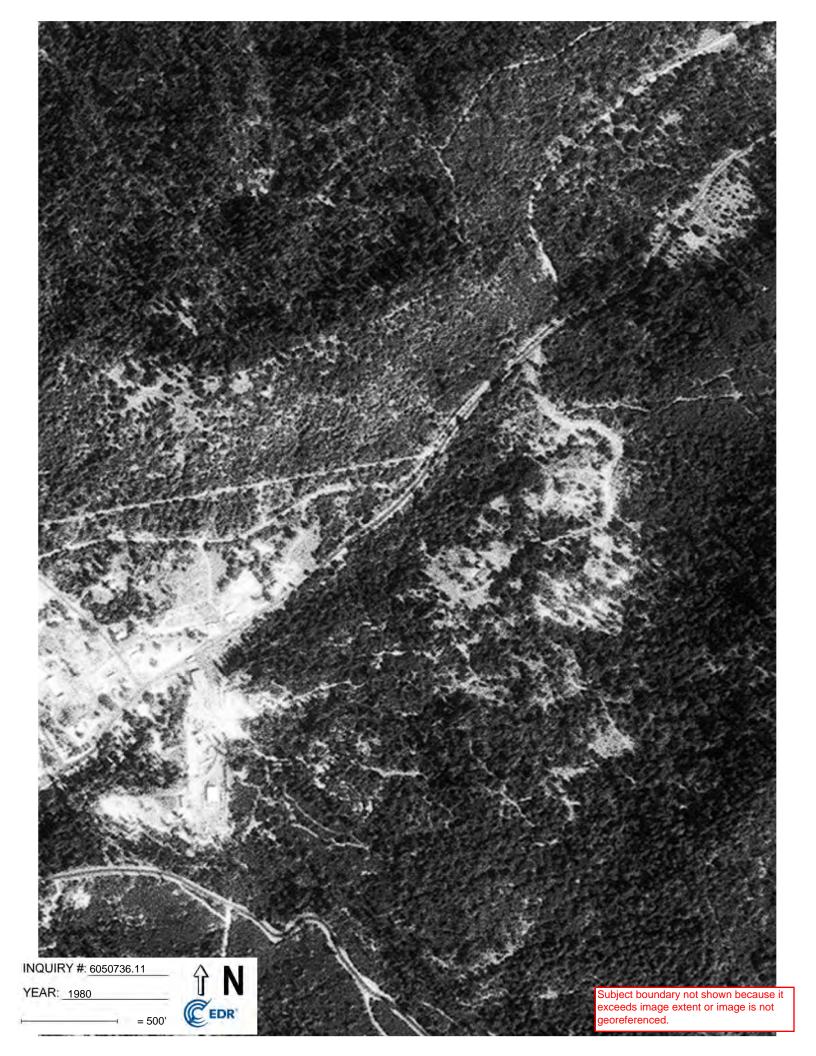


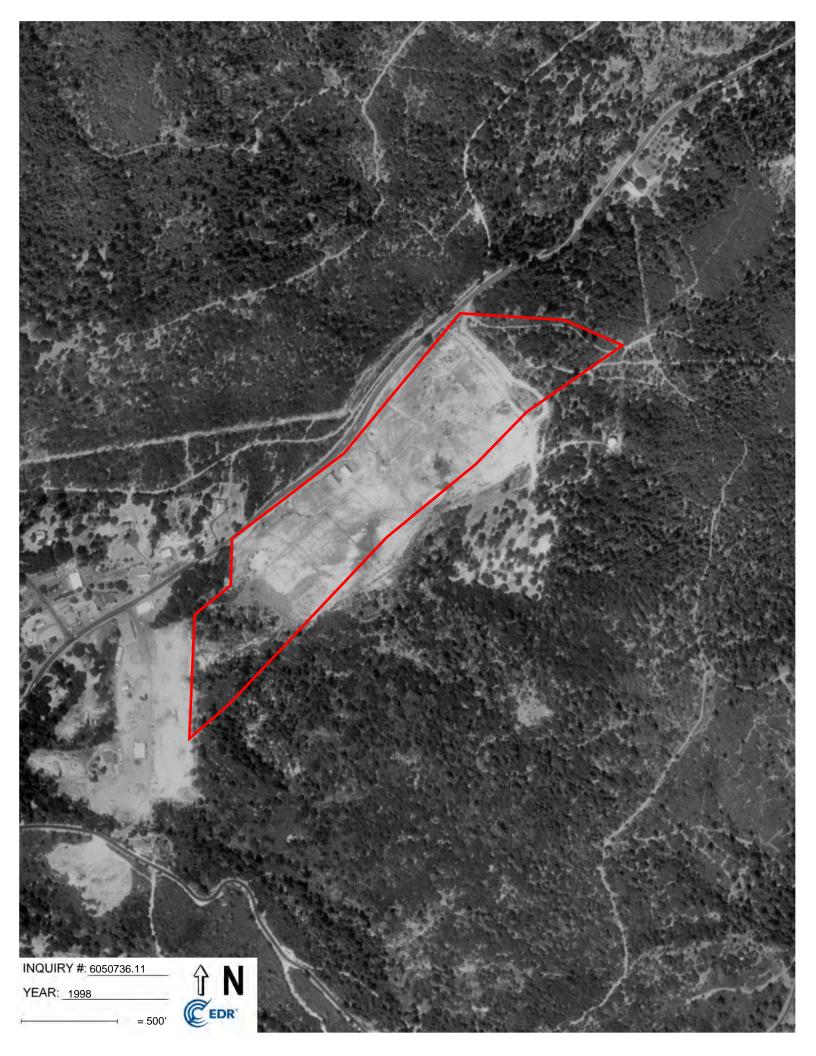


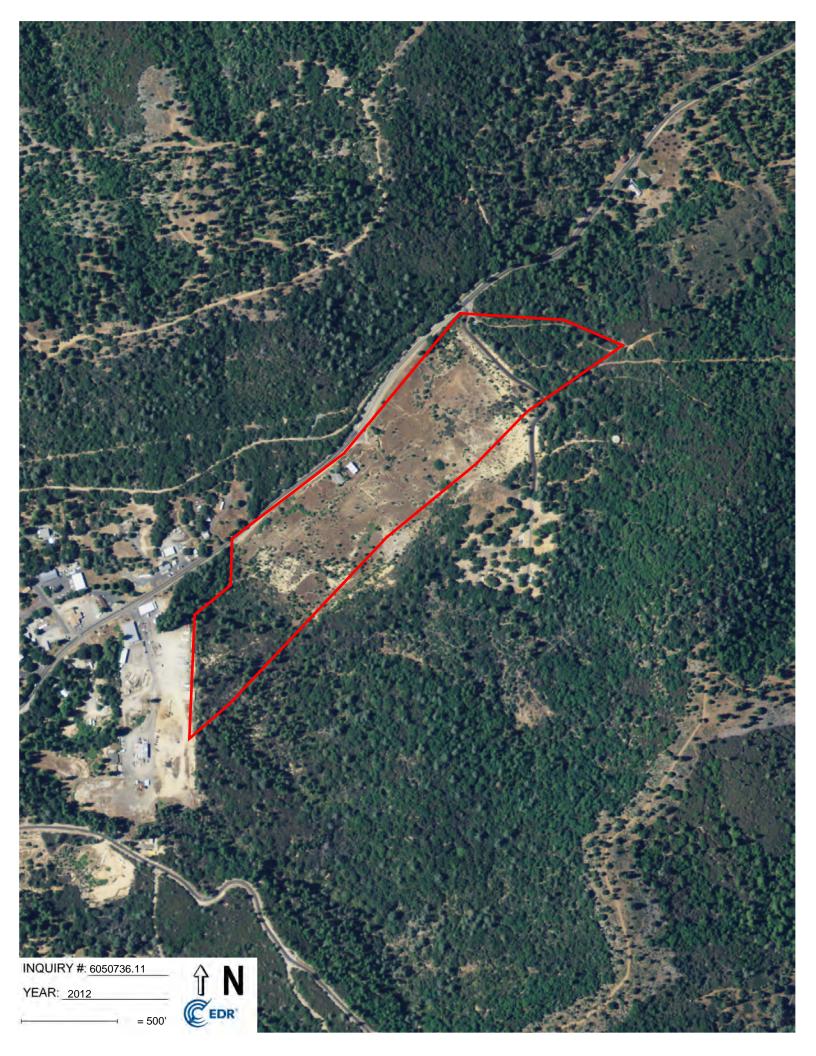
APPENDIX G

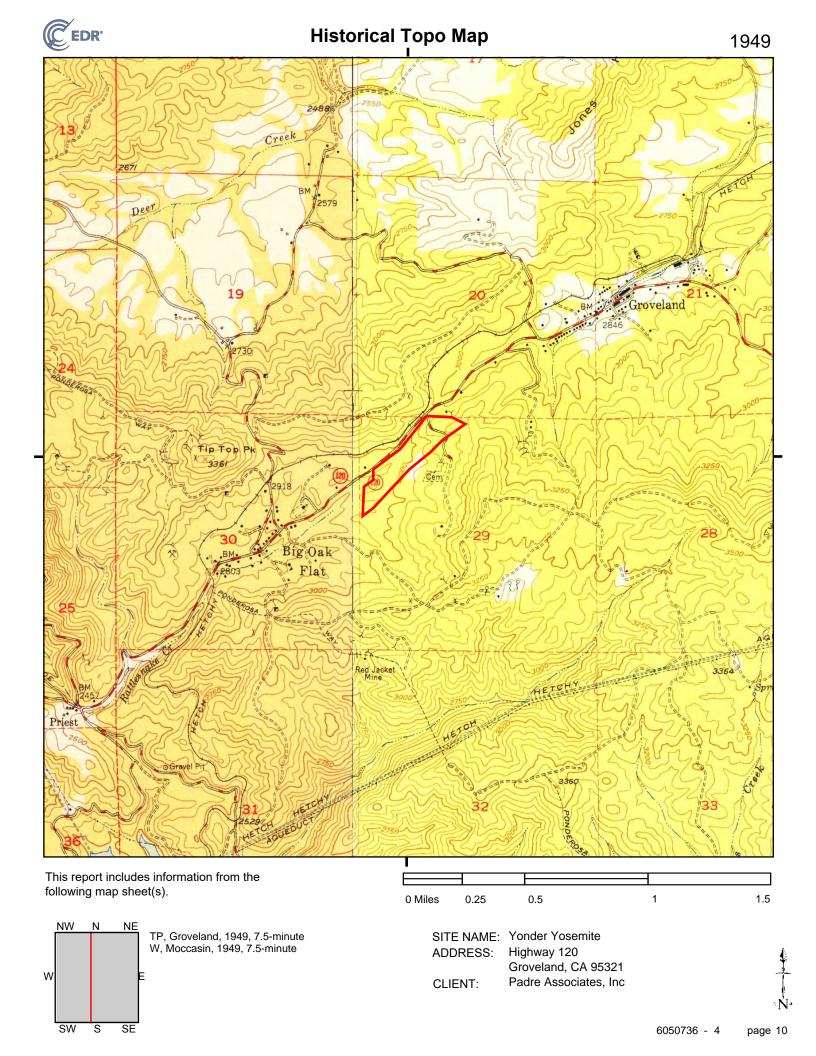
Historic Aerial Photos and Topo Maps (EDR, 2020)

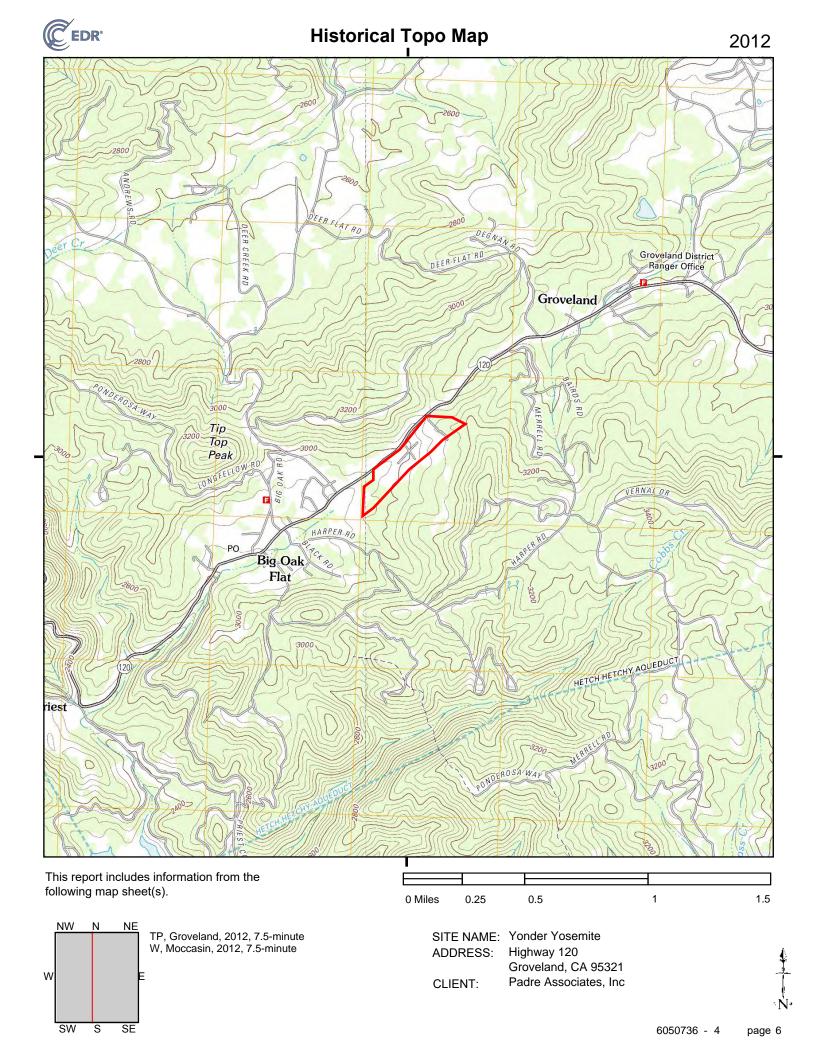












APPENDIX F

Special-Status Plant Spring Botanical Survey Report



May 28, 2021

Project No. 2002-4727

James Tate c/o TK Consulting 2082 Michelson Dr., Suite 400 Irvine, CA 92612

Subject: Special-Status Plant Spring Botanical Survey Letter Report for the Highway 120

Lodging Hospitality Project, Tuolumne County, California

Dear Mr. Tate:

Padre Associates, Inc. (Padre) has prepared the following Letter-Report (Report) to document the results of a follow-up spring botanical survey conducted in support of the proposed Highway 120 Lodging Hospitality Project (Project) located along State Highway 120 between Big Oak Flat and Groveland in Tuolumne County, California (Project Site). Padre completed a follow-up spring botanical survey, focused on the presence/absence of special-status plant species, to supplement the initial botanical survey completed in July 2020 as discussed in the *Biological Resources Survey Report for the Highway 120 Lodging Hospitality Project, Tuolumne County, California* (Biological Report) (Padre 2020a). This Report includes a summary of field survey methods and results, photographs, and a comprehensive list of plant species observed during the 2020 and 2021 botanical surveys.

FIELD SURVEY METHODS

On May 10,11 and 12, 2021, Padre Biologists, Christina Santala, Shannon Gonzalez, and Cody Montoya completed a field survey focused on the presence/absence of special-status plant species with a potential to occur within the Project Site. Field survey methods consisted of walking systematic transects throughout the Project Site and recording plant species observed. All plant species observed were documented and included in a comprehensive plant list combining the results of the July 2020 and May 2021 botanical resources field surveys. Plant specimens that were not positively identified in the field were further examined using appropriate botanical keys, including The Jepson Manual Vascular Plants of California (Baldwin et. al. 2012) and The Jepson Online Interchange for California Floristics (University of California 2021). The timing of the survey captured the blooming period for the plant species with the potential to occur within the Project Site, and numerous commonly occurring annual and perennial plant species within the region.



BOTANICAL SURVEY RESULTS

The Project Site exhibited typical spring vegetation conditions such as emergent and early blooming annual grasses and forbs, new growth on perennial shrubs within the various vegetation types documented within the Project Site. Soils were dry and there were no areas containing standing water or pools. Based on the Biological Resources Survey Report there were ten annual special-status plant species that were determined to have the potential, but may not have been identifiable, during the July 2020 survey including: Rawhide Hill onion (*Allium tuolumnense*), Mariposa clarkia (*Clarkia biloba* ssp. *australis*), Red Hills cryptantha (*Cryptantha spithamaea*), yellow-lip pansy monkeyflower (*Diplacus pulchellus*), Tuolumne button-celery (*Eryngium pinnatisectum*), slender-stemmed monkey flower (*Erythranthe filicaulis*), Congdon's Iomatium (*Lomatium congdonii*), shaggy hair lupine (*Lupinus spectabilis*), Layne's ragwort (*Packera layneae*), and Red Hills ragwort (*Senecio clevelandii* var. *heterophyllus*). These species have a low to moderate potential to occur based on suitable habitat and proximity of known occurrences within five miles of the Project Site.

No special-status plant species were observed during the 2021 field survey. Note that Padre positively identified commonly occurring species *clarkia*, *cryptantha*, *monkey flower*, and *lupine* (four of the five target genera) however, none were determined to be special-status species. See the attached Site Photographs and Comprehensive Vascular Plant List for supporting documentation.

CLOSING

If you have any questions or would like more information regarding the contents of this letter report, please contact Eric Snelling at esnelling@padreinc.com, or (805) 786-2650, ext. 112.

Sincerely,

Padre Associates, Inc.

Christina Santala Project Biologist

Trick. Shelling

Principal

Attachments: Site Photographs

Vascular Plant List



REFERENCES

- Baldwin, Bruce G., Goldman, Douglas H., Keil, David J., Rosatti, Thomas J. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press. Berkeley, California.
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- Padre Associates, Inc. 2020a. Biological Resources Survey Report, Highway 120 Lodging Hospitality Project, Tuolumne County, California. December 2020.
- ------ 2020b. Preliminary Federal Aquatic Resources Delineation and State Aquatic Resources Delineation Report, Highway 120 Lodging Hospitality Project, Tuolumne County, California. October 2020.
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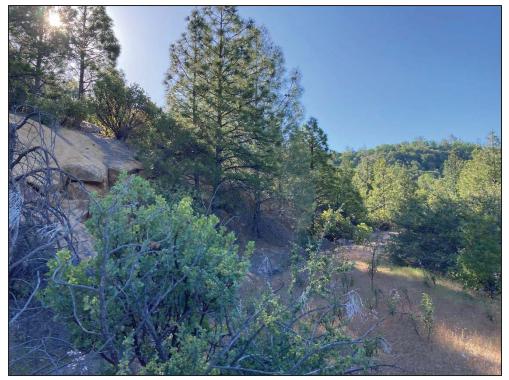
ATTACHMENTS

Site Photographs
Comprehensive Vascular Plant List





Photograph 1. Representative view of spring conditions at the Project Site (aspect southwest; 5/12/21).



Photograph 2. Additional view of spring conditions at the Project Site (aspect southeast; 5/12/21).

Comprehensive Vascular Plant List

Species Observed within the Project Site July 2020 and May 2021 Highway 120 Lodging Hospitality Project Site, Tuolumne County, California

| Scientific Name | Common Name | Habit | Indicator Status | Family |
|-------------------------------------|---------------------------|-------|------------------|----------------|
| Acmispon americanus | Spanish lotus | AH | UPL | Fabaceae |
| Aesculus californica | California buckeye | Т | | Sapindaceae |
| Alnus rhombifolia | White alder | Т | • | Betulaceae |
| Acrotstaphylos manzanita | Manzanita | S | • | Ericaceae |
| Agoseris heterophylla | Annual mountain dandelion | AH | • | Asteraceae |
| Aira caryophyllea* | Silver hairgrass | AG | FACU | Poaceae |
| Amsinckia intermedia | Common fiddleneck | AH | | Boraginaceae |
| Apium graveolens* | Celery | AH | | Apiaceae |
| Arctostaphylos viscida | White-leaved manzanita | S | | Ericaceae |
| Artemisia douglasiana | California mugwort | PH | FAC | Asteraceae |
| Avena barbata* | Slim oat | AG | | Poaceae |
| Brassica nigra* | Black mustard | AH | • | Brassicaceae |
| Brassica rapa* | Common mustard | AH | • | Brassicaceae |
| Briza minor* | Little quaking grass | AG | FAC | Poaceae |
| Bromus sitchensis var. carinatus | California brome | AG | 1710 | Poaceae |
| Bromus diandrus* | Ripgut brome | AG | • | Poaceae |
| Bromus hordeaceus* | Soft chess brome | AG | • | Poaceae |
| | | | • | |
| Calochortus monophyllus | Yellow star tulip | PH | • | Liliaceae |
| Carduus pycnocephalus* | Italian thistle | AH | ODI | Asteraceae |
| Carex densa | Sedge | PH | OBL | Cyperaceae |
| Castilleja densiflora | Dense flower owl's clover | AH | | Orobanchaceae |
| Ceanothus cuneatus | Buck brush | S | | Rhamnaceae |
| Centromadia fitchii | Spikeweed | AH | FACU | Asteraceae |
| Centaurea solsticialis* | Yellow starthistle | AH | • | Asteraceae |
| Centaurea stoebe ssp. micranthos* | Spotted knapweed | AH | | Asteraceae |
| Chenopodium californicum | California goosefoot | PH | | Chenopodiaceae |
| Clarkia purpurea ssp. quadrivulnera | Four spot | AH | | Onagraceae |
| Claytonia perfoliata | Miner's lettuce | AH | FAC | Montiaceae |
| Conium maculatum* | Poison hemlock | PH | FACW | Apiaceae |
| Croton setiger | Turkey-mullein | AH | | Euphorbiaceae |
| Cryptantha simulans | Pine cryptantha | AH | | Boraginaceae |
| Cynodon dactylon* | Bermuda grass | PG | FACU | Poaceae |
| Cyperus eragrostis | Tall flatsedge | PH | FACW | Cyperaceae |
| Deinandra pallida | Kern tarweed | AH | | Asteraceae |
| Dittrichia graveolens* | Stinkwort | AH | • | Asteraceae |
| Elymus caput-medusae* | Medusa head | AG | • | Poaceae |
| Eleocharis macrostachya | Creeping spikerush | PH | FACW | Cyperaceae |
| Elymus elymoides | Squirreltail | PG | FACU | Poaceae |
| Emmenanthe penduliflora | Whispering bells | AH | 1 700 | Boraginaceae |
| Epilobium brachycarpum | Willow herb | AH | • | Onagraceae |
| Epilobium foliosum | California willow herb | AH | • | - |
| ≟ | | | • | Onagraceae |
| Ericameria arborescens | Golden-fleece | S | | Asterceae |
| Erigeron canadensis | Horseweed | AH | FACU | Asteraceae |
| Eriogonum nudum | Buckwheat | S | | Polygonaceae |
| Eriodictyon californicum | Yerba santa | S | | Boraginaceae |
| Erodium botrys* | Long beak filaree | AH | FACU | Geraniaceae |
| Erythranthe guttata | Seep monkey flower | A/PH | OBL | Phrymaceae |
| Erysimum capitatum var. capitatum | Western wallflower | AH | | Brassicaceae |
| Erythranthe guttata | Creek monkeyflower | AH | OBL | Phrymaceae |
| Festuca microstachys | Small fescue | AG | • | Poaceae |
| Festuca myuros* | Rattail fescue | AG | | Poaceae |
| Festuca perennis* | Italian rye grass | PG | FAC | Poaceae |
| Foeniculum vulgare* | Sweet fennel | PH | • | Apiaceae |
| Galium aparine | Bedstraw | AH | FACU | Rubiaceae |
| Gastridium phleoides* | Nit Grass | AG | FACU | Poaceae |
| Geranium molle* | Dovesfoot geranium | A/PH | | Geraniaceae |
| Grindelia camporum | Gumweed | PH | FACW | Asteraceae |
| Heteromeles arbutifolia | Toyon | S | | Rosaceae |
| Hirschfeldia incana* | Mediterranean mustard | AH | • | Brassicaceae |
| Holocarpha virgata | Narrow tarplant | AH | • | Asteraceae |
| Hordeum brachyantherum | Meadow barley | PH | FACW | Poaceae |
| | , | | FACU | |
| Hordeum marinum ssp. gussoneaum* | Foxtail barley | AG | FACU | Poaceae |
| Hypochaeris glabra | Smooth cat's ear | AH | | Asteraceae |

Comprehensive Vascular Plant List

Species Observed within the Project Site July 2020 and May 2021 Highway 120 Lodging Hospitality Project Site, Tuolumne County, California

| Scientific Name | Common Name | Habit | Indicator Status | Family |
|-------------------------------|------------------------|-------|------------------|----------------|
| Juglans californica | California walnut | Т | FACU | Juglandaceae |
| Juncus bufonius | Toad rush | AG/H | FACW | Juncaceae |
| Juncus effuses | Lamp rush | PG/H | FACW | Juncaceae |
| Lactuca Serriola* | Prickly lettuce | AH | FACU | Asteraceae |
| Lathyrus latifolius* | Perennial sweet pea | PH | ė | Fabaceae |
| Logfia gallica* | Narrow leaf cottonrose | AH | ė | Asteraceae |
| Lupinus bicolor | Miniature lupine | AH | ė | Fabaceae |
| Lupinus microcarpus | Chick lupine | AH | ė | Fabaceae |
| Lupinus nanus | Lupine | AH | | Fabaceae |
| Mentha pulegium | Pennyroyal | PH | OBL | Lamiaceae |
| Navarretia intertexta | Needleleaf navarretia | AH | FACW | Polemoniaceae |
| Pinus ponderosa | Yellow pine | Т | FACU | Pinaceae |
| Pinus sabiniana | Foothill pine | Т | | Pinaceae |
| Plantago lanceolata* | English plantain | PH | FAC | Plantaginaceae |
| Polygpogon monspeliensis* | Rabbitsfoot grass | AG | FACW | Poaceae |
| Pseudognaphalium californicum | California everlasting | AH | ė | Asteraceae |
| Quercus douglasii | Blue oak | Т | ė | Fagaceae |
| Quercus Kelloggii | California black oak | Т | ė | Fagaceae |
| Quercus wislizeni | Interior live oak | Т | ė | Facaceae |
| Rubus ulmifolius* | Elmleaf blackberry | V/S | | Rosaceae |
| Rubus aremeniacus* | Himalayan blackberry | S | FAC | Rosaceae |
| Rumex crispus* | Curly dock | AH | FAC | Polygonaceae |
| Rumex acetosella* | Sheep sorrel | PH | FACU | Polygonaceae |
| Salix laevigata | Red willow | S/T | FACW | Saliaceae |
| Salix lasiolepis | Arroyo willow | T | FACW | Salicaceae |
| Torilis arvensis* | Tall sock destroyer | AH | | Apiaceae |
| Toxicodendron diversilobum | Poison Oak | PH | | Anacardiaceae |
| Tribulus terrestris* | Puncture vine | AH | | Zygophyllaceae |
| Trichostema lanceolatum | Vinegarweed | AH | FACU | Lamiaceae |
| Trifolium oliganthum | Few flowered clover | AH | • | Fabaceae |
| <i>Vicia</i> sp. | Vetch | AH | • | Fabaceae |
| Xanthium strumarium | Rough cocklebur | AH | FAC | Asteraceae |

Notes: Scientific nomenclature follows Baldwin (2012).

An "*" indicates non-native species which have become naturalized or persist without cultivation

An "." indicates that no indicator has been assigned due to lack of information to determine indicator status; or is not listed and assumed an upland species.

Habit definitions: Wetland indicator status (Lichvar and Kartesz, 2016):

AG - Annual grass. OBL (Obligate Wetland Plants)- Almost always occur in wetlands.

AH - Annual herb. FACW (Facultative Wetland Plants) - Usually occur in wetland, but may occur in non-wetlands

PG - Perennial grass. FAC (Facultative Wetland Plants) - Occur in wetlands and non-wetlands.

PH - Perennial herb. FACU (Facultative Upland Plants) - Usually occur in non-wetlands; may occur in wetlands

PV - Perennial vine. UPL (Upland Plants) - Almost always occur in non-wetlands.

S - Shrub T - Tree

APPENDIX G

Oak Tree Inventory Report



July 6, 2021

Project No. 2002-4727

James Tate c/o TK Consulting 2082 Michelson Dr., Suite 400 Irvine, CA 92612

Subject: Oak Tree Inventory Letter Report for the Highway 120 Lodging Hospitality Project,

Tuolumne County, California

Dear Mr. Tate:

Padre Associates, Inc. (Padre) has prepared the following Letter Report (Report) to document the results of an oak tree inventory conducted in support of the proposed Highway 120 Lodging Hospitality Project (Project) located along State Highway 120 between Big Oak Flat and Groveland in Tuolumne County, California (Project Site). Padre completed an oak tree inventory field survey that was focused on identification and mapping of oak trees (Quercus sp.) within the Project footprint to determine potential impacts to oak trees and oak woodland canopy within the Project Site. The inventory was completed as a recommended impact avoidance measure described the Biological Resources Survey Report for the Highway 120 Lodging Hospitality Project, Tuolumne County, California (Biological Report) (Padre 2020a) in compliance with MM BIO-10 of the IS/MND (Padre 2021) that requires compliance with Tuolumne County Ordinance 2903 Chapter 9.24, intended to discourage premature removal of oak trees for development projects within Tuolumne County. In addition, mature pine trees (Pinus sp.) and clusters of pines that occurred outside of the Project footprint, but within the Project Site, were also mapped to assist with incorporating existing woodland species into the Project landscape design. This Report includes a summary of field survey methods and results including photographs, a figure depicting the location of mapped trees and associated electronic data file (shapefile) with all collected tree data.

FIELD SURVEY METHODS

On May 10, May 11, and May 12, 2021, Padre Biologists, Christina Santala, Shannon Gonzalez, and Cody Montoya completed a field survey focused on the mapping oak trees within and overlapping to the Project footprint, and pine trees and oaks outside of the Project footprint that may be incorporated into the landscape design. Field methods consisted of mapping the location and collecting data on oak trees using a Global Positioning System (GPS) and recording notes on species, diameter at breast height (DBH), and health of each oak tree, while using the proposed Project footprint and Project site boundary as reference in the field. Oak trees were mapped and documented individually unless conditions required mapping the oak trees as a "cluster". Cluster mapping was conducted when the woodland/shrub vegetation was too dense to get to the tree trunk (for GPS data collection) and/or the cluster was comprised of saplings too numerous to map as individuals. Within this Report, saplings are specimens that are less than



two inches DBH, or otherwise noted as a sapling. As a supplemental task, Padre collected similar data for pine trees and numerous oak trees located outside of the Project footprint to assist with development of the Project landscape plan.

OAK TREE INVENTORY SURVEY RESULTS

The Project Site supports several vegetation communities ranging from low growing herbaceous vegetation to dense forested woodlands. As observed, the highest concentration of oak trees occurred in the dense Mixed foothill woodland areas located on the western and eastern ends of the Project Site, followed by moderate concentrations in Ponderosa pine forest and Whiteleaf manzanita chapparal vegetation communities in central and southern portions of the Project Site. Oak trees ranging from sapling size to fully mature specimens occurred as component species of the woodland and shrub vegetation communities with canopy cover ranging from dense intermittent patches to single individual trees in the open and herbaceous areas of the Project Site. Oak tree species observed included interior live oak (*Quercus wislizeni*), California black oak (*Quercus Kelloggii*), and blue oak (*Quercus douglasii*), and pine tree species observed included Ponderosa pine (*Pinus ponderosa*) and foothill pine (*Pinus sabiniana*), and oak trees located outside of the Project footprint to assist with development of the Project landscape plan. Species descriptions are discussed in this section.

Interior live oak. Interior live oak is an evergreen tree in the Oak Family (Fagaceae) that is native to California and grows in the coast ranges, central valley, and Sierra foothills. This species occurs at elevations from sea level to 5,000 feet and is a major component of foothill woodland habitats. Interior live oak trees can grow up to 50 feet tall and blooms in the winter and spring. Interior live oak is not considered sensitive by the California Department of Fish and Wildlife (CDFW); however, is protected under Tuolumne County regulations.

California black oak. California black oak is a deciduous tree in the Oak Family that is native to California and grows on slopes and valleys in woodland habitats throughout California. This species occurs at elevations from approximately 100 feet to 8,000 feet above sea level, and typically grows to an average of 50 feet tall and is dormant in the winter months. The acorns of this species are relatively large and were considered the best acorns for food by the Native Americans (CNPS 2021b). California black oak is not considered sensitive by CDFW; however, is protected under the Tuolumne County regulations.

Blue oak. Blue oak is a deciduous tree in the Oak Family that is native and endemic to California and grows on dry slopes, interior foothills and woodlands habitats in the central valley, coast ranges and the San Francisco bay area. This species occurs at elevations under 5,000 feet above sea level, grows very slowly to an average of 65 feet tall. Blue oak is not considered sensitive by CDFW; however, is protected under Tuolumne County regulations.

Ponderosa pine. Ponderosa pine is an evergreen tree in the Pine Family (Pinaceae) that is native to California and western North America in variable habitats from sea level to 10,000 feet. This species can grow to more than 200 feet tall and attracts beneficial butterflies and numerous bird species (CNPS 2021b). Ponderosa pine is not considered sensitive by CDFW or Tuolumne County.



Foothill pine. Foothill pine is an evergreen tree in the Pine Family that is native to California and grows in foothill woodland and chaparral habitats on infertile soils throughout California at elevations between 500 and 5,000 feet above sea level. This species initially grows slowly to 80 feet tall. Foothill pine is not considered sensitive by CDFW or Tuolumne County.

The results of the inventory survey documented 97 interior live oaks, five California black oaks, and three blue oaks (saplings and mature trees) within and overlapping the proposed Project footprint. See Table 1 – Oak Tree Inventory Results Summary Table for a summary of the results, and Attachments – Site Photographs, Figure 1 – Oak Tree Inventory Results, Figure 1a – Oak Trees 5-inches and Greater DBH, Figure 1b – Pine Trees-5 inches and Greater DBH, and associated electronic version of the map (shapefiles) for supporting documentation.

Table 1. Oak Tree Inventory Results Summary Table

| Species | Diameter | Number of Trees (Relative to Footprint) | | |
|-------------------------|---------------------|---|---------|--|
| | Diameter | Inside/Overlapping | Outside | |
| Oaks | | | | |
| Interior live oak | ≥5 inches | 97 | 181 | |
| Interior live oak | < 5 and saplings | 121 | 244 | |
| Black oak | ≥5 inches | 5 | 10 | |
| Black oak | < 5 and saplings | 17 | 20 | |
| Blue oak | ≥5 inches | 3 | 1 | |
| Blue oak | < 5 and saplings | 11 | 17 | |
| To | tal | 254 473 | | |
| Pines and Other Species | | | | |
| Species | Size | Number of Trees | | |
| Ponderosa pine | Mature and saplings | 471 | | |
| Foothill pine | Mature and saplings | 8 | | |
| Cottonwood | Mature and saplings | 5 | | |

Notes:

¹Tree number reflects pines and other species counted primarily outside of footprint for landscape design purposes.



CLOSING

There is a total of 105 oak trees including interior oak, California black oak, and blue oaks equal to or greater than five inches DBH that have the potential to be removed and/or impacted due to Project implementation. If oak tree removal is deemed unavoidable, an oak tree protection and replacement plan will be required. The plan may include, but not be limited to, details of oak tree protection measures, number of oak trees to be removed and impacted/damaged, number of replacement plantings required per Tuolumne County oak tree mitigation requirements, oak tree planting location, methods, and post construction restoration monitoring.

If you have any questions or would like more information regarding the contents of this letter report, please contact Eric Snelling at <a href="mailto:essential-essen

Sincerely,

Padre Associates, Inc.

Christina Santala Project Biologist

Eric Snelling

Principal

Attachments: Site Photographs

Figure 1 - Oak Tree Inventory Results

Figure 1a – Oak Trees 5-inches and Greater DBH Figure 1b – Pine Trees 5-inches and Greater DBH



REFERENCES

- Baldwin, Bruce G., Goldman, Douglas H., Keil, David J., Rosatti, Thomas J. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press. Berkeley, California.
- California Native Plant Society (CNPS), Rare Plant Program. 2021a. Inventory of Rare and Endangered Plants of California (online edition, v8-030.39). Website http://www.rareplants.cnps.org (Accessed:30 May 2021).
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- ----- 2021. Administrative Draft Initial Study/Mitigated Negative Declaration Highway 120 Highway 120 Lodging Hospitality Project, Tuolumne County, California. May 2021.
- University of California. 2021. The Jepson Online Interchange for California Floristics. University of California, Berkeley, CA. Available online: http://ucjeps.berkeley.edu/interchange.html.

ATTACHMENTS

Site Photographs
Figure 1 – Oak Tree Inventory Results
Figure 1a – Oak Trees 5-inches and Greater DBH
Figure 1b – Pine Trees 5-inches and Greater DBH

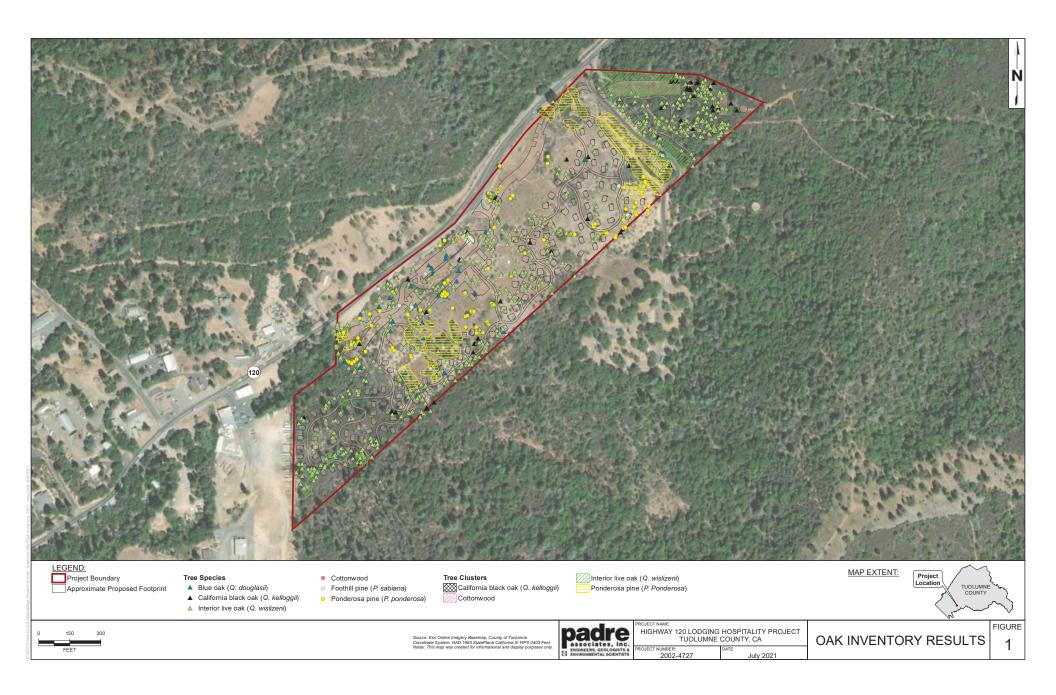


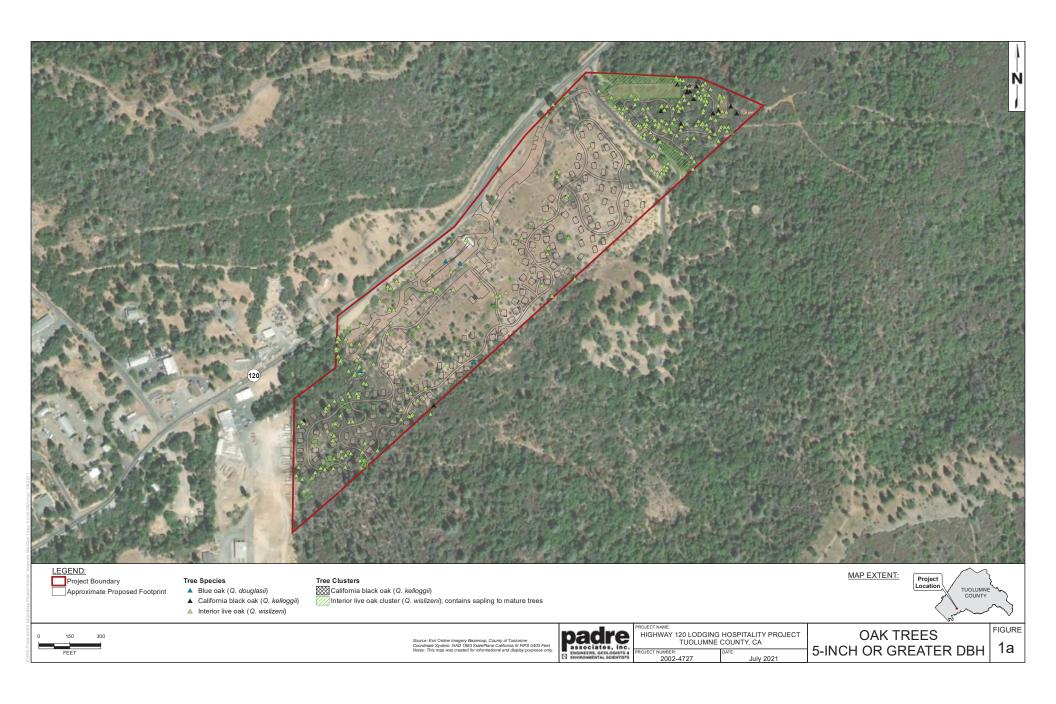


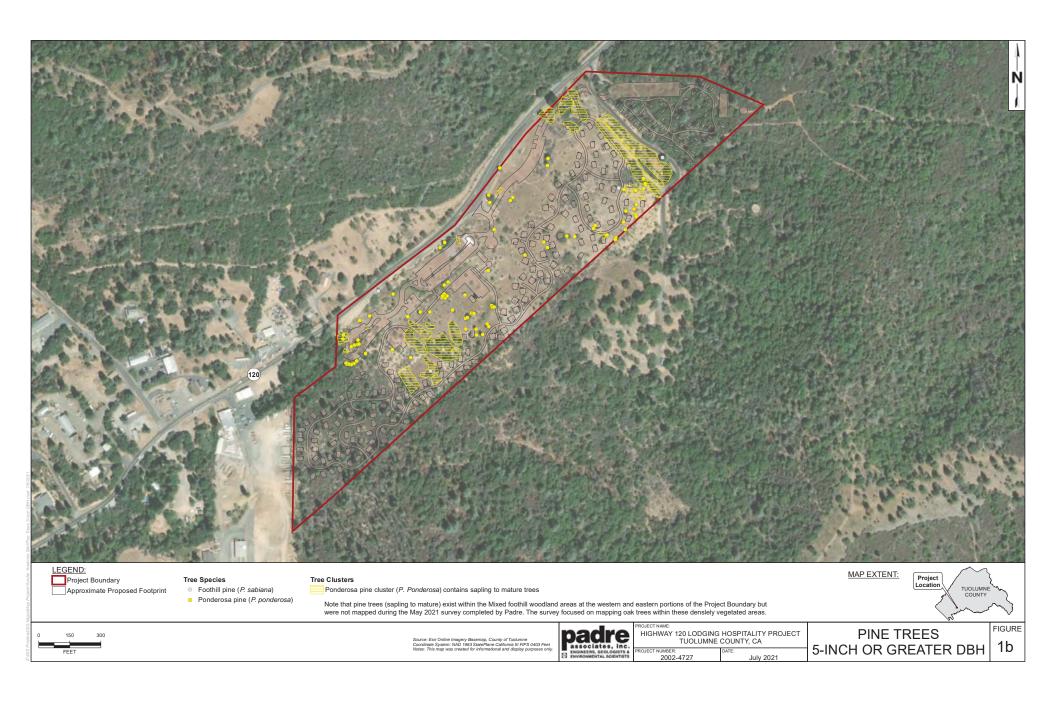
Photograph 1. Representative view of an interior live oak, California black oak, and blue oak within the Project Site (aspect northeast; 5/12/21).



Photograph 2. Mature Ponderosa pine suitable for incorporation into landscape plan (aspect southeast; 5/12/21).







APPENDIX C

PHASE I ENVIRONMENTAL SITE ASSESSMENT



PHASE I ENVIRONMENTAL SITE ASSESSMENT YONDER YOSEMITE SITE

ASSESSOR'S PARCEL NUMBERS: 066-140-013, 066-140-014, 066-140-015, 066-140-016, 066-140-017, 066-140-018, 066-140-019, 066-140-022, 066-140-031, AND 066-140-032

HIGHWAY 120 AT WAY STATION ROAD BETWEEN BIG OAK FLAT AND GROVELAND TUOLOMNE COUNTY, CALIFORNIA

Prepared for: James Tate

May 2020

May 11, 2020 Project No. 2002-4721

James Tate 2019 Main Street Salt Lake City, Utah 84115

Subject: Phase I Environmental Site Assessment - Yonder Yosemite Site, Highway 120 at

Way Station Road, Big Oak Flat Area, Tuolumne County, California

Dear Mr. Tate:

Padre Associates, Inc. is pleased to submit the attached Phase I Environmental Site Assessment report to James Tate for the subject site. The report presents our findings, conclusions, and recommendations regarding the current environmental conditions at the subject site.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional, as defined in Title 40 Code of Federal Regulations (CFR) §312. We have specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Additionally, the subject Phase I ESA has been performed in conformance with the scope and limitations of ASTM Practice E1527-13.

It has been a pleasure to have provided these services to you. If you have any questions or require additional information, please contact Mr. Eric Snelling at (805) 786-2650 at extension 112 or by email at esnelling@padreinc.com.

Sincerely,

PADRE ASSOCIATES, INC.

Trick. Kelling

Eric K. Snelling, R.E.P.A.

Principal

Jerome K. Summerlin, C.E.G., C.Hg.

President



TABLE OF CONTENTS

| 1.0 | 0 INTRODUCTION | 1 |
|-----|---|----|
| 2.0 | 0 ENVIRONMENTAL SETTING | 3 |
| : | 2.1 SITE LOCATION AND DESCRIPTION | 3 |
| | 2.2 TOPOGRAPHY AND DRAINAGE | |
| : | 2.3 GEOLOGY AND HYDROGEOLOGY | 3 |
| | 2.3.1 Geology | 3 |
| | 2.3.2 Hydrogeology | 4 |
| | 2.4 SURFICIAL SOIL | |
| | 2.5 FLOODPLAIN | |
| | 2.6 OIL AND GAS WELLS | |
| | 2.7 RADON | 5 |
| 3.0 | 0 HISTORICAL SITE CONDITIONS | 6 |
| ; | 3.1 HISTORICAL AERIAL PHOTOGRAPHS | 6 |
| ; | 3.2 HISTORICAL SANBORN FIRE INSURANCE MAPS | 7 |
| ; | 3.3 UNITED STATES GEOLOGICAL SURVEY TOPOGRAPHIC MAPS | 7 |
| ; | 3.4 HISTORICAL CITY DIRECTORIES | |
| | 3.5 TUOLOMNE COUNTY PLANNING AND BUILDING | |
| ; | 3.6 RECS OBSERVED DURING THE HISTORICAL REVIEW | 8 |
| 4.(| 0 CURRENT SITE CONDITIONS | 9 |
| | 4.1 SITE RECONNAISSANCE | 9 |
| | 4.1.1 Interior Observations | |
| | 4.1.2 Exterior Observations | |
| | 4.1.3 Adjacent Property Observations | 9 |
| 4 | 4.2 UTILITIES | 10 |
| | 4.3 ASBESTOS-CONTAINING MATERIALS | |
| | 4.4 LEAD-BASED PAINT | |
| | 4.5 POLYCHLORINATED BIPHENYLS | |
| 4 | 4.6 RECS OBSERVED DURING THE SITE RECONNAISSANCE | 10 |
| 5.0 | 0 ENVIRONMENTAL RECORDS REVIEW | 11 |
| ; | 5.1 PUBLIC RECORDS REVIEW AND AGENCY CONTACTS | 11 |
| | 5.1.1 Tuolumne County Environmental Health Services | 11 |
| | 5.1.2 State Water Resources Control Board | |
| | 5.1.3 California Department of Toxic Substances Control's EnviroStor Database | 11 |
| | 5.1.4 Environmental Liens or Activity and Use Limitations | |
| ; | 5.2 ENVIRONMENTAL DATABASE INFORMATION | |
| | 5.2.1 National Priorities List - Federal Superfund | |
| | 5.2.2 U.S. EPA Comprehensive Environmental Response, Compensation, and Liab | • |
| | Information System (CERCLIS) | |
| | 5.2.3 RCRA - TSD Facilities Listing | 12 |



| 5.2.4 RC | CRA - CORRACTS Facilities Listing | 13 |
|-----------------|---|----|
| | CRA - LQG's List | |
| | CRA - SQG's List | _ |
| | cility and Manifest Data (HAZNET) | |
| | nergency Response Notification System | |
| | ate Equivalent CERCLIS (formerly Cal-Sites List) | |
| | derground and Aboveground Storage Tank Databasesaking Underground Storage Tanks | |
| | ills, Leaks, Investigations, and Cleanup List | |
| | lid Waste/Landfill Sites | |
| - | oposition 65 Notification Records | _ |
| 5.2.15 His | storical Dry Cleaners | 16 |
| | hool Property Evaluation Program (SCH) Database | |
| | her Ascertainable Records (Project Site and Adjacent Properties) | |
| | PROVIDED INFORMATION | |
| | vner, Property Manager, and Occupant Informationecialized Knowledge | |
| | OBSERVED DURING THE ENVIRONMENTAL RECORDS REVIEW | |
| | ISIONS AND RECOMMENDATIONS | |
| | | |
| | ENT CONDITIONS AND HISTORICAL SITE BACKGROUND | |
| | ONMENTAL CONDITIONS | |
| | MMENDATIONS | |
| 7.0 LIMITAT | IONS | 20 |
| 8.0 REFERE | NCES | 21 |
| | | |
| | PLATES | |
| Site Location N | Лар | 1 |
| | | 2 |
| | APPENDICES | |
| APPENDIX A: | SITE PHOTOGRAPHS | |
| APPENDIX B: | HISTORICAL INFORMATION INCLUDING: | |
| | B1: AERIAL PHOTOGRAPHS | |
| | B2: SANBORN MAP COVERAGE | |
| | B3: TOPOGRAPHIC MAPS | |
| | | |
| | B4: CITY DIRECTORY ABSTRACT | |
| APPENDIX C: | ENVIRONMENTAL DATABASE REPORT | |
| APPENDIX D: | QUALIFICATIONS | |
| | | |



1.0 INTRODUCTION

At the request of Mr. James Tate, Padre Associates, Inc. (Padre) completed a Phase I Environmental Site Assessment (ESA) of the approximately 35-acre property located on Highway 120 at Way Station Road, between the unincorporated area of Big Oak Flat and the town of Groveland, Tuolumne County, California (Project Site). The Project Site is identified with the following Tuolumne County Assessor's Parcel Numbers (APN): 066-140-013, 066-140-014, 066-140-015, 066-140-016, 066-140-017, 066-140-018, 066-140-019, 066-140-022, 066-140-031, and 066-140-032.

This Phase I ESA was completed in accordance with the guidelines outlined in the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments (E-1527-13) and the U.S. Environmental Protection Agency's All Appropriate Inquiry (AAI) standard promulgated in 2013. The objective of the ESA was to evaluate whether current or previous land use at or adjacent to the Project Site may have involved, or resulted in the use, storage, disposal, treatment, and/or release of hazardous substances to the environment, resulting in the determination of a Recognized Environmental Condition (REC) at the Project Site. A REC is defined by ASTM E-1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Additional key definitions from the ASTM E-1527-13 standard include the following:

- Environment includes navigable waters, the waters of the contiguous zone, and the ocean waters; and any other surface water, groundwater, drinking water supply, land surface or subsurface strata. It should be noted that this ESA did not include a survey of asbestos-containing materials (ACM) or lead-based paint (LBP), nor did it include sampling and chemical analysis of any environmental media at the Project Site.
- Historical Recognized Environmental Conditions (HRECs) a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (i.e., property use restrictions, activity and use limitations, institutional controls and engineering controls).
- Controlled Recognized Environmental Conditions (CRECs) a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable



regulatory authority (for example, as evidence by the issuance of a "No Further Action" letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (i.e., property use restrictions, activity and use limitations, institutional controls and engineering controls).

- Activity Use Limitations (AULs) legal or physical restrictions or limitations on the
 use of, or access to, a site or facility: (a) to reduce or eliminate potential exposure to
 hazardous substances or petroleum products in the soil, soil vapor, groundwater,
 and / or surface water on the property, or (b) to prevent activities that could interfere
 with the effectiveness of a response action, in order to ensure maintenance of a
 condition of no significant risk to public health or the environment.
- Migrate / Migration refers to the movement of hazardous substances or petroleum products in any form, including solid and liquid at the surface and subsurface, and vapor in the subsurface.

To achieve the objective of the ESA, the following tasks were completed:

- A review of readily available geologic and hydrogeologic literature;
- Historical research including a review of available historical aerial photographs, Sanborn Fire Insurance Maps, historical city directories, and historical topographic maps relating to the Project Site;
- A site reconnaissance of the Project Site and adjacent properties;
- Interviews with knowledgeable persons of the Project Site;
- Public agency records review;
- An environmental database search; and
- The preparation of this report presenting the results of the ESA.

Four appendices are included with this report: Appendix A presents photographs of the Project Site at the time of Padre's site visit; Appendix B presents the historical information obtained for the Project Site; Appendix C presents the environmental database report; and Appendix D presents the qualifications of the environmental professionals that conducted and supervised the ESA preparation.



2.0 ENVIRONMENTAL SETTING

The following discussion summarizes the geologic, hydrogeologic, and other relevant data pertaining to the physical setting of the Project Site.

2.1 SITE LOCATION AND DESCRIPTION

The location of the Project Site is illustrated on Plate 1 - Site Location Map and Plate 2 - Site Plan. The Project Site is currently vacant, with one vacant commercial building and a canopy structure associated with a partially developed gas station facility. The Project Site is bounded on the north by State Hwy 120, on the east by undeveloped forest land, on the south by a cemetery and undeveloped forest land, and on the west by vacant land and a hardware store.

According to the Tuolumne County Assessor's Office, the Project Site is comprised of approximately 30.59-acres (not including roads) on ten parcels identified as APN 066-140-013, 066-140-014, 066-140-015, 066-140-016, 066-140-017, 066-140-018, 066-140-019, 066-140-022, 066-140-031, and 066-140-032. The Project Site is currently owned by the Gateway Hub LLC, a California Limited Liability Corporation. According to the April 27, 2020 environmental database report obtained from Environmental Data Resources, Inc. of Shelton, Connecticut (EDR), the latitude and longitude coordinates of the approximate central area of the Project Site are reported to be:

Latitude (North) 37.829286°
 Longitude (East) -120.246885°

2.2 TOPOGRAPHY AND DRAINAGE

Based on observations at the Project Site and a review of the United States Geological Survey (USGS) Moccasin and Groveland, California 7.5-minute topographic quadrangles, the Project Site is located at an elevation of approximately 3,000 feet above mean sea level (AMSL) The Oakdale, California 30×60 minute quadrangle topographic map indicates the ground surface in the vicinity of the Project Site slopes gently to the west toward the Rattlesnake Creek and eventually the Priest Reservoir (USGS, 1994). It is estimated that surface water generally flows towards the west.

2.3 GEOLOGY AND HYDROGEOLOGY

2.3.1 Geology

The Project Site is located within the more gently-sloping western side of the Sierra Nevada Geomorphic Province. These mountains represent a 400-mile long tilted fault block along the eastern edge of the San Joaquin Valley and the state of California. The Project Site is situated east of the Melones Fault Zone and west of the Tuolumne River Mesozoic deposits



that consist primarily of loams, clay loams to coarser-grained sandy loams underlie the Project Site. Based on a review of the Geologic Map of the San Francisco-San Jose, California Quadrangles (Scale 1:250,000), these colluvial and alluvial deposits overlie the intrusive Jurassic metasedimentary and Jurassic-Cretaceous dioritic rock deposits (Wagner et al., 1991).

2.3.2 Hydrogeology

The Project Site is located within the Upper Tuolumne Watershed, which is bounded on the east by the Sierra Nevada Mountains. The Tuolumne River flows westward towards the San Joaquin Valley and is one of the main feeders of the San Joaquin River. The Upper Tuolumne is also part of the Hetch Hetchy Project that feeds a series of reservoirs and aqueducts to provide water and resources to the San Francisco metropolitan area.

According to the USGS National Water Information System, the nearest water supply well to the Project Site is well 001S018E13F001m, which is located approximately 17-miles to the northeast of the Project Site. Groundwater within the well was measured at a depth of 60.35 feet below grade (elevation of 3,870 feet AMSL) in August 29, 2018.

Regional groundwater flow in the vicinity of the Project Site is anticipated to follow topographic surface which slopes to the southwest.

2.4 SURFICIAL SOIL

The site has been graded with fill material, and according to webs soil surveys, native soils at the Project Site are primarily the Musick Series. These Ultic Haploxeralfs soils are found in mountains and foothills and are derived from intrusive igneous rocks. The Musick soil consists of primarily loams, clay loams, with sandy loam parent materials derived from diorite. They are characterized as well drained, and exhibit moderately low to moderately high hydraulic conductivity throughout the profile (NRCS, 2020).

2.5 FLOODPLAIN

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (*Community Panel Number: 06109C1225C*), the Project Site is located within Zone X, which are areas determined to of minimal flood hazard (FEMA, 2020).

2.6 OIL AND GAS WELLS

Padre reviewed the State of California Department of Conservation, Geologic Energy Management Division¹ (CalGEM) online mapping system Well Finder to determine whether any oil and gas wells are located at or in the vicinity of the Project Site. According to the available CalGEM records, no oil and/or gas wells has been developed or drilled at the Project Site.

¹On January 1, 2020 the Division of Oil, Gas, and Geothermal Resources (DOGGR) was renamed the California Department of Conservation, Geologic Energy Management Division (CalGEM).



2.7 RADON

Radon is an odorless, colorless, radioactive gas generated through the decay of naturally occurring radioactive isotopes in bedrock materials. Radon can migrate through the subsurface and accumulate in enclosed spaces such as basements and low-lying living areas. Radon can also enter the home through showers and faucets by using groundwater with elevated radon concentrations. The U.S. EPA lists Tuolumne County as having a normal risk (Zone 2) for radon concentrations. The California Geological Survey indicates home indoor air in the Big Oak Flat area is unlikely to exceed the U.S. EPA's recommended action level of 4 picocuries per liter (pCi/L). The EDR Radius Report indicates that according to the California Radon database indoor air samples collected in the Carpinteria area were below 4 pCi/L (EDR, 2020). Radon risk is higher in areas of granitic and shale rock formations, and while the Project Site is located on colluvial residuum of dioritic material, the risk of radon gas is not anticipated to be a potential environmental concern at the Project Site.



3.0 HISTORICAL SITE CONDITIONS

Based on a review of publicly available historical information, Padre has compiled the following history of the Project Site.

3.1 HISTORICAL AERIAL PHOTOGRAPHS

Padre reviewed available aerial photographs of the Project Site and the surrounding area obtained and provided by EDR. Aerial photographs showing the area of the Project Site from the years 1945, 1954, 1969, 1980, 1984, 1998, 2005, 2009, 2012, and 2016 were reviewed by Padre. The following is a summary of the aerial photographs reviewed:

- 1945 The Project Site appears to be mostly undeveloped, with natural vegetation covering the site. An unpaved road is visible traversing from northwest to southeast, bisecting the Project Site. The adjacent properties appear to also be undeveloped.
- 1954 The Project Site and the adjacent properties appear to be in a similar condition as observed in the 1945 photograph. Properties in Big Oak Flat, located to the southwest of the Project Site, appear to be more developed than in 1945.
- 1969 The Project Site and the adjacent properties appear to be in a similar condition as observed in the 1954 photograph, with the road showing up more clearly. Big Oak Flat properties located to the west of the Project Site appear more developed than 1954, however the resolution of the photograph is poor.
- **1980** The Project Site appears to be in a similar condition as observed in the 1969 photograph. A nearby property to the southwest has been cleared and structures have been developed.
- 1984 The Project Site and adjacent properties to the west, north, and east appear to be in similar condition as observed in the 1980 photograph. The resolution of the 1984 photograph is poor.
- 1998 The Project Site appears to have been cleared and graded. The trees and vegetation abundant in prior photos are not visible and two structures have been developed in the northern and central area of the Project Site. Adjacent properties to the southwest appear to be further develop from conditions observed in the 1984 photograph.
- **2005** The Project Site appears to be in a similar condition as observed in the 1998 photograph. The adjacent properties to the south to be in similar condition as observed in the 1998 photograph.
- **2009** The Project Site and adjacent properties to the south and east appear to be in a similar configuration as observed in the 2005 photograph.



- **2012** The Project Site and adjacent properties appear to be in a similar configuration as observed in the 2009 photograph.
- **2016** The Project Site and adjacent properties appear to be in a similar configuration as observed in the 2012 photograph.

Padre's review of the historical aerial photographs acquired from EDR indicated that the Project Site was primarily undeveloped from at least the mid-1940s until at least the mid-1990s. Structures built at the Project Site during the 1990s could represent a potential REC to the property. No other potential RECs were identified as a result of the historical aerial photograph review. Copies of the aerial photographs are provided as Appendix B1.

3.2 HISTORICAL SANBORN FIRE INSURANCE MAPS

Padre contracted with EDR to provide a search of available historical Sanborn Fire Insurance Maps, which are maintained exclusively by EDR. These maps, which have been periodically updated since the late 19th Century, often provide valuable insight into historical site uses, which can be used to assist the Phase I ESA preparer with assessing potential environmental conditions on or near a specific property. According to EDR, Sanborn Map coverage was not identified for the Project Site, parent property, or adjacent properties. A copy of EDR's Sanborn map coverage statement for the Project Site is provided as Appendix B2.

3.3 UNITED STATES GEOLOGICAL SURVEY TOPOGRAPHIC MAPS

Padre obtained historical topographic maps from EDR for the area of the Project Site. Historical topographic maps dated 1893, 1896, 1897, 1898, 1947, 1948, 1949, 1973, 1987, 2001, and 2012 were available for review. In general, the scale of the topographic maps (1 inch = 0.5 mile, elevation contours at 20 feet or greater) is intended to depict general surface features and land use over a broad area, therefore most specific land uses at ground level are typically indistinguishable. Furthermore, individual property details and structures are not provided on either the 2001 or the 2012 map. However, based on the review of these topographic maps, the Project Site was undeveloped from at least 1893 to 1987. Because the Project Site was indicated as undeveloped, no potential RECs were identified as a result of the historical topographic maps are provided as Appendix B3.

3.4 HISTORICAL CITY DIRECTORIES

Padre obtained an abstract of historical city directories provided by EDR for addresses along Highway 120, Big Oak Flat, California. The EDR abstract did not identify the Project Site address or adjacent address. Padre's review of the historical city directories abstract provided by EDR did not indicate evidence or conditions that would pose a REC to the Project Site. A copy of EDR's city directory abstract is provided as Appendix B4.



3.5 TUOLOMNE COUNTY PLANNING AND BUILDING

The Project Site is zoned as Commercial (C-1) by the Tuolumne County Community Development Department. No other permit information was readily available from Tuolumne County.

3.6 RECS OBSERVED DURING THE HISTORICAL REVIEW

Padre identified that a portion of the Project Site was developed with a commercial building and service station, which may potentially contain underground storage tanks (USTs), that are considered a potential REC.



4.0 CURRENT SITE CONDITIONS

This section summarizes current site conditions and Project Site uses as well as any hazardous substances use, handling, and storage, if any, observed on-site.

4.1 SITE RECONNAISSANCE

Mr. Alan Klein of Padre visited the Project Site on April 30, 2020. The weather conditions at the time of the site reconnaissance were sunny and warm with temperatures of approximately 70 degrees Fahrenheit. All areas of the Project Site were inspected, and Padre inspected the interior of the vacant commercial building. Selected photographs taken during the course of the site reconnaissance activities are included as Appendix A.

4.1.1 Interior Observations

The interior of the vacant commercial building was observed to have been vandalized and contained debris and refuse. No evidence of environmental conditions that would pose a risk to the Project Site were observed within the vacant building.

4.1.2 Exterior Observations

The Project Site is primarily undeveloped, with the exception of the areas of the commercial building and canopy structures associated within a partially developed gas station facility. A paved turnout provides access to the Project Site and access road traverses north through the Project Site along the eastern boundary of the Project Site.

Evidence of three USTs was indicated at the former service station area of the Project Site. The UST locations were observed to be surrounded with an earthen berm around the perimeter. The interior of the bermed area was observed to be flooded with water. Four vertical vent pipes were observed extending out of the water. No evidence of dumping, pits, or spills of chemicals in the form of stained soil or stressed vegetation was observed at the Project Site. Although the UST area was flooded during Padre's site visit, Padre was provided with a recent photograph of the area by TK Consulting which indicates that the tops of the USTs are exposed on the ground surface when the area is dry.

4.1.3 Adjacent Property Observations

The adjacent properties appeared similar to the conditions observed in the most recent aerial photographs. No evidence of potential environmental conditions that could affect the Project Site was observed on the adjacent properties.



4.2 UTILITIES

Overhead electrical and telecommunication lines were observed across Highway 120 from the Project Site, from east to west along Highway 120. No on-site utilities were observed during the site visit.

4.3 ASBESTOS-CONTAINING MATERIALS

The use of asbestos in common building materials has been mostly discontinued since the late 1970s. According to the aerial photographs reviewed by Padre, the northeastern most residential structure was constructed in the mid-1990s, therefore it is unlikely that the on-site structures contain asbestos containing materials. However, an asbestos survey should be conducted prior to any renovation or demolition activities affecting the on-site buildings.

4.4 LEAD-BASED PAINT

The use of lead-based paints (LBP) was common practice in building construction prior to 1978. According to the aerial photographs reviewed by Padre the two structures onsite were constructed between 1984 and 1998, therefore it is possible that the northeastern most residential structure was painted with LBP. The exteriors both structures were painted, however an LBP survey was not conducted as a part of this Phase I ESA.

4.5 POLYCHLORINATED BIPHENYLS

The federal Toxic Substances Control Act (TSCA) generally prohibited the domestic manufacturing of polychlorinated biphenyls (PCBs) after 1979. However, hydraulic fluids or dielectric insulating fluids typically found in electrical transformers, hydraulic equipment, capacitors, and similar equipment may contain PCBs if such materials have been present prior to the late 1970s. There were no observed materials that could contain hydraulic fluids identified during the site reconnaissance. Based on these observations, PCBs are not considered a REC to the Project Site.

4.6 RECS OBSERVED DURING THE SITE RECONNAISSANCE

Three USTs are suspected to be present at the former service station property within the Project Site. The presence of three USTs pose a potential on-site REC.



5.0 ENVIRONMENTAL RECORDS REVIEW

Padre researched various publicly-accessed databases or files available at regulatory agencies in the region to evaluate whether soil and groundwater contamination is known or suspected at or adjacent to the Project Site. Regulatory agency databases were obtained from EDR for the Project Site and properties within the ASTM-prescribed radii.

5.1 PUBLIC RECORDS REVIEW AND AGENCY CONTACTS

5.1.1 Tuolumne County Environmental Health Services

Padre contacted the Tuolumne County Environmental Health Services Department (TCEHS) regarding available files regarding hazardous materials use, storage or disposal at the Project Site. TCEHS is a Certified Unified Program Agency (CUPA) for the implementation of state and federal hazardous materials regulations within Tuolumne County. The Project Site is listed as a CUPA-registered Facility with the TCEHS. Padre contacted TCEHS to obtain available records for the USTs at the Project Site. As of the date of this report, TCEHS has not responded to Padre's request, so the TCEHS are determined to not be readily available. Padre will forward any pertinent file information obtained from TCEHS under separate cover.

5.1.2 State Water Resources Control Board

The State Water Resources Control Board (SWRCB) maintains public information pertaining to permitted underground storage tanks (USTs), leaking underground storage tank (LUST), and cleanup program sites (CPS) through the online database identified as GeoTracker. Padre reviewed the GeoTracker database for LUST and CPS sites that could pose a potential environmental concern to the Project Site. Based on the review of the GeoTracker database, neither the Project Site nor adjacent properties were listed on GeoTracker.

5.1.3 California Department of Toxic Substances Control's EnviroStor Database

The California Department of Toxic Substances Control (DTSC) maintains the EnviroStor database for known or suspected hazardous waste sites in California. Based on the review of the EnviroStor database, neither the Project Site nor adjacent properties were listed in the EnviroStor database.

5.1.4 Environmental Liens or Activity and Use Limitations

According to EDR, there are currently no environmental liens or state-registered deed restrictions in effect at the Project Site.



5.2 ENVIRONMENTAL DATABASE INFORMATION

Padre obtained environmental agency listings database information for the Project Site and for properties located within the ASTM-prescribed radii of the Project Site from EDR. The EDR report is included as Appendix C. The purpose of the environmental agency listings database review is to identify whether the Project Site or adjacent sites have been listed on local, state, or federal government database listings or retain historical documentation regarding current and/or past usage that could potentially pertain to RECs. Sites within the ASTM prescribed radii were also reviewed to identify outlying sites that might potentially impact the subsurface soil and/or groundwater conditions beneath the Project Site. The following sections summarize our findings for the required ASTM databases beginning with Federal listings and ending with local listings. Sites listed on additional or supplementary databases not required by the ASTM but reported by EDR were reviewed by Padre but are not summarized below, unless such sites are located within close proximity of the Project Site or could pose an unacceptable environmental risk to the Project Site.

5.2.1 National Priorities List - Federal Superfund

The National Priorities List (NPL) is a U.S. Environmental Protection Agency (U.S. EPA) listing of private, state, and federally owned sites, which have been included on the federal Superfund list for remediation.

• Neither the Project Site nor properties located within a one-mile radius of the Project Site were identified on the NPL.

5.2.2 U.S. EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

The U.S. EPA's CERCLIS llistings are a compilation of sites that have been brought to the attention of the U.S. EPA, through various means, as being possible sites of hazardous waste activity. The CERCLIS listings are an information database and not necessarily an action list.

• Neither the Project Site nor properties located within a one-mile radius of the Project Site were identified on the CERCLIS List.

5.2.3 RCRA - TSD Facilities Listing

The U.S. EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA-TSD database is a compilation by the U.S. EPA of reporting facilities that transport, treat, store or dispose of hazardous waste.

 Neither the Project Site nor properties located within a one-half mile radius of the Project Site were identified on the RCRA-TSD List.



5.2.4 RCRA - CORRACTS Facilities Listing

The RCRA Corrective Action (CORRACTS) Sites Listing contains information pertaining to hazardous waste treatment, storage, and disposal facilities (RCRA TSD) which have conducted, or are currently conducting, a corrective action(s) as regulated under RCRA.

• Neither the Project Site nor properties located within a one-mile radius of the Project Site were identified on the CORRACTS List.

5.2.5 RCRA - LQG's List

The U.S. EPA's RCRA Program identifies and tracks large quantity generators (LQG's). LQG's generate over 1,000 kilograms (kg) of hazardous waste, or 1 kg acutely hazardous waste per month.

 Neither the Project Site nor properties located within a one-quarter mile of the Project Site were listed on the RCRA-LQG list.

5.2.6 RCRA - SQG's List

The U.S. EPA's RCRA Program identifies and tracks small quantity generators (SQG's). SQG's generate over 100 kg and 1,000 kg of hazardous waste per month.

• Neither the Project Site nor properties located within a one-quarter mile of the Project Site were listed on the RCRA-SQG list.

5.2.7 Facility and Manifest Data (HAZNET)

Facility and management data is extracted from the copies of the hazardous waste manifests received each year by the DTSC.

• Neither the Project Site, nor properties located within a one-eighth mile radius of the Project Site were listed on the HAZNET list.

5.2.8 Emergency Response Notification System

The Emergency Response Notification System (ERNS) contains records on releases of oil and hazardous substances reported to the U.S. EPA and National Response Center of the U.S. Coast Guard.

 Neither the Project Site nor properties located within a one-eighth mile radius of the Project Site were listed on the ERNS list.

5.2.9 State Equivalent CERCLIS (formerly Cal-Sites List)

The State DTSC and Site Mitigation and Brownfields Reuse Program (SMBRP) have combined databases now identified as EnviroStor. This database includes the formerly known



Cal-Sites List, which in turn included the former State of California Abandoned Sites Program Information System (ASPIS) and the BEP databases. The EnviroStor database is a compilation of sites that have been brought to the attention of the California Environmental Protection Agency (Cal EPA), through various means, as being possible sites of hazardous waste activity or contamination. It should be noted that the EnviroStor database is an informational database and not necessarily an action list.

• The Project Site was not listed in the State Equivalent CERCLIS' EnviroStor database. One property was located within a one-mile radius:

Groveland Mill #2
Highway 120/Hells Hollow
Direction: Northeast
Distance: 4,300 feet

This site has been identified as a low priority facility with additional assessment needed. This site is not anticipated to pose an environmental concern to the Project Site based on the distance, direction, regulatory status, and hydrogeological relationship.

5.2.10 Underground and Aboveground Storage Tank Databases

The UST and aboveground storage tank (AST) databases maintain an inventory of active and inactive UST and AST facilities gathered from local regulatory agencies. The Facility Inventory Database (CA FID UST) contains a historical listing of active and inactive UST locations from the State Water Resources Control Board (SWRCB). The Hazardous Substance Storage Container Database (Hist UST) is a historical listing of UST sites. The Statewide Environmental Evaluation and Planning System (SWEEPS) is a UST database maintained by the SWRCB during the 1980s; the system is no longer updated or maintained.

 Five properties located within a one-quarter mile were listed in the UST, CA FID UST, Hist UST, SWEEPS or AST databases:

Miner's Mart 117451 Hwy 120 Big Oak Flat, CA 95305 Distance: 590 feet

Direction: West Southwest

Henley's Building Supply 17867 Hwy 120 Big Oak Flat, CA 95305 Distance: 590 feet

Direction: West Southwest



Neilson's Mini Mart 17586 Main St Big Oak Flat, CA 95305 Distance: 590 feet

Direction: West Southwest

Suburban Propane- Big Oak Flat 11236 Ward's Ferry Rd Big Oak Flat, CA 95305 Distance: 756 feet

Direction: West Southwest

Tuolumne County CRA Roads Big Oak Flat Yard 11240 Ward's Ferry Rd Big Oak Flat, CA 95305 Distance: 790 feet

Direction: West Southwest

Two sites, Miner's Mart and Neilson's Mini Mart, are also listed on the LUST site discussed below. Based on the distance, direction, and regulatory status, the remaining sites are not anticipated to pose an environmental concern to the Project Site.

5.2.11 Leaking Underground Storage Tanks

The leaking Underground Storage Tank Information System (LUST) records contain an inventory of reported leaking underground storage tanks incidents gathered from local and state (SWRCB) regulatory agencies.

 The Project Site was not listed on the LUST list. Two properties located within a one-half mile of the Project Site were identified in the LUST database:

Miner's Mart 117451 Hwy 120 Big Oak Flat, CA 95305 Distance: 590 feet

Direction: West Southwest

Neilson's Mini Mart 17586 Main St Big Oak Flat, CA 95305 Distance: 590 feet

Direction: West Southwest



Both of these sites are listed with a "Case Closed" status requiring no further action. Based on the distance, direction, and regulatory status, these two sites are not anticipated to pose an environmental concern to the Project Site.

5.2.12 Spills, Leaks, Investigations, and Cleanup List

The RWQCB is the agency with jurisdiction over groundwater protection in the region of the Project Site. The RWQCB maintains a Spills, Leaks, Investigation, and Cleanup (SLIC) list regarding active investigations at non-LUST sites with the potential to affect groundwater quality.

• Neither the Project Site nor properties located within a one-quarter mile from the Project Site were identified in the SLIC database.

5.2.13 Solid Waste/Landfill Sites

The Solid Waste Assessment Test Program (SWAT) is a database maintained by the SWRCB for information on the ground water monitoring of sanitary landfills. The California Integrated Waste Management Board (CIWMB) maintains the Solid Waste Information System (SWIS) pursuant to the Solid Waste Information System (SWIS) pursuant to the Solid Waste Management and Resource Recovery Act of 1972. The SWIS list contains an inventory of active, inactive, and closed solid waste disposal and transfer facilities. The Waste Management Unit Database (WMUDS) is an inventory of waste management units developed by SWRCB and RWQCB staff.

• Neither the Project Site nor properties located within a one-half mile radius of the Project Site were identified on the SWAT/SWIS/WMUDS Lists.

5.2.14 Proposition 65 Notification Records

Proposition 65 Notification Records (Notify 65) database contains facility notification about any releases which could impact drinking water and thereby expose the public to a potential health risk.

• The Project Site was not identified in the Notify 65 database.

5.2.15 Historical Dry Cleaners

EDR performed a database search of potential dry cleaner sites. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, and wash & dry facilities.

 Neither the Project Site nor properties within a one-eighth mile radius were identified on EDR's Historical Dry Cleaner List.



5.2.16 School Property Evaluation Program (SCH) Database

The DTSC maintains a database of school sites that are being evaluated for possible hazardous materials contamination as required by the California Education Code.

Neither the Project Site, nor properties within a one-eighth mile radius of the Project Site, were identified in the SCH database.

5.2.17 Other Ascertainable Records (Project Site and Adjacent Properties)

EDR performed a search of other database records listed on Pages 6 and 7 of the EDR Radius Map Report with GeoCheck (EDR, 2020). The Project Site is listed as a CUPA-registered site under the site name of Yosemite Way Station Mini Mart, located at Way Station Road, and reportedly contained aboveground storage tanks. The Project Site is also listed as Yosemite Way Station under the California Integrated Water Quality Information System (CIWQS) for registration with the State Water Resources Control Board for compliance with the state-wide construction storm water program between 1992 and 1996. No violations were noted under either facility listing.

5.3 USER PROVIDED INFORMATION

5.3.1 Owner, Property Manager, and Occupant Information

No property manager or occupants were reportedly available for Padre to interview regarding environmental conditions at the Project Site.

5.3.2 Specialized Knowledge

Padre was not provided with any additional "specialized site knowledge" regarding the Project Site.

5.4 RECS OBSERVED DURING THE ENVIRONMENTAL RECORDS REVIEW

Padre did not identify any evidence or conditions that would pose a REC to the Project Site during the course of the environmental records review.



6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the scope of services performed for this ESA, Padre makes the following conclusions regarding the Project Site.

6.1 CURRENT CONDITIONS AND HISTORICAL SITE BACKGROUND

Padre completed a Phase I ESA for the approximately 35-acre Project Site located at on Highway 120, between Big Oak Flat and Groveland, Tuolumne County, California. The Project Site is currently developed with one vacant commercial building and a canopy structure associated with a former fuel service station and store. The majority of the Project Site is vacant and was observed to have been previously graded for development purposes. Storm water drainage improvements were observed throughout the Project Site.

The Project Site is bounded on the north by residential property and undeveloped land, on the east by undeveloped forest land, on the south by a cemetery and undeveloped land, and on the west by undeveloped land and a hardware store. In general, the surrounding properties to the Project Site consist of residential and forest land.

Evidence of three USTs associated with a former service station were observed at the Project Site. The USTs are partially exposed on the ground surface within a bermed area that is currently flooded from recent rain events. No evidence of dumping, pits, spills, and/or or leaks of chemicals in the form of stained soil or stressed vegetation was observed at the Project Site.

The Project Site is listed as a Tuolumne County CUPA listing for the use of aboveground storage tanks; however, no aboveground storage tanks were observed during Padre's site visit. Padre has attempted to obtain file information from Tuolumne County Environmental Health Services regarding the USTs; however, no response has been received by Padre as of the date of this report. The environmental database review did not reveal any other sites on or within close proximity to the Project Site that would be considered to pose a REC to the Project Site.

Based on a review of readily available historical information, the Project Site was undeveloped prior to the mid-1990s when the Project Site was graded, and the former service station facility was constructed. The Project Site appears to have been abandoned since the mid-1990s and it is unclear whether the service station ever operated.

6.2 ENVIRONMENTAL CONDITIONS

The three on-site USTs are currently submerged under standing water within a bermed area. Padre was unable to determine whether the USTs contain liquids. The on-site structures have the potential to contain asbestos-containing building materials and lead-based painted surfaces.



6.3 RECOMMENDATIONS

Padre makes the following recommendations regarding the Project Site:

USTs. Padre recommends completion of an inspection of the USTs to determine whether they contain liquids and to assess their integrity. Any liquids within the USTs should be pumped out and properly disposed. The USTs should be inspected prior to future use or properly removed by a licensed contractor. The resulting soil excavation base and sidewalls should be assessed to determine whether the USTs have leaked petroleum hydrocarbons into the surrounding subsurface.

Asbestos Containing Materials. Padre recommends the completion of an asbestos survey of the on-site structures prior to any renovation or demolition activities. If asbestos-containing materials be identified, then those materials should be properly abated by a licensed asbestos abatement contractor.

Lead Based Paint. Padre recommends the completion of a lead-based paint survey of the on-site structures prior to any renovation or demolition activities. Should lead-based paint be identified, they should be removed by a properly trained and licensed contractor.



7.0 LIMITATIONS

This report has been prepared for the sole benefit of Mr. James Tate. No other persons may rely on the findings of this report without the expressed written consent of the client and Padre Associates, Inc.

In performing our professional services, we have attempted to apply present engineering and scientific judgment and use a level of effort consistent with the standard of practice measured on the date of work and in locale of the Project Site for similar type studies. Padre Associates, Inc. makes no warranty, express or implied.

The analyses and interpretations presented in this report have been developed based on the results from the review of existing information pertaining to the Project Site.

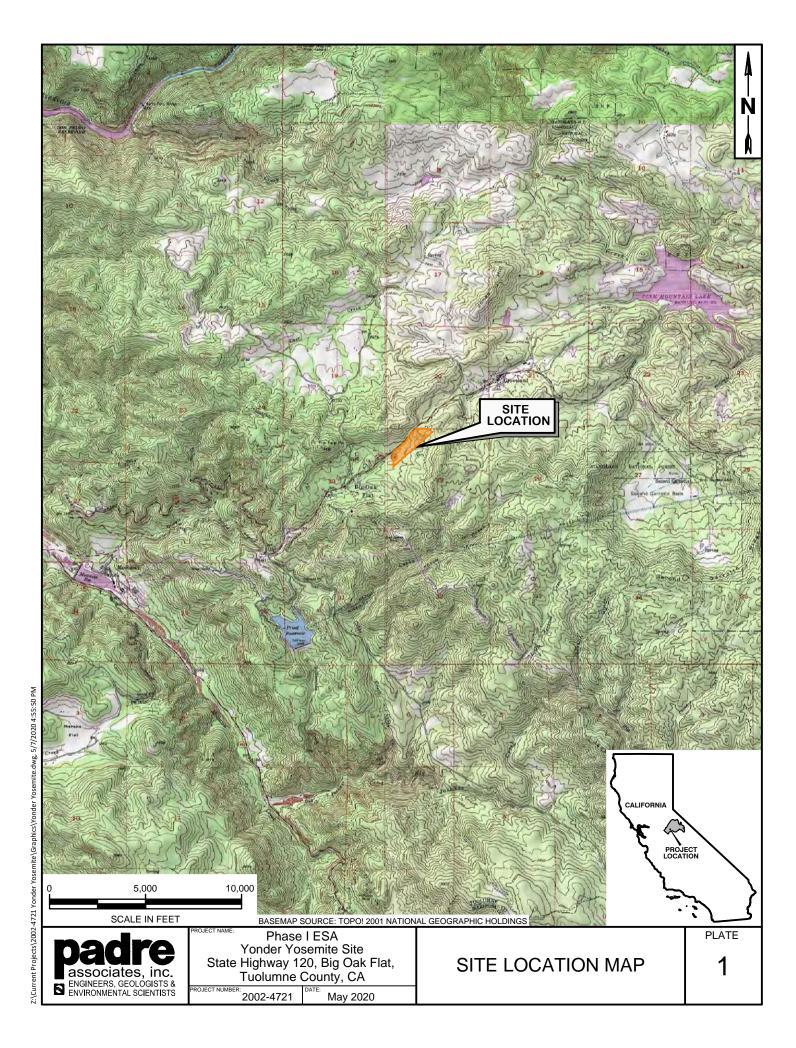


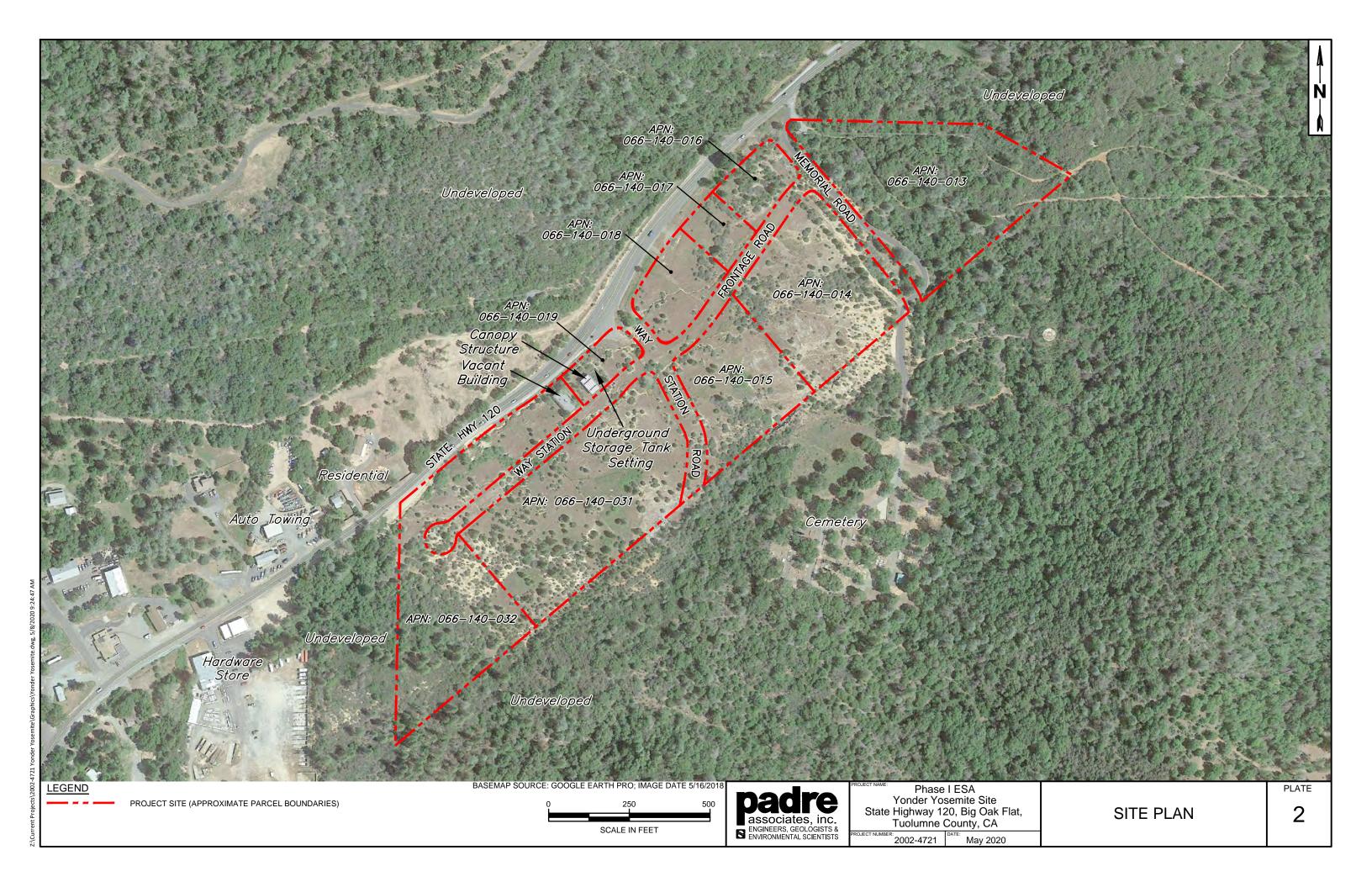
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- United States Geological Survey 7.5-minute topographic series, Groveland, California, dated 2018.
- United States Geological Survey 7.5-minute topographic series, Moccasin, California, dated 2018.
- Wagner, D.L., Bortugno, E.J, and McJunkin, R.D., 1991 Geologic Map of the San Francisco San Jose Quadrangle, California, Scale: 1:250,000.



PLATES







APPENDIX A SITE PHOTOGRAPHS





Photo 1. View of Former Service Station from Highway 120.



Photo 2. View of vacant building.





Photo 3. Interior of vacant building.



Photo 4. View of UST setting.





Photo 5. View of canopy area.



Photo 6. View of central portion of Project Site, looking south.





Photo 7. View of central portion of Project Site, looking east.



Photo 8. Southern portion of Project Site.





Photo 9. View of drainage culvert and erosional area within the Project Site.



Photo 10. View of Project Site from Highway 120.



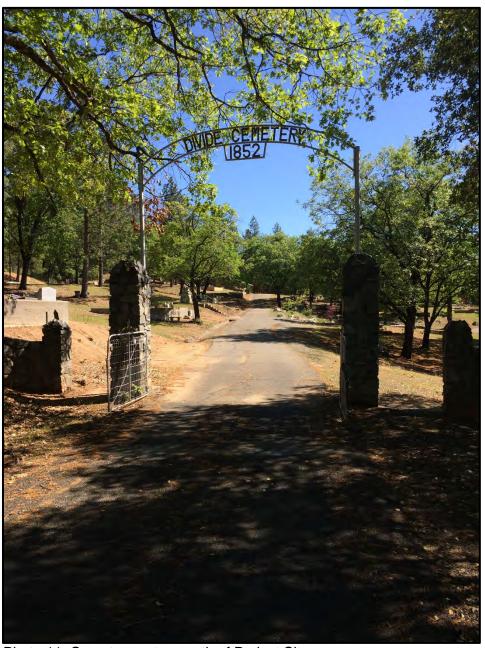


Photo 11. Cemetery gates south of Project Site





Photo 12. Residential property to west of Project Site.



APPENDIX B HISTORICAL INFORMATION

B1: AERIAL PHOTOGRAPHS
B2: SANBORN MAP COVERAGE
B3: TOPOGRAPHIC MAPS
B4: CITY DIRECTORY ABSTRACT



APPENDIX B1 AERIAL PHOTOGRAPHS

Yonder Yosemite

Highway 120 Groveland, CA 95321

Inquiry Number: 6050736.11

April 28, 2020

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

04/28/20

Site Name: Client Name:

Yonder Yosemite Padre Associates, Inc Highway 120 369 Pacific Street Groveland, CA 95321 San Luis Obispo, CA 93

369 Pacific Street
San Luis Obispo, CA 93401
Contact: Eric Snelling



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

EDR Inquiry # 6050736.11

| <u>Year</u> | <u>Scale</u> | <u>Details</u> | Source |
|-------------|--------------|-----------------------------------|-----------|
| 2016 | 1"=500' | Flight Year: 2016 | USDA/NAIP |
| 2012 | 1"=500' | Flight Year: 2012 | USDA/NAIP |
| 2009 | 1"=500' | Flight Year: 2009 | USDA/NAIP |
| 2005 | 1"=500' | Flight Year: 2005 | USDA/NAIP |
| 1998 | 1"=500' | Acquisition Date: August 18, 1998 | USGS/DOQQ |
| 1984 | 1"=500' | Flight Date: January 01, 1984 | USGS |
| 1980 | 1"=500' | Flight Date: January 01, 1980 | USGS |
| 1969 | 1"=500' | Flight Date: January 01, 1969 | NASA |
| 1954 | 1"=500' | Flight Date: August 17, 1954 | USGS |
| 1945 | 1"=500' | Flight Date: January 01, 1945 | USGS |

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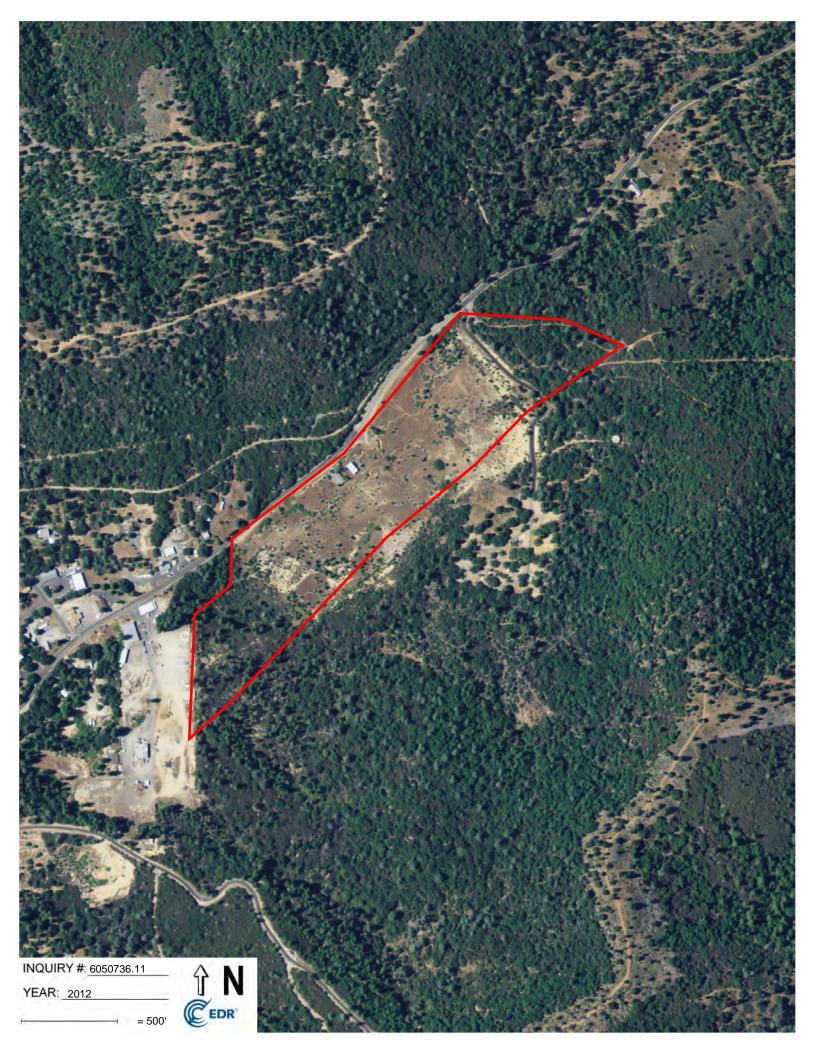
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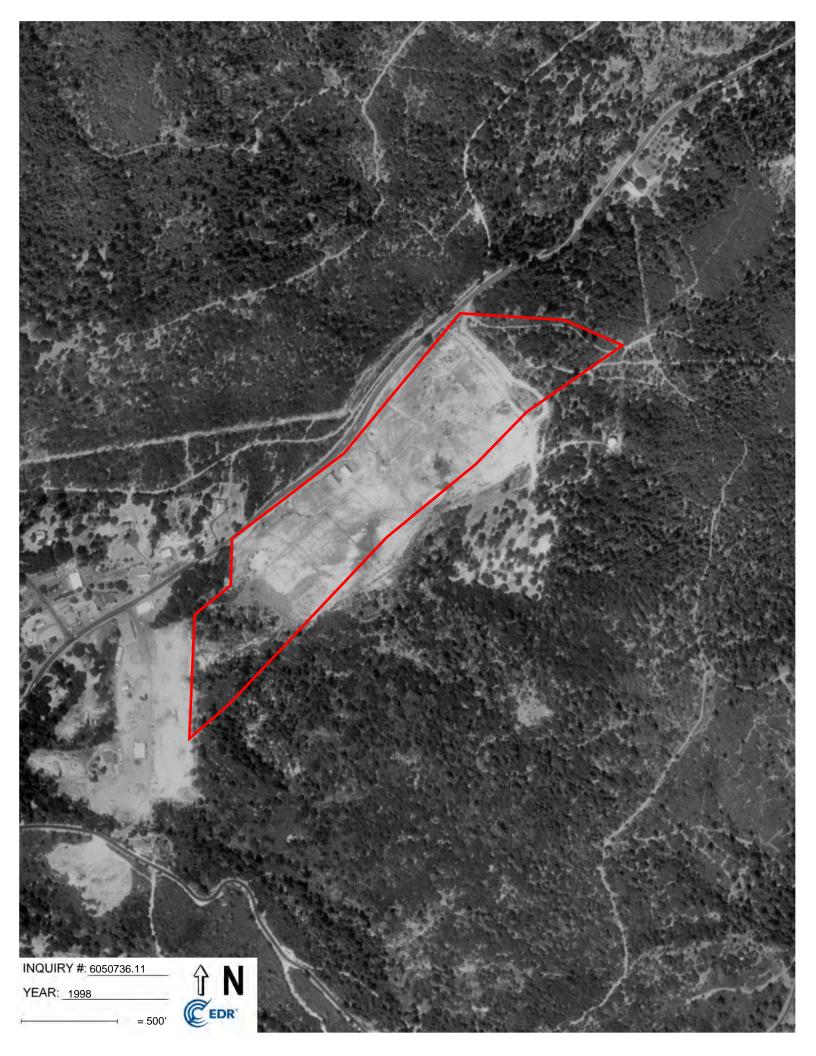
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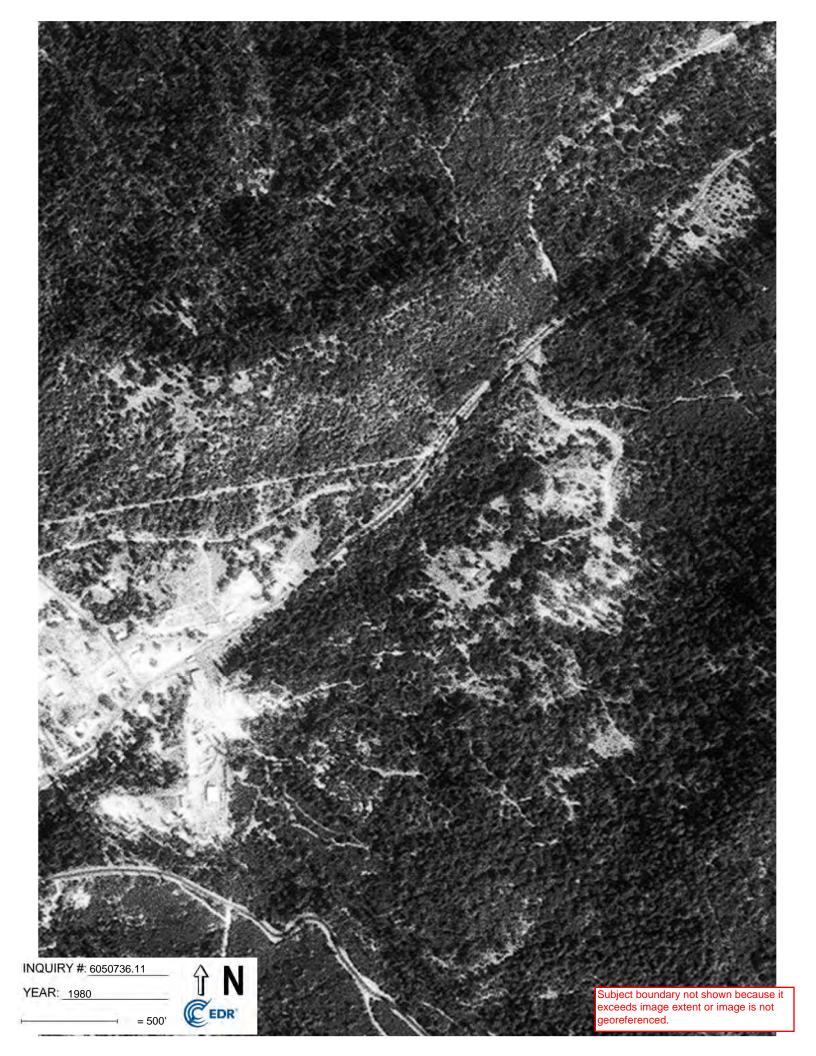




















APPENDIX B2 SANBORN MAP COVERAGE

Yonder Yosemite Highway 120 Groveland, CA 95321

Inquiry Number: 6050736.3

April 27, 2020

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Certified Sanborn® Map Report

04/27/20

Site Name: Client Name:

Yonder Yosemite Padre Associates, Inc. 369 Pacific Street Highway 120

Groveland, CA 95321 San Luis Obispo, CA 93401

EDR Inquiry # 6050736.3 Contact: Eric Snelling



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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # C141-491B-BBEC

PO# 2002-4721

Yonder Yosemite Project **Project**

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: C141-491B-BBEC

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

✓ University Publications of America

▼ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX B3 TOPOGRAPHIC MAPS

Yonder Yosemite Highway 120 Groveland, CA 95321

Inquiry Number: 6050736.4

April 27, 2020

EDR Historical Topo Map Report

with QuadMatch™



EDR Historical Topo Map Report

04/27/20

Site Name: Client Name:

Yonder Yosemite Padre Associates, Inc Highway 120 369 Pacific Street

Groveland, CA 95321 San Luis Obispo, CA 93401

EDR Inquiry # 6050736.4 Contact: Eric Snelling



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Padre Associates, Inc were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

| Search Resi | ults: | Coordinates: | |
|-------------|-------------------------|----------------------|--------------------------------|
| P.O.# | 2002-4721 | Latitude: | 37.829286 37° 49' 45" North |
| Project: | Yonder Yosemite Project | Longitude: | -120.246885 -120° 14' 49" West |
| | · | UTM Zone: | Zone 10 North |
| | | UTM X Meters: | 742298.71 |
| | | UTM Y Meters: | 4190446.07 |
| | | Elevation: | 2994.18' above sea level |

Maps Provided:

2012 1897 2001 1896 1987 1893 1973 1949 1948 1947, 1948 1898

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Groveland 2012 7.5-minute, 24000



Moccasin 2012 7.5-minute, 24000

2001 Source Sheets



Groveland 2001 7.5-minute, 24000 Aerial Photo Revised 1998

1987 Source Sheets



Groveland 1987 7.5-minute, 24000 Aerial Photo Revised 1984



Moccasin 1987 7.5-minute, 24000 Aerial Photo Revised 1984



GROVELAND 1987 7.5-minute, 24000

1973 Source Sheets



Groveland 1973 7.5-minute, 24000 Aerial Photo Revised 1973



Moccasin 1973 7.5-minute, 24000 Aerial Photo Revised 1943



GROVELAND 1973 7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1949 Source Sheets



Groveland 1949 7.5-minute, 24000 Aerial Photo Revised 1945



Moccasin 1949 7.5-minute, 24000 Aerial Photo Revised 1945

1948 Source Sheets



Tuolumne 1948 15-minute, 62500 Aerial Photo Revised 1945



Sonora 1948 15-minute, 62500 Aerial Photo Revised 1945

1947, 1948 Source Sheets



Groveland 1947 7.5-minute, 24000 Aerial Photo Revised 1945



Moccasin 1948 7.5-minute, 24000 Aerial Photo Revised 1945

1898 Source Sheets



Sonora 1898 30-minute, 125000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1897 Source Sheets



Sonora 1897 30-minute, 125000

1896 Source Sheets

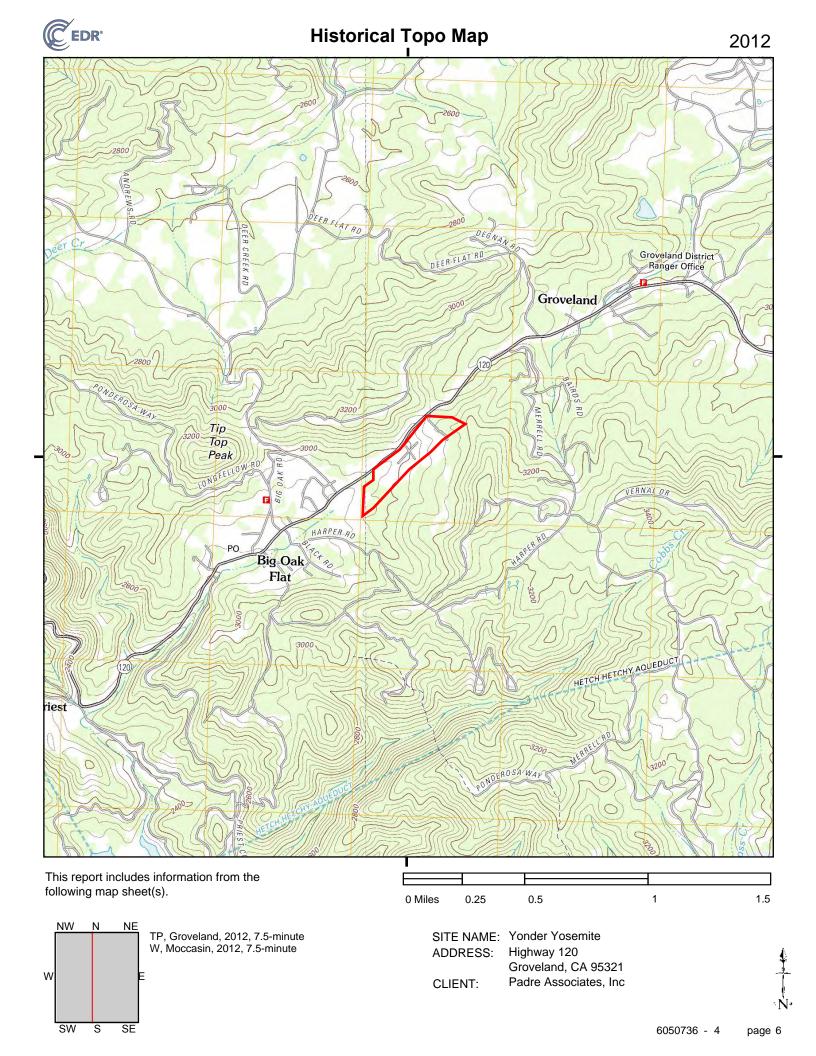


Sonora 1896 30-minute, 125000

1893 Source Sheets



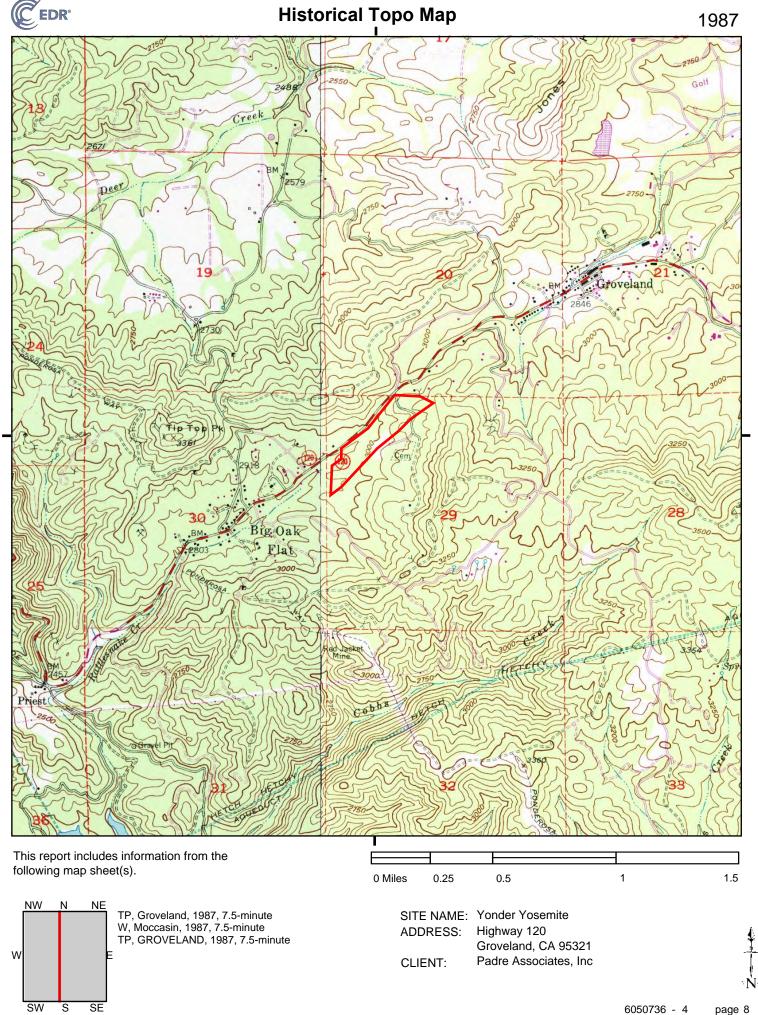
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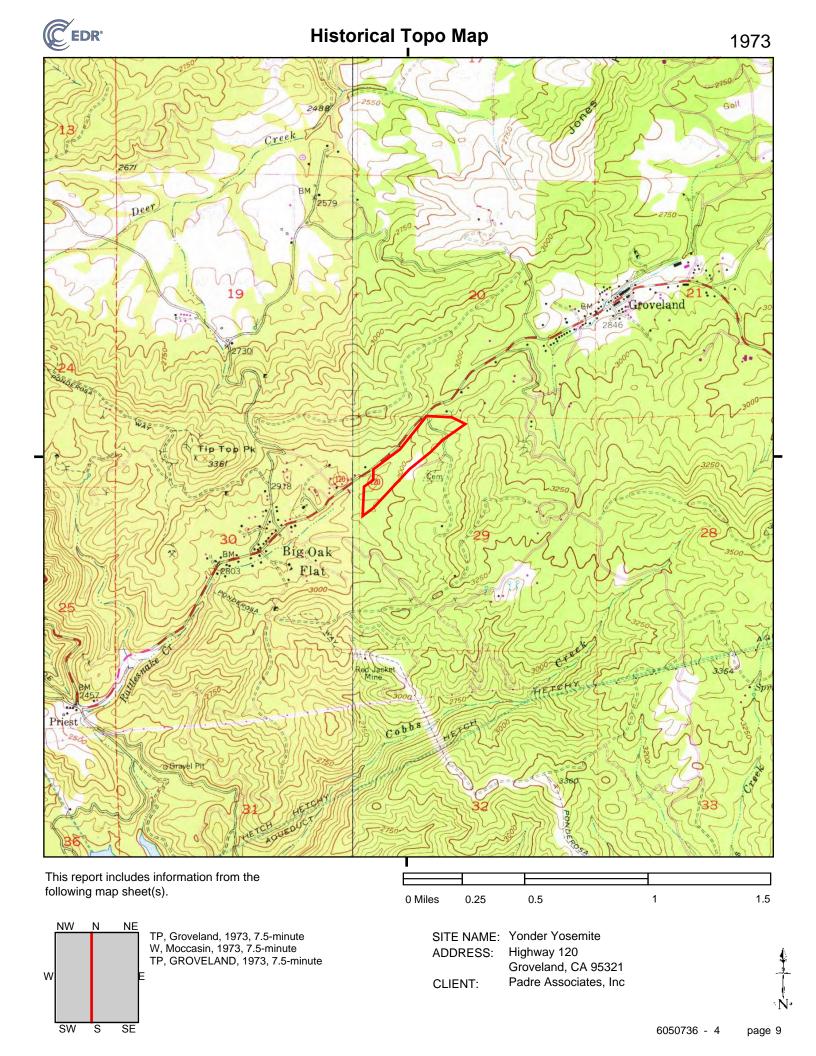


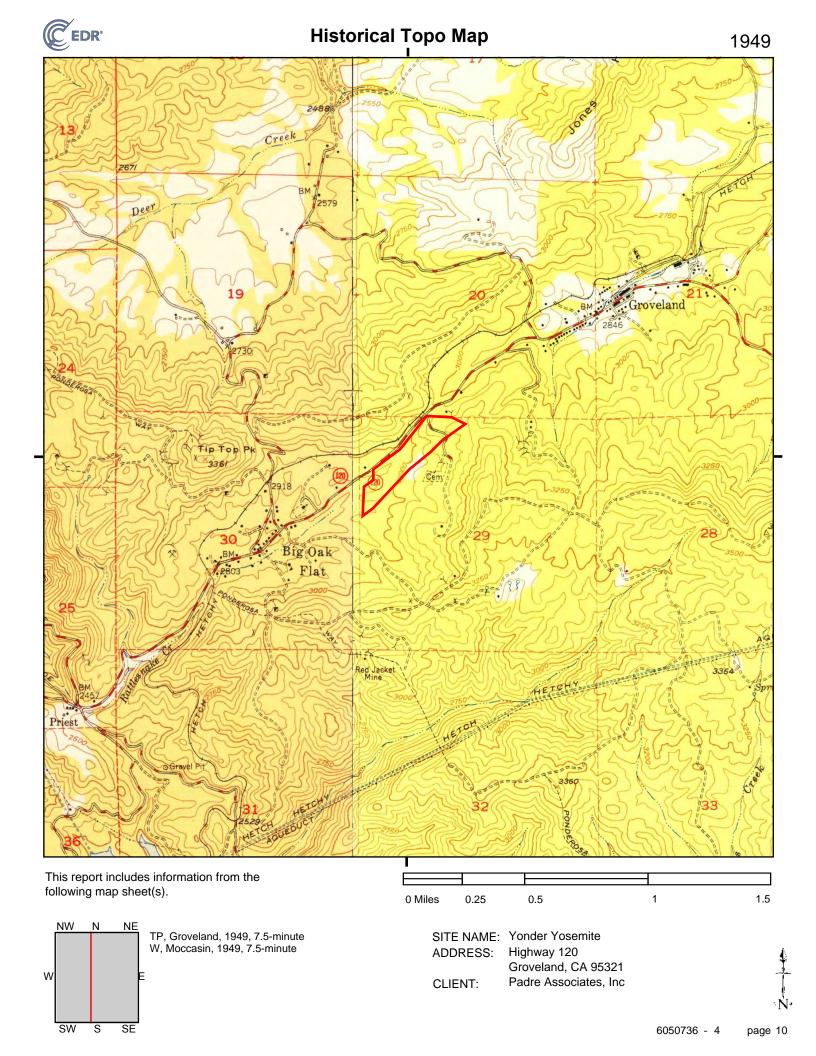
6050736 - 4 page 7

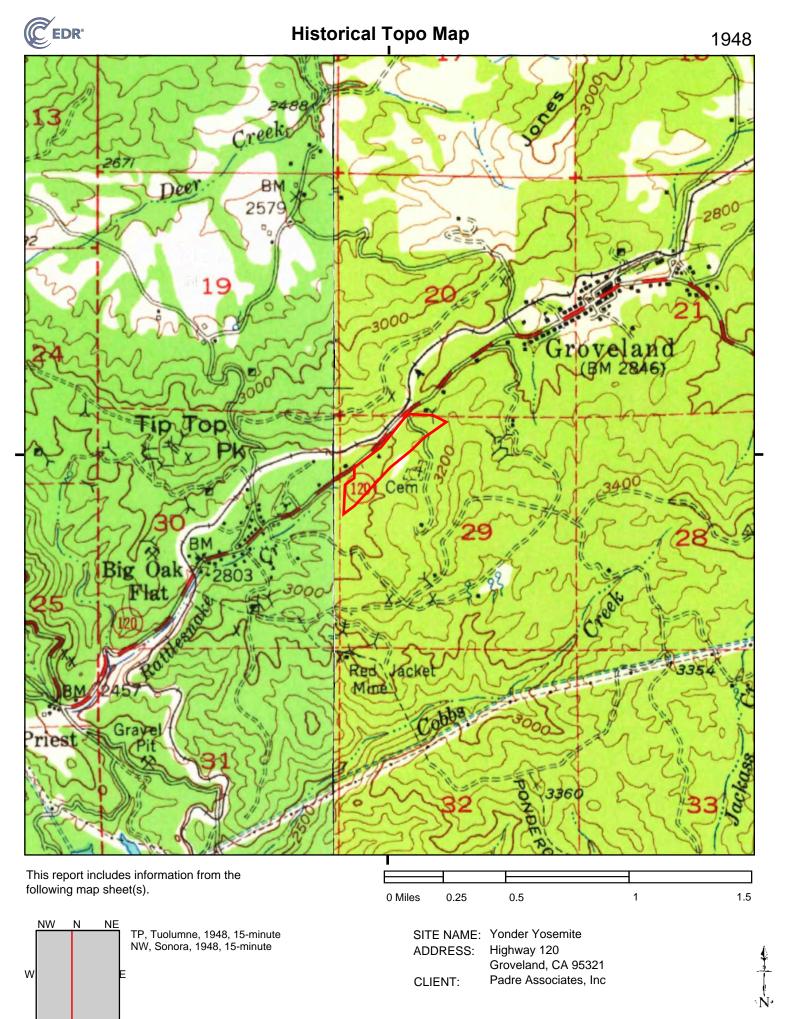
Groveland, CA 95321 Padre Associates, Inc

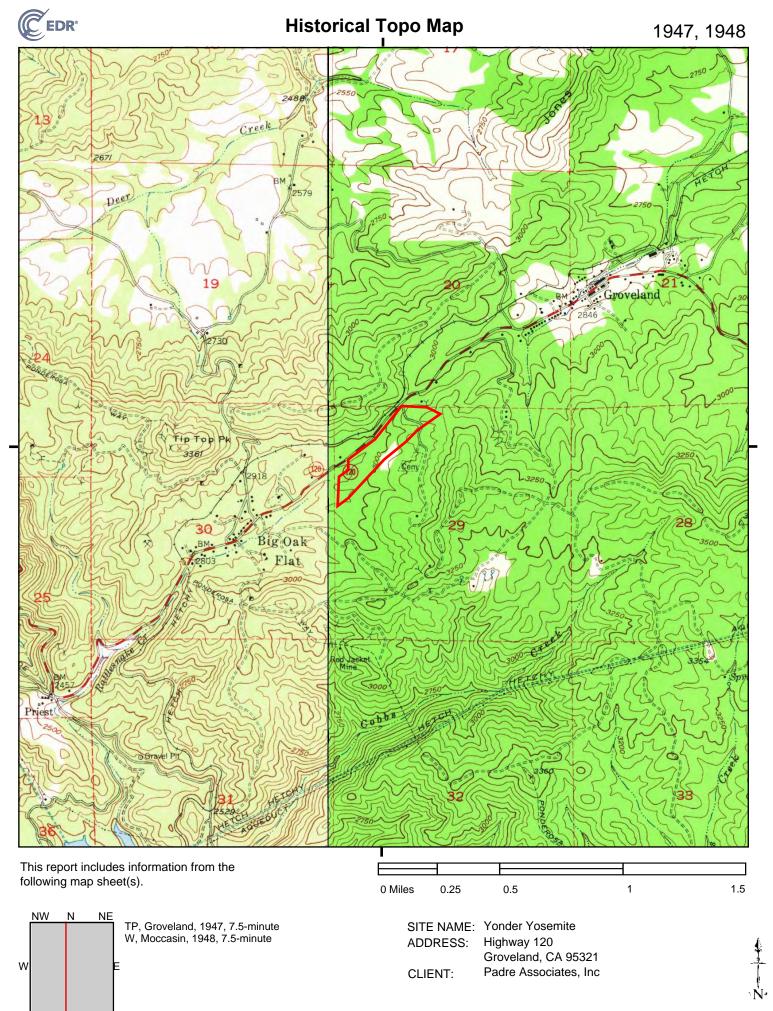
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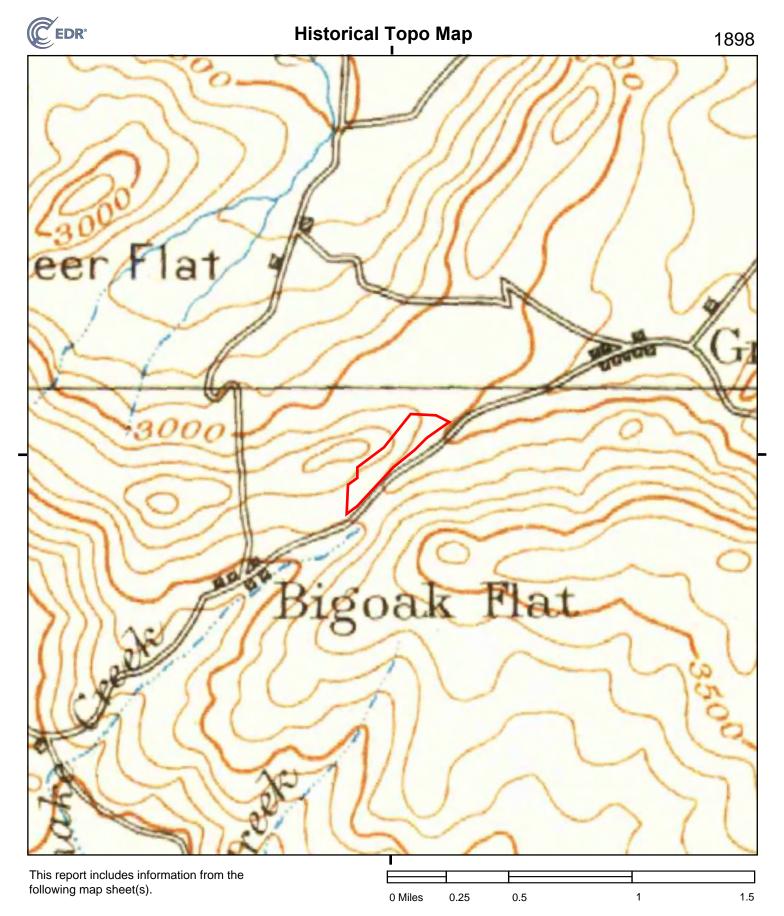












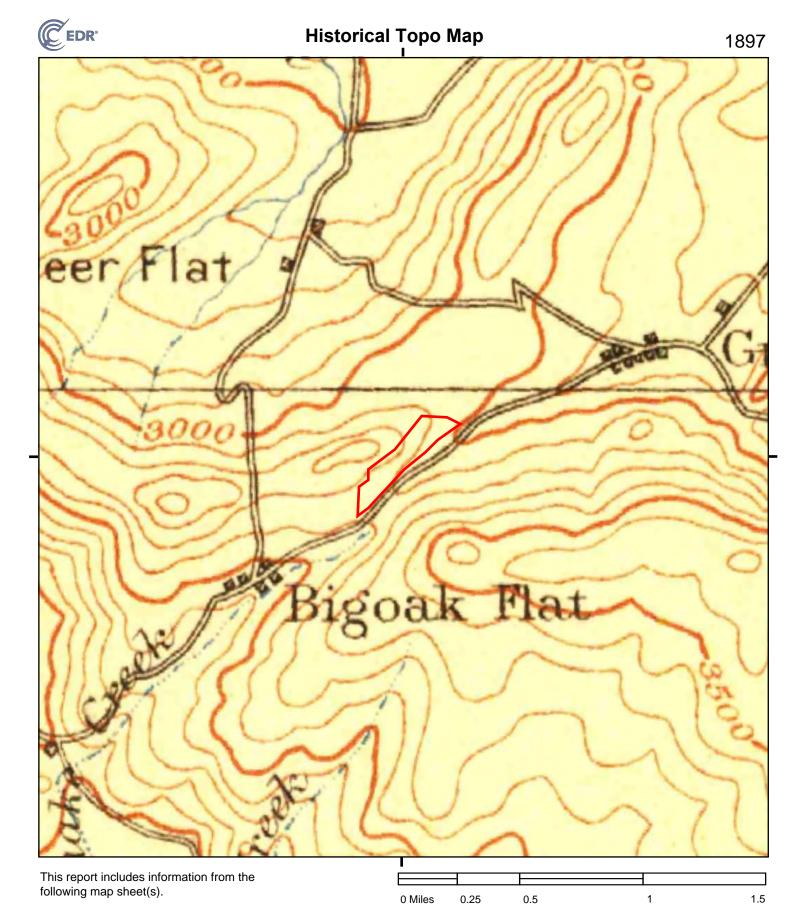
NW N NE TP, Sonora, 1898, 30-minute
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SITE NAME: Yonder Yosemite ADDRESS: Highway 120

Groveland, CA 95321

CLIENT: Padre Associates, Inc



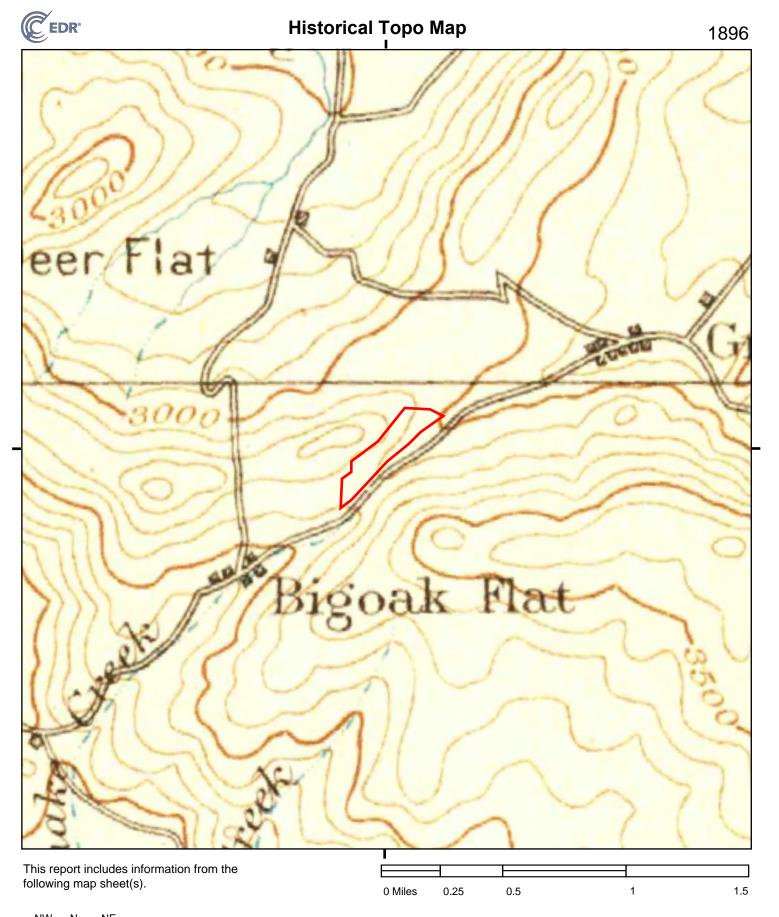


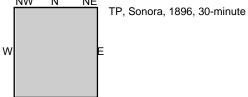
NW N NE TP, Sonora, 1897, 30-minute
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SITE NAME: Yonder Yosemite ADDRESS: Highway 120

Groveland, CA 95321

CLIENT: Padre Associates, Inc

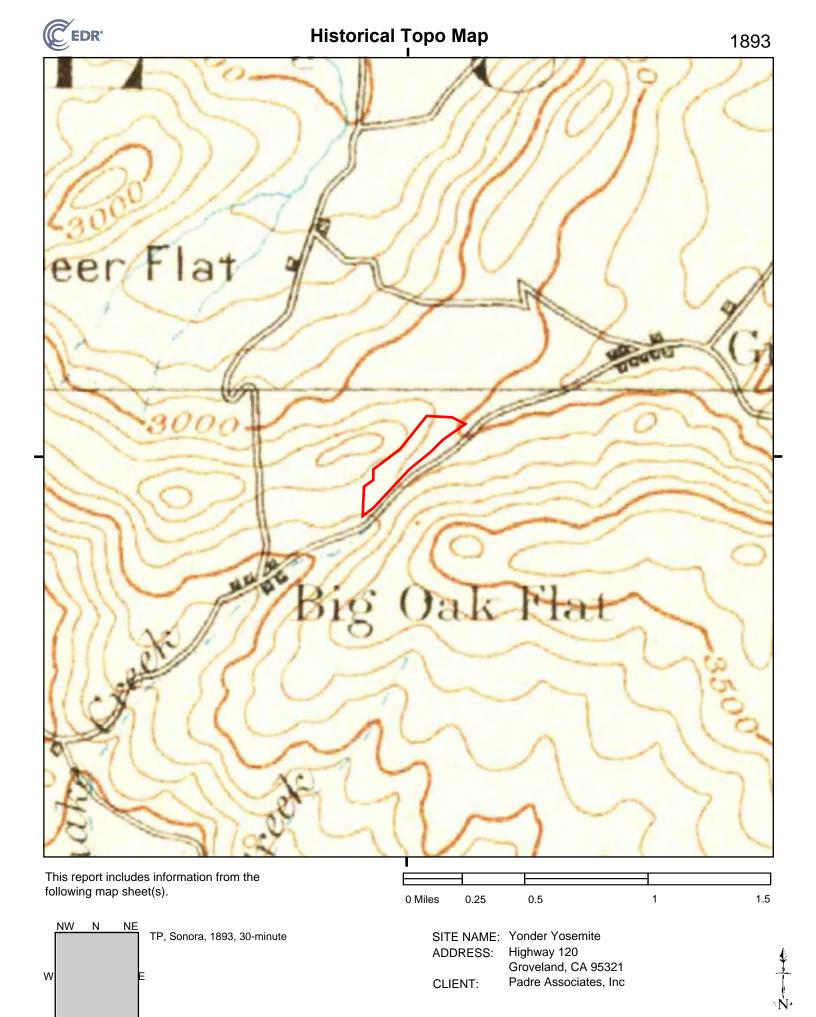




SITE NAME: Yonder Yosemite
ADDRESS: Highway 120

Groveland, CA 95321

CLIENT: Padre Associates, Inc





APPENDIX B4 CITY DIRECTORY ABSTRACT

Yonder Yosemite

Highway 120 Groveland, CA 95321

Inquiry Number: 6050736.5

April 28, 2020

The EDR-City Directory Image Report



TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

| <u>Year</u> | Target Street | Cross Street | <u>Source</u> |
|-------------|---------------|--------------|------------------------------|
| 2017 | ☑ | | EDR Digital Archive |
| 2014 | | | EDR Digital Archive |
| 2010 | | | EDR Digital Archive |
| 2005 | | | EDR Digital Archive |
| 2000 | | | EDR Digital Archive |
| 1996 | | | POLK DIRECTORY CO |
| 1985 | | | Haines Criss-Cross Directory |
| 1981 | | | Haines Criss-Cross Directory |
| 1977 | | | Haines Criss-Cross Directory |
| 1974 | | | Haines Criss-Cross Directory |
| 1971 | | | Haines Criss-Cross Directory |

FINDINGS

TARGET PROPERTY STREET

Highway 120 Groveland, CA 95321

| <u>Year</u> | CD Image | Source | |
|-------------|------------|------------------------------|---|
| HIGHWAY 1 | <u>20</u> | | |
| | | | |
| 2000 | pg A5 | EDR Digital Archive | |
| 1996 | - | POLK DIRECTORY CO | Street not listed in Source |
| 1985 | pg A6 | Haines Criss-Cross Directory | |
| 1985 | pg A7 | Haines Criss-Cross Directory | |
| 1981 | pg A8 | Haines Criss-Cross Directory | |
| 1981 | pg A9 | Haines Criss-Cross Directory | |
| 1977 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1974 | - | Haines Criss-Cross Directory | Target and Adjoining not listed in Source |
| 1971 | - | Haines Criss-Cross Directory | Street not listed in Source |
| OTATE IIIOI | NA/AV/ 400 | | |
| STATE HIGH | 1WAY 120 | | |
| | | | |
| 2017 | pg A1 | EDR Digital Archive | |
| 2014 | pg A2 | EDR Digital Archive | |
| 2010 | pg A3 | EDR Digital Archive | |
| 2005 | pg A4 | EDR Digital Archive | |
| | | | |

6050736-5 Page 2

FINDINGS

CROSS STREETS

No Cross Streets Identified

6050736-5 Page 3



| 7589 | YOSEMITE RIDGE |
|-------|-------------------------------------|
| 7593 | MARTINEZ, JUAN B |
| 7597 | EAKLE, C |
| | HANNAH, JOHNSON |
| | HOWLAND, DAVID E |
| | MUNOZ, REGINA D |
| | ORGAN, WILLIAM J |
| | SCHLUCHTER, LEW |
| 7633 | YOSEMITE WESTGATE LODGE |
| 7647 | BUCK MEADOWS LODGE |
| | BUCKMEADOWS RESTAURANT |
| 17820 | P&P |
| 17867 | MILLER BROS AUTOMOTIVE |
| | PML HARDWARE & LUMBER SUPPLY |
| 17870 | BIG OAK AUTO & TRUCK |
| 19177 | BIG OAK FLATGROVELAND UNIFIED SCHOO |
| | TENAYA PARENT PRESCHOOL |
| 19210 | TESELLE, ROBERT H |
| 19950 | BERKSHIRE INN |
| 20829 | FOILES, BENJAMIN |
| 20865 | KRAMER, LAURA G |
| 20889 | HELLER, JOHN J |
| 20951 | STEPHEN, HARVEY |
| 21250 | SUGAR PINE RANCH |
| 23350 | CARUTHERS, TIMOTHY |
| 24545 | UNITED STATES GOVERNMENT |
| | WEST COAST CONTRACTORS OF NEVEDA |
| 27890 | SIERRA MAC RIVER TRIPS |
| 31383 | YOSEMITE LAKES |
| | YOSEMITE LAKES N & A & C & O WEST |
| | |

| 7589 | YOSEMITE RIDGE |
|-------|--------------------------------------|
| 7593 | BRYANT, RICHARD D |
| 7597 | EAKLE, C |
| | MUNOZ, REGINA D |
| | ORGAN, WILLIAM J |
| | SCHLUCHTER, LEW |
| 7633 | AMERICAS BEST VALUE INN YOSEMITE WES |
| | YOSEMITE WESTGATE LODGE |
| 7647 | BUCK MEADOWS LODGE |
| | BUCKMEADOWS RESTAURANT |
| 18289 | ROSSINI, RAYMOND A |
| 18497 | OCCUPANT UNKNOWN, |
| 18531 | LEBLANC, PETER J |
| 18688 | REMAX YOSEMITE GOLD |
| 18930 | GROVELAND C S D FIRE DEPT |
| 18950 | COUNTY OF TUOLUMNE |
| 19031 | ANAYA, MICHAEL |
| 19138 | LANE, JENNY |
| 19161 | HAYS, TARYN J |
| 19177 | BIG OAK FLATGROVELAND UNIFIED SCHOO |
| | TENAYA ELEMENTARY SCHOOL |
| | TENAYA PARENT PRESCHOOL |
| 19210 | HORNAUER, ROBERT H |
| 19950 | BERKSHIRE INN |
| 20829 | FOILES, BENJAMIN |
| 20843 | , |
| 20855 | BENSTEAD, STEPHEN F |
| 20865 | JENSEN, HAROLD E |
| 21250 | |
| 23350 | • |
| 24025 | HOLCOMBS, CHARLES |
| 27601 | OCCUPANT UNKNOWN, |
| 27890 | SIERRA MAC RIVER TRIPS |
| 30400 | • |
| 31383 | YOSEMITE LAKES |
| | YOSEMITE LAKES N & A & C & O WEST |

| 7579 | MCDONNELL, M |
|-------|-----------------------------|
| | MORGAN, ANNETE |
| 7589 | YOSEMITE RIDGE |
| 7593 | OCCUPANT UNKNOWN, |
| 7597 | EAKLE, C |
| | HARRISON, ANGELA B |
| | MARTINEZ, RODRIGO |
| | MCINTOSH, K |
| | SCHLUCHTER, LEW |
| 7633 | YOSEMITE WESTGATE LODGE |
| 7642 | OGLE, KEVIN R |
| 19161 | HAYS, TARYN J |
| 19177 | TENAYA ELEMENTARY SCHOOL |
| 19399 | ST PATRICKS CATHOLIC CHURCH |
| 19618 | GARDINER, DAPHANE D |
| 19732 | KAIL, JEFF |
| 20751 | OCCUPANT UNKNOWN, |
| 20829 | FOILES, BENJAMIN |
| 20843 | BRANSON, MICHAEL C |
| 20865 | JENSEN, HAROLD E |
| 20889 | DOTY, DIANE |
| 20951 | JACKSON, CHARLES T |
| 21250 | SUGAR PINE RANCH |
| 24025 | HOLCOMBS, CHARLES |
| 24545 | US FORESTRY DEPT |
| | YOSEMITE ASSOCIATION |
| 27601 | OCCUPANT UNKNOWN, |
| 30400 | GEORGE, MEL |
| | |

| 7 | F70 | MCDONNELL |
|---|------------|-----------------------------------|
| | 579 | MCDONNELL, M |
| 7 | 589 | MOORE, JOHN C |
| _ | 507 | YOSEMITE RIDGE RESORT |
| / | 597 | BULLOCK, AMY |
| | | GREENFIELD, STEVEN |
| | | HIDALGO, ALICIA S |
| | | KING, PAUL A |
| | | PFEIFFER, REBECCA |
| | | SCHLUCHTER, LEW |
| | | SOUTH, LEVI |
| | 613 | ROYSE, VERNON L |
| | 647 | THE YOSEMITE WESTGATE BUCK MEADOW |
| | 651 | OCCUPANT UNKNOWN, |
| | 8569 | TRAXLER, TIMOTHY |
| 1 | 8583 | REMAX YOSEMITE GOLD |
| 1 | 8595 | SUTTON, PHILLIP |
| 1 | 8605 | HOMEMADE |
| | | HOT DOGGIE |
| 1 | 8660 | GRAY, JOHN |
| 1 | 8680 | MILLARD WILLIAM DDS |
| | | RUSSELL, ED |
| 1 | 8710 | SILVER, AL J |
| 1 | 8736 | HOTEL CHARLOTTE |
| | | NIEBYLSKI, VICTOR |
| 1 | 8800 | CENTURY 21 PLSNT VIEW PRPRTY |
| | | RESIDENTIAL DESIGN |
| | | ZOO PHONICS INC |
| | 8841 | FULTON, DONALD R |
| | 8875 | SULLIVAN, NANCY |
| | 9031 | ANAYA, MICHAEL |
| 1 | 9161 | HAYS, TARYN |
| 1 | 9177 | TENAYA ELEMENTARY |
| | 9618 | GARDINER, DAPHANE |
| 1 | 9732 | KAIL, JEFF |
| 1 | 9950 | BERKSHIRE INN |
| 2 | 0843 | BRANSON, MICHAEL C |
| 2 | 0855 | FORTIER, PHILLIP J |
| 2 | 0865 | OCCUPANT UNKNOWN, |
| 2 | 0889 | PATRICK, ROGER |
| 2 | 0951 | GUADAGNI, MARY L |
| | | YE OLDE CABINET & COUNTER TOP |
| 2 | 4545 | HADLOCK, NANCY A |
| | | UNITED STATES FOREST SERVICE |
| 2 | 7581 | POCSI, P |
| 2 | 7601 | OCCUPANT UNKNOWN, |
| | 7997 | CHARLSON, WILLIAM |
| | 0400 | GEORGE, MEL |
| 3 | 4001 | YOSEMITE GATEHOUSE LODGE |
| | | |

HIGHWAY 120 2000

| 7570 | MCDONNELL M |
|--------------|--|
| 7579 7597 | MCDONNELL, M JAMES, WILLIAM H |
| 7597 | YOUNG, GERALD R |
| 7640 | |
| 7613 | ROYSE, VERNON |
| 7642 | , |
| 7651 | VACATION STATION |
| | BIG OAK AUTO & TRUCK |
| | REMAX YOSEMITE GOLD SALES OFFICE |
| 18653 | |
| 18661 | |
| | GROVELAND FAMILY MEDICAL CENTER |
| | GUTHRIE GEORGE MD |
| | HARDIE J MD |
| | SHIELD STEVEN MD |
| 18727 | VINTAGE GOLD WINE BAR & BOTTLE SHOP |
| 18730 | COCINA MICHOACANA |
| 18736 | FRUGAL GOLFER THE |
| | GROVELAND CHAMBER OF COMMERCE |
| | HIGHWAY 120 CHAMBER OF COMMERCE |
| 18744 | COFFEE EXPRESS |
| 18800 | ZOO PHONICS INCORPORATED |
| 18841 | SILVA, JAMES A |
| 18933 | ANAYA, M |
| 19161 | HAYS, TARYN |
| 19177 | BIG OAK FLAT GROVELAND UNIFIED SCHOOL DIST MAINTENANCE OFFIC |
| | BIG OAK FLAT GROVELAND UNIFIED SCHOOL DIST TENAYA E |
| | BIG OAK FLAT GROVELAND UNIFIED SCHOOL DISTRICT SUPERIN |
| | BIG OAK FLAT GROVELAND UNIFIED SCHOOL DISTRICT TRANSPORT |
| | TENAYA ELEMENTARY SCHOOL |
| 19210 | MANZANITA HILL BED & BREAKFAST |
| 19701 | THORNTON, HAROLD W |
| 19734 | STOWMAN, CHARLES |
| 19950 | BERKSHIRE INN |
| | YATES, BOB |
| 20843 | LANE, MARK E |
| 20889 | ZAHONY, GABOR L |
| 20951 | YE OLDE CABINET & COUNTER TOP |
| 24545 | KOVINAK, ANGELA |
| | YOSEMITE ASSOCIATION |
| 27581 | POCSI, P |
| 30400 | GEORGE, MEL |
| 31383 | THOUSAND TRAILS N & A & C & O WEST |
| 0.000 | YOSEMITE LAKES |
| | I OOLIVII IL LIIILO |

HIGHWAY 120 1985

HWY 120 95305 RIG OAK FLAT

| DIG V | JAN PLAT | |
|-------|--------------------|-------------|
| 17380 | SNYDER GEO W JIR | 962-7727 2 |
| 17433 | LEWELLEN OARLENE | 962-6827 1 |
| | LEWELLEN NELS | 962-5749 1 |
| | WEMMER GARY | 962-7669+5 |
| 17544 | XXXX | 00 |
| 17556 | AHLSWEDE G | 962-6314 4 |
| | ANNAS UPHOLSTERY | 982-5421 4 |
| 17576 | COMBINED BUILDERS | 962-6209 2 |
| | GROVELAND RLTY | 962-7153 2 |
| | NEILSENS GAS STOP | 962-7153+5 |
| 17585 | CROVELAND RADIATOR | 962-5127+5 |
| 17620 | XXXX | 00 |
| 17632 | CURRY THOS | 962-6238 +5 |
| 17791 | WEST L M | 962-6213 4 |
| 17820 | XXXX | 00 |
| 17850 | XXXX | 00 |
| 17867 | TEHAYA AUTO PARTS | 962-5231+5 |
| 17950 | EATON HAROLO W | 962-5566 2 |
| NO # | BORUP THOS | 962-7445 +5 |
| HO # | CANGIO MERARDO M | 962-7690 7 |
| NO # | EASTMAN ARCHIE O | 962-7626 7 |
| NO # | HENLEY LESEIE | 962-7254 7 |
| HOR | NENLEYS | 962-7181 |
| NO # | MOORE PEAL LEON | 962-6271 1 |
| NO # | SMITH ARTHUR B | 962-77BS |
| NO # | STAHL BYRON | 962-7638 8 |
| NC # | US POSTAL SERVICE | 962-6231 2 |
| NO E | YOSEMITE ELECTRIC | 962-5431 0 |
| • | 11 8U5 17 RES | 6 NEW |

HIGHWAY 120

1985

| | HWY | 120 95321 | | 3 |
|---|----------------|---------------------|------------|-------|
| | GRO' | VELAND | | 300 |
| ١ | 1795C | GARROTTE GARAGE SNP | 962-6579 | 4 |
| 1 | 18531 | LEBLANC PETE | 962-7682 | 4 |
| Į | 18583 | XXXX | 00 | |
| 1 | 18609 | YXXX | 00 | |
| ı | 18580 | MOUNTAIN LEISURE | 962-6667 | 4 |
| I | | NATL FIRST MORTGAGE | 982-8228+ | 5 |
| 8 | | PINE MOUNTAIN LAKE | 962-7159 | 2 |
| ١ | | SUNDOWN TOWNNSE RN | 962-6457 | 4 |
| ١ | | TIMBER TOUCH LOG HM | 962-5667+ | 5 |
| ļ | 18720 | TUOLMH CO GRYLND NL | 962-9910+ | 5 |
| ı | 18730 | XXXX | 00 | 005.0 |
| ľ | 18744 | PIGHT COMMECTION | 962-5724+ | S |
| l | 18759 | CUSTOM REALTY | 962-7123 | 2 |
| | 18500 | OUCHSNERER COHSTR | 862-5201 | 4 |
| | 16841 | HENOERSON BILL | 962-6003 | 4 |
| l | 18875 | XXXX | 00 | |
| ĺ | 19161 | HAYS T | 962-6452 | 4 |
| | 19177 | SUTTON ROOGER | 962-7002 | 1 |
| | 19210 | BOTTIN GALE | 962-6111 | 1 |
| | 19618 | PEET SPENCER | 962-6155 | 4 |
| | 19728 | LUCAS STANLEY J | 962-6128 | 1 |
| | 19734 | STOWMAN CHAS | 962-6229 | 1 |
|] | 19807 | SMITH TERESA J | 962-6856 | 2 |
| | 19920 | XXXX | 00 | 1 |
| | 20011 | HALL E R | 962-6054 | 4 |
| ĺ | 20839 | XXXX | 00 | |
| | 20689 | FRENCH ROBT | 962-7065 | 1 |
| | 21500 | | 962-6929 | 1 |
| | 200 March 2000 | MCPARTLANO PAUL | 962-6929 | 1 |
| I | 24000 | NELSON NOEL P | 962-7443 | 2 |
| | 24569 | JULYAN JUOY A | 962-7530 + | 5 |
| | NO # | ANDREWS HARRY S | B62 - 7565 | 6 |

HIGHWAY 120 1981

HWY 120 95305 **BIG OAK FLAT**

| ыа | OAK FLAT | |
|-------|---------------------|----------------|
| 17433 | LEWELLEN DARLENE | 962-6827 +1 |
| | LEWELLEN NELS | 962-6749 +1 |
| 17544 | XXXX | 00 |
| 17576 | M A C E LUMBER | 962 - 6875 + 1 |
| 17620 | COOPER ERIN T | 962-6441 +1 |
| 17820 | XXXX | 00 |
| 17860 | GREMMINGER JOYCE E | 962-6830 +1 |
| 17950 | MCPHERSON SHARON | 962-6584 +1 |
| NO# | BIG OAK FLT PST OFF | 962-6231 9 |
| NO# | CANCIO MERARDO M | 962-7690 7 |
| NO # | EASTMAN ARCHIE D | 962-7626 7 |
| NO# | GAMBINO JULES | 962-6550 0 |
| NO# | GARROTTE GARAGE VW | 962 - 7315 + 1 |
| MO # | HENLEY LESLIE | 962-7254 7 |
| NO# | HENLEYS | 962-7181 |
| NO# | MOORE PEAL LEON | 962-6271 +1 |
| NO# | PRIEST STA MOTEL&ST | 962-7110 8 |
| NO# | STAHL BYRON | 962-7638 8 |
| NO # | UNITED FARM AGENCY | 962 - 6780 + 1 |
| NO# | WAGNER RICHARD A | 962-7485 7 |
| | | |

HIGHWAY 120 1981

HWY 120 95321

| GROVELAND | | | |
|-----------|---------------------|-------------|--|
| 18583 | SCHWINGEN THOMAS | 962-7164+1 | |
| | YOSEMITE CHIROPROTO | 962-7194+1 | |
| 18653 | JOHNSTONE J LONNIE | 962-7549 0 | |
| 18730 | XXXX | 00 | |
| 16875 | FULTON CHERI | 962-6605 +1 | |
| 19177 | SUTTON RODGER | 962-7002 +1 | |
| 19210 | BOTTIN DALE | 962-6111 +1 | |
| | PAN SIERRA INC | 962-6566+1 | |
| 19618 | PECT SPENCER | 952-6155 +1 | |
| 19728 | LUCAS STANLEY J | 962-6128 +1 | |
| 19734 | STOWMAN CHAS | 962-6229 +1 | |
| 20011 | HALL RAY | 962-7643 0 | |
| 20673 | QUIROS LILIANA | 962-7263 +1 | |
| 20889 | FRENCH ROBT | 962-7065 +1 | |
| 21500 | KREJCIK PAULA | 962-6929 +1 | |
| | MCPARTLAND PAUL | 962-6929 +1 | |
| 24000 | KURZROK JOHN S | 962-6644 +1 | |
| 24550 | ABARCA MIKE | 962-6895 +1 | |
| NO B | ANDREWS HARRY S | 962-7565 6 | |
| NO B | AUSTRIA ANTONIO B | 962-7118 7 | |
| NO # | BASS EARL A | 962-7380 9 | |



APPENDIX C ENVIRONMENTAL DATABASE REPORT

Yonder Yosemite

Highway 120 Groveland, CA 95321

Inquiry Number: 6050736.2s

April 27, 2020

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

TABLE OF CONTENTS

| SECTION | PAGE |
|--|----------|
| Executive Summary | ES1 |
| Overview Map. | 2 |
| Detail Map. | |
| Map Findings Summary. | 4 |
| Map Findings. | 9 |
| Orphan Summary | 51 |
| Government Records Searched/Data Currency Tracking | GR-1 |
| GEOCHECK ADDENDUM | |
| Physical Setting Source Addendum. | A-1 |
| Physical Setting Source Summary | A-2 |
| Physical Setting Source Map. | A-7 |
| Physical Setting Source Map Findings. | A-8 |
| Physical Setting Source Records Searched | PSGR-1 |

Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

HIGHWAY 120 GROVELAND, CA 95321

COORDINATES

Latitude (North): 37.8292860 - 37° 49' 45.42" Longitude (West): 120.2468850 - 120° 14' 48.78"

Universal Tranverse Mercator: Zone 10 UTM X (Meters): 742304.8 UTM Y (Meters): 4190241.0

Elevation: 2993 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5636543 GROVELAND, CA

Version Date: 2012

West Map: 5640010 MOCCASIN, CA

Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140619 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: HIGHWAY 120 GROVELAND, CA 95321

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|-----------|----------------------|----------------------|-------------------------------------|-----------------------|-------------------------------|
| A1 | MILLER BROTHERS AUTO | 17870 STATE HIGHWAY | CERS HAZ WASTE, CERS | Lower | 256, 0.048, WSW |
| 2 | PML HARDWARE INC | 17867 HIGHWAY 120 | CERS HAZ WASTE, CERS, HWTS | Lower | 280, 0.053, SW |
| A3 | J.S. WEST - BIG OAK | 17860 HIGHWAY 120 | CUPA Listings | Lower | 418, 0.079, WSW |
| 4 | HWY 120 TOWING & REP | 17870 HIGHWAY 120 | CUPA Listings, HWTS | Lower | 423, 0.080, WSW |
| B5 | MINER'S MART | 17451 HWY 120 | UST | Lower | 590, 0.112, WSW |
| B6 | HENLEY'S BUILDING SU | 17867 HIGHWAY 120 | UST, SWEEPS UST | Lower | 590, 0.112, WSW |
| B7 | NEILSEN'S MINI MART | 17586 MAIN | UST | Lower | 590, 0.112, WSW |
| C8 | THE TIRE SHOP | 11239 WARDS FERRY RD | CERS HAZ WASTE, CUPA Listings, CERS | Lower | 698, 0.132, WSW |
| B9 | SUBURBAN PROPANE- BI | 11236 WARDS FERRY RD | AST | Lower | 766, 0.145, WSW |
| C10 | TUOLUMNE COUNTY C.R. | 11240 WARDS FERRY RD | CERS TANKS, CERS | Lower | 790, 0.150, WSW |
| C11 | TUOLUMNE COUNTY C.R. | 11240 WARDS FERRY RD | AST | Lower | 790, 0.150, WSW |
| C12 | TUOLUMNE COUNTY BOF | 11240 WARDS FERRY RD | CERS HAZ WASTE | Lower | 790, 0.150, WSW |
| 13 | MINOR'S MART | 17867 HWY 120 | LUST, SWEEPS UST, HIST CORTESE | Lower | 1876, 0.355, WSW |
| 14 | NEILSEN'S MINI MART | 17586 120 | LUST, CUPA Listings, HIST CORTESE | Lower | 2215, 0.420, WSW |
| 15 | GROVELAND MILL # 2 | HIGHWAY 120/HELLS HO | ENVIROSTOR | Lower | 4315, 0.817, NE |

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

| Federal NPL site list | |
|----------------------------------|---------------------------------------|
| NPL Proposed NPL NPL LIENS | Proposed National Priority List Sites |
| Federal Delisted NPL site lis | st . |
| Delisted NPL | National Priority List Deletions |
| Federal CERCLIS list | |

FEDERAL FACILITY..... Federal Facility Site Information listing

| SEMS | Superfund Enterprise Management System |
|------|--|
| | |
| | |

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE....... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

| RCRA-LQG | RCRA - Large Quantity Generators |
|-----------|---|
| RCRA-SQG | RCRA - Small Quantity Generators |
| RCRA-VSQG | RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity |
| | Generators) |

Federal institutional controls / engineering controls registries

LUCIS.....Land Use Control Information System

US ENG CONTROLS...... Engineering Controls Sites List US INST CONTROLS...... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE...... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

INDIAN UST...... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP...... Voluntary Cleanup Priority Listing VCP...... Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database

SWRCY..... Recycler Database

HAULERS...... Registered Waste Tire Haulers Listing

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register

HIST Cal-Sites Historical Calsites Database

SCH...... School Property Evaluation Program

Local Lists of Registered Storage Tanks

HIST UST..... Hazardous Substance Storage Container Database

CA FID UST..... Facility Inventory Database

Local Land Records

LIENS...... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED...... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS...... Hazardous Materials Information Reporting System CHMIRS..... California Hazardous Material Incident Report System

LDS....... Land Disposal Sites Listing
MCS...... Military Cleanup Sites Listing
SPILLS 90...... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR...... RCRA - Non Generators / No Longer Regulated

FUDS Formerly Used Defense Sites DOD Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION.......... 2020 Corrective Action Program List

TSCA..... Toxic Substances Control Act

TRIS...... Toxic Chemical Release Inventory System

RAATS_____RCRA Administrative Action Tracking System

ICIS...... Integrated Compliance Information System

Act)/TSCA (Toxic Substances Control Act)

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS...... Aerometric Information Retrieval System Facility Subsystem

US MINES...... Mines Master Index File ABANDONED MINES..... Abandoned Mines

FINDS......Facility Index System/Facility Registry System DOCKET HWC..... Hazardous Waste Compliance Docket Listing

UXO...... Unexploded Ordnance Sites

ECHO..... Enforcement & Compliance History Information

FUELS PROGRAM..... EPA Fuels Program Registered Listing

CA BOND EXP. PLAN..... Bond Expenditure Plan

DRYCLEANERS..... Cleaner Facilities

EMI..... Emissions Inventory Data ENF..... Enforcement Action Listing

Financial Assurance Information Listing

HAZNET..... Facility and Manifest Data

ICE.....ICE

HWP..... EnviroStor Permitted Facilities Listing

HWT...... Registered Hazardous Waste Transporter Database

MINES..... Mines Site Location Listing

MWMP..... Medical Waste Management Program Listing

NPDES...... NPDES Permits Listing

PEST LIC..... Pesticide Regulation Licenses Listing

PROC..... Certified Processors Database

Notify 65..... Proposition 65 Records

UIC_____UIC Listing

UIC GEO...... UIC GEO (GEOTRACKER) WASTEWATER PITS...... Oil Wastewater Pits Listing WDS..... Waste Discharge System

WIP..... Well Investigation Program Case List MILITARY PRIV SITES...... MILITARY PRIV SITES (GEOTRACKER)

PROJECT (GEOTRACKER)

WDR..... Waste Discharge Requirements Listing CIWQS...... California Integrated Water Quality System

CERS..... CERS

NON-CASE INFO...... NON-CASE INFO (GEOTRACKER) OTHER OIL GAS..... OTHER OIL & GAS (GEOTRACKER) PROD WATER PONDS...... PROD WATER PONDS (GEOTRACKER) SAMPLING POINT..... SAMPLING POINT (GEOTRACKER) WELL STIM PROJ..... Well Stimulation Project (GEOTRACKER) HWTS..... Hazardous Waste Tracking System

MINES MRDS..... Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants EDR Hist Auto_____ EDR Exclusive Historical Auto Stations EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF...... Recovered Government Archive Solid Waste Facilities List

RGA LUST...... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/27/2020 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|--|----------------------|------------------------|--------|------|
| GROVELAND MILL # 2 Facility Id: 55240015 Status: Refer: Other Agency | HIGHWAY 120/HELLS HO | NE 1/2 - 1 (0.817 mi.) | 15 | 49 |

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|-------------------------------|----------------------------------|---------------------------|--------|------|
| MINOR'S MART | 17867 HWY 120 | WSW 1/4 - 1/2 (0.355 mi.) | 13 | 29 |
| Database: LUST REG 5, Date of | f Government Version: 07/01/2008 | | | |
| Database: LUST, Date of Gover | nment Version: 12/09/2019 | | | |

Status: Completed - Case Closed

Status: Case Closed Global Id: T0610900065

NEILSEN'S MINI MART 17586 120 WSW 1/4 - 1/2 (0.420 mi.) 14 31

Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 12/09/2019

Status: Completed - Case Closed

Status: Preliminary site assessment underway

Global Id: T0610900121

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|-------------------------|--------|------|
| MINER'S MART | 17451 HWY 120 | WSW 0 - 1/8 (0.112 mi.) | B5 | 17 |
| Database: UST, Date of Governr Facility Id: 75435 | nent Version: 12/09/2019 | , , , , , | | |
| HENLEY'S BUILDING SU Database: UST, Date of Governr Facility Id: 45566 | 17867 HIGHWAY 120 nent Version: 12/09/2019 | WSW 0 - 1/8 (0.112 mi.) | B6 | 17 |
| NEILSEN'S MINI MART Database: UST, Date of Governr Facility Id: 56444 | 17586 MAIN nent Version: 12/09/2019 | WSW 0 - 1/8 (0.112 mi.) | В7 | 18 |

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|--|--|---------------------------|--------|------|
| SUBURBAN PROPANE- BI Database: AST, Date of Governmen | 11236 WARDS FERRY RD nt Version: 07/06/2016 | WSW 1/8 - 1/4 (0.145 mi.) | В9 | 22 |
| TUOLUMNE COUNTY C.R. Database: AST, Date of Government | 11240 WARDS FERRY RD nt Version: 07/06/2016 | WSW 1/8 - 1/4 (0.150 mi.) | C11 | 26 |

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/21/2020 has revealed that there are 4 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|----------------------|----------------------|---------------------------|--------|------|
| MILLER BROTHERS AUTO | 17870 STATE HIGHWAY | WSW 0 - 1/8 (0.048 mi.) | A1 | 9 |
| PML HARDWARE INC | 17867 HIGHWAY 120 | SW 0 - 1/8 (0.053 mi.) | 2 | 10 |
| THE TIRE SHOP | 11239 WARDS FERRY RD | WSW 1/8 - 1/4 (0.132 mi.) | C8 | 18 |
| TUOLUMNE COUNTY BOF | 11240 WARDS FERRY RD | WSW 1/8 - 1/4 (0.150 mi.) | C12 | 27 |

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---------------------------------|-------------------|-------------------------|--------|------|
| HENLEY'S BUILDING SU | 17867 HIGHWAY 120 | WSW 0 - 1/8 (0.112 mi.) | B6 | 17 |
| Status: A Comp Number: 45566 | | | | |

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 01/21/2020 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|----------------------|----------------------|---------------------------|--------|------|
| TUOLUMNE COUNTY C.R. | 11240 WARDS FERRY RD | WSW 1/8 - 1/4 (0.150 mi.) | C10 | 23 |

Other Ascertainable Records

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 3 CUPA Listings sites within approximately 0.25 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|-------------------------------|-------------------------------------|-------------------------|--------|------|
| J.S. WEST - BIG OAK | 17860 HIGHWAY 120 | WSW 0 - 1/8 (0.079 mi.) | A3 | 15 |
| Database: CUPA TUOLUMNE, Date | e of Government Version: 04/23/2018 | | | |

Facility ID: FA0002087

HWY 120 TOWING & REP 17870 HIGHWAY 120 WSW 0 - 1/8 (0.080 mi.) 4 15

Database: CUPA TUOLUMNE, Date of Government Version: 04/23/2018

Facility ID: FA0002362

THE TIRE SHOP 11239 WARDS FERRY RD

Database: CUPA TUOLUMNE, Date of Government Version: 04/23/2018

Facility ID: FA0002629

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|--|---------------|---------------------------|--------|------|
| MINOR'S MART Reg ld: 550085 | 17867 HWY 120 | WSW 1/4 - 1/2 (0.355 mi.) | 13 | 29 |
| NEILSEN'S MINI MART Reg ld: 550145 | 17586 120 | WSW 1/4 - 1/2 (0.420 mi.) | 14 | 31 |

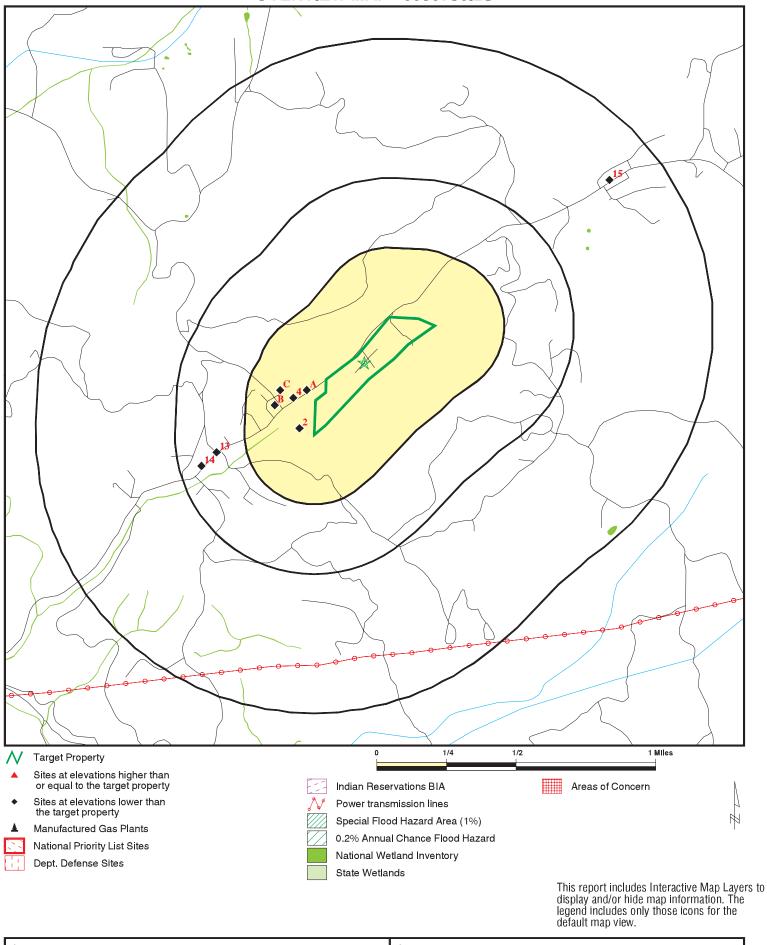
Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name

YOSEMITE WAY STATION TUOLUMNE MEADOWS CHEVRON YOSEMITE WAY STATION MINI MART Database(s)

CIWQS LUST, HIST CORTESE CUPA Listings

OVERVIEW MAP - 6050736.2S



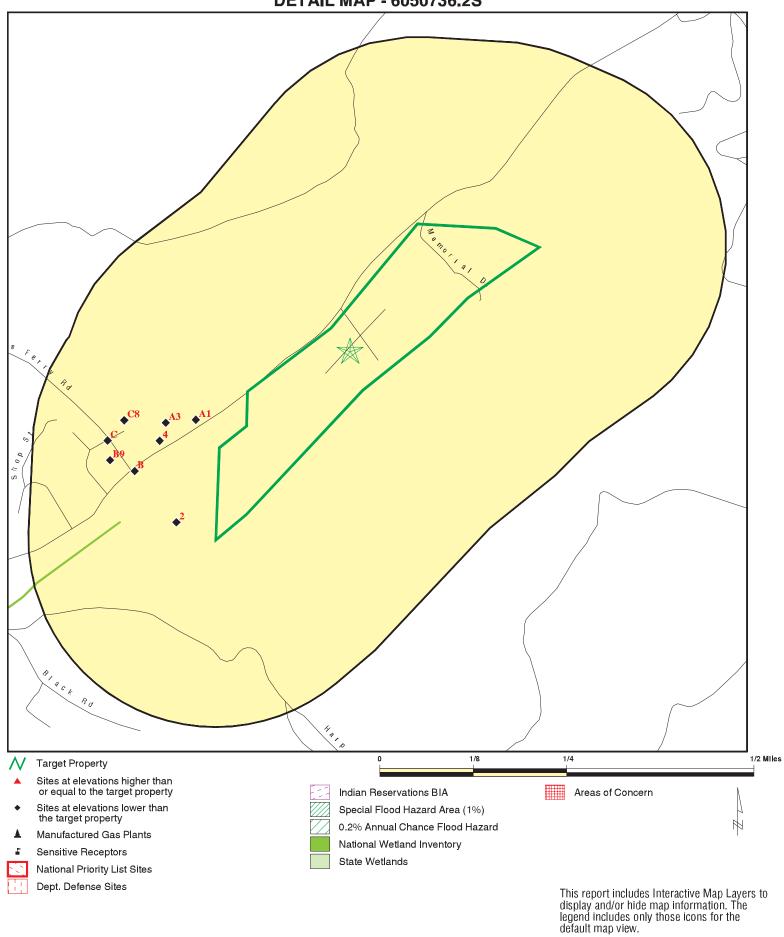
 SITE NAME:
 Yonder Yosemite
 CLIENT:
 Padre Associates, Inc

 ADDRESS:
 Highway 120
 CONTACT:
 Eric Snelling

 Groveland CA 95321
 INQUIRY #:
 6050736.2s

 LAT/LONG:
 37.829286 / 120.246885
 DATE:
 April 27, 2020 10:43 pm

DETAIL MAP - 6050736.2S



 SITE NAME:
 Yonder Yosemite
 CLIENT:
 Padre Associates, Inc

 ADDRESS:
 Highway 120
 CONTACT:
 Eric Snelling

 Groveland CA 95321
 INQUIRY #:
 6050736.2s

 LAT/LONG:
 37.829286 / 120.246885
 DATE:
 April 27, 2020 10:46 pm

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|--|-------------------------------|--------------------|-------------|-------------|----------------|----------------|----------------|------------------|
| STANDARD ENVIRONMENT | TAL RECORDS | | | | | | | |
| Federal NPL site list | | | | | | | | |
| NPL Proposed NPL NPL LIENS | 1.000 1.000 1.000 | | 0 0 0 | 0 0 0 | 0 0 0 | 0 0 0 | NR NR NR | 0 0 0 |
| Federal Delisted NPL sit | e list | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Federal CERCLIS list | | | | | | | | |
| FEDERAL FACILITY SEMS | 0.500 0.500 | | 0 0 | 0 0 | 0 0 | NR NR | NR NR | 0 0 |
| Federal CERCLIS NFRA | P site list | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Federal RCRA CORRAC | TS facilities li | st | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Federal RCRA non-COR | RACTS TSD fa | acilities list | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Federal RCRA generator | rs list | | | | | | | |
| RCRA-LQG RCRA-SQG RCRA-VSQG | 0.250 0.250 0.250 | | 0 0 0 | 0 0 0 | NR NR NR | NR NR NR | NR NR NR | 0 0 0 |
| Federal institutional con engineering controls reg | | | | | | | | |
| LUCIS US ENG CONTROLS US INST CONTROLS | 0.500 0.500 0.500 | | 0 0 0 | 0 0 0 | 0 0 0 | NR NR NR | NR NR NR | 0 0 0 |
| Federal ERNS list | | | | | | | | |
| ERNS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| State- and tribal - equiva | lent NPL | | | | | | | |
| RESPONSE | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| State- and tribal - equiva | lent CERCLIS | 3 | | | | | | |
| ENVIROSTOR | 1.000 | | 0 | 0 | 0 | 1 | NR | 1 |
| State and tribal landfill and/or solid waste disposal site lists | | | | | | | | |
| SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| State and tribal leaking s | storage tank li | ists | | | | | | |
| LUST | 0.500 | | 0 | 0 | 2 | NR | NR | 2 |

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted | |
|--|--|--------------------|---------------------------------|------------------------------------|--------------------------------------|----------------------------------|--|---------------------------------|--|
| INDIAN LUST CPS-SLIC | 0.500 0.500 | | 0 0 | 0 | 0 | NR NR | NR NR | 0 | |
| State and tribal registere | d storage tar | nk lists | | | | | | | |
| FEMA UST UST AST INDIAN UST | 0.250 0.250 0.250 0.250 | | 0 3 0 0 | 0 0 2 0 | NR NR NR NR | NR NR NR NR | NR NR NR NR | 0 3 2 0 | |
| State and tribal voluntary | cleanup site | es | | | | | | | |
| INDIAN VCP VCP | 0.500 0.500 | | 0 0 | 0 0 | 0 0 | NR NR | NR NR | 0 0 | |
| State and tribal Brownfie | lds sites | | | | | | | | |
| BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 | |
| ADDITIONAL ENVIRONMENTAL RECORDS | | | | | | | | | |
| Local Brownfield lists | | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 | |
| Local Lists of Landfill / Solid Waste Disposal Sites | | | | | | | | | |
| WMUDS/SWAT SWRCY HAULERS INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS | 0.500 0.500 0.001 0.500 0.500 0.500 0.500 | | 0 0 0 0 0 0 | 0 0 NR 0 0 0 | 0 0 NR 0 0 0 | NR NR NR NR NR NR | NR NR NR NR NR NR | 0 0 0 0 0 0 | |
| Local Lists of Hazardous Contaminated Sites | waste / | | | | | | | | |
| US HIST CDL HIST Cal-Sites SCH CDL CERS HAZ WASTE Toxic Pits US CDL PFAS | 0.001 1.000 0.250 0.001 0.250 1.000 0.001 0.500 | | 0 0 0 0 2 0 0 | NR 0 0 NR 2 0 NR | NR 0 NR NR NR 0 NR | NR 0 NR NR 0 NR | NR NR NR NR NR NR NR | 0 0 0 0 4 0 0 | |
| Local Lists of Registered Storage Tanks | | | | | | | | | |
| SWEEPS UST HIST UST CERS TANKS CA FID UST | 0.250 0.250 0.250 0.250 | | 1 0 0 0 | 0 0 1 0 | NR NR NR NR | NR NR NR NR | NR NR NR NR | 1 0 1 0 | |
| Local Land Records | | | | | | | | | |
| LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 | |

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|-------------------------------|-------------------------------|--------------------|--------|-----------|-----------|----------|----------|------------------|
| LIENS 2 DEED | 0.001 0.500 | | 0 0 | NR 0 | NR 0 | NR NR | NR NR | 0 |
| Records of Emergency R | Release Repo | rts | | | | | | |
| HMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CHMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MCS CDILLE 00 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SPILLS 90 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Other Ascertainable Rec | ords | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD CORD DRYCL FAMERS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS US FIN ASSUR | 0.500 0.001 | | 0 0 | 0 NR | 0 NR | NR NR | NR NR | 0 0 |
| EPA WATCH LIST | 0.001 | | 0 | NR NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | 0.001 | | Ö | NR | NR | NR | NR | Õ |
| TRIS | 0.001 | | Ö | NR | NR | NR | NR | Ö |
| SSTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| RMP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RAATS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PRP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PADS ICIS | 0.001 0.001 | | 0 0 | NR NR | NR NR | NR NR | NR NR | 0 0 |
| FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MLTS | 0.001 | | Ö | NR | NR | NR | NR | Ö |
| COAL ASH DOE | 0.001 | | Ö | NR | NR | NR | NR | Ō |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RADINFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOT OPS CONSENT | 0.001 | | 0 0 | NR | NR | NR | NR NR | 0 |
| INDIAN RESERV | 1.000 1.000 | | 0 | 0 0 | 0 0 | 0 0 | NR | 0 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | ő | Ö | NR | NR | Ő |
| LEAD SMELTERS | 0.001 | | Ö | NR | NR | NR | NR | Ō |
| US AIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ABANDONED MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FINDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOCKET HWC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UXO ECHO | 1.000 0.001 | | 0 0 | 0 NR | 0 NR | 0 NR | NR NR | 0 0 |
| FUELS PROGRAM | 0.001 | | 0 | NR 0 | NR NR | NR NR | NR NR | 0 |
| CA BOND EXP. PLAN | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Cortese | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| CUPA Listings | 0.250 | | 2 | 1 | NR | NR | NR | 3 |

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted | |
|------------------------------------|-------------------------------|--------------------|--------|-----------|-----------|----------|----------|------------------|--|
| DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 | |
| EMI | 0.001 | | Ö | NR | NR | NR | NR | Ö | |
| ENF | 0.001 | | Ō | NR | NR | NR | NR | Ö | |
| Financial Assurance | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| HAZNET | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| ICE | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| HIST CORTESE | 0.500 | | 0 | 0 | 2 | NR | NR | 2 | |
| HWP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 | |
| HWT | 0.250 | | 0 | 0 | NR | NR | NR | 0 | |
| MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 | |
| MWMP | 0.250 | | 0 | 0 | NR | NR | NR | 0 | |
| NPDES | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| PEST LIC | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| PROC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 | |
| Notify 65 | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 | |
| UIC | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| UIC GEO | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| WASTEWATER PITS WDS | 0.500 | | 0 | 0 NR | 0 NR | NR NR | NR NR | 0 | |
| WIP | 0.001 0.250 | | 0 0 | 0 | NR NR | NR NR | NR NR | 0 0 | |
| MILITARY PRIV SITES | 0.230 | | 0 | NR | NR | NR | NR | 0 | |
| PROJECT | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| WDR | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| CIWQS | 0.001 | | Ő | NR | NR | NR | NR | 0 | |
| CERS | 0.001 | | Ö | NR | NR | NR | NR | Ö | |
| NON-CASE INFO | 0.001 | | Ö | NR | NR | NR | NR | Ö | |
| OTHER OIL GAS | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| PROD WATER PONDS | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| SAMPLING POINT | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| WELL STIM PROJ | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| HWTS | TP | | NR | NR | NR | NR | NR | 0 | |
| MINES MRDS | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| EDR HIGH RISK HISTORICAL RECORDS | | | | | | | | | |
| EDR Exclusive Records | | | | | | | | | |
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 | |
| EDR Hist Auto | 0.125 | | 0 | NR | NR | NR | NR | 0 | |
| EDR Hist Cleaner | 0.125 | | 0 | NR | NR | NR | NR | Ö | |
| EBIT Hot Gloaner | 0.120 | | Ū | | | | | Ü | |
| EDR RECOVERED GOVERNMENT ARCHIVES | | | | | | | | | |
| Exclusive Recovered Govt. Archives | | | | | | | | | |
| RGA LF | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| RGA LUST | 0.001 | | 0 | NR | NR | NR | NR | 0 | |
| | | | | | | | | | |
| - Totals | | 0 | 8 | 6 | 4 | 1 | 0 | 19 | |
| · otaio | | Č | J | Č | • | | J | .0 | |

Search

Distance (Miles)

Target Property

< 1/8 1/8 - 1/4

1/4 - 1/2

1/2 - 1

> 1

Total Plotted

NOTES:

Database

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS

Direction Distance

Distance EDR ID Number
Elevation Site EPA ID Number

A1 MILLER BROTHERS AUTOMOTIVE CERS HAZ WASTE S121784244
WSW 17870 STATE HIGHWAY 120 CERS N/A

WSW 17870 STATE HIGHWAY 120 < 1/8 GROVELAND, CA 95321

0.048 mi.

256 ft. Site 1 of 2 in cluster A

Relative: CERS HAZ WASTE:

LowerName:MILLER BROTHERS AUTOMOTIVEActual:Address:17870 STATE HIGHWAY 1202949 ft.City,State,Zip:GROVELAND, CA 95321

 Site ID:
 433425

 CERS ID:
 10755481

CERS Description: Hazardous Waste Generator

CERS:

Name: MILLER BROTHERS AUTOMOTIVE Address: 17870 STATE HIGHWAY 120 City,State,Zip: GROVELAND, CA 95321

Site ID: 433425 CERS ID: 10755481

CERS Description: Chemical Storage Facilities

Violations:

Site ID: 433425

Site Name: Miller Brothers Automotive

Violation Date: 01-30-2018

Citation: HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5,

Section(s) 25250.22

Violation Description: Failure to properly manage used oil and/or fuel filters in accordance

with the requirements.

Violation Notes: Returned to compliance on 01/30/2018. Violation Division: Tuolumne County Environmental Health

Violation Program: HW
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-30-2018

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-30-2018 Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: HW
Eval Source: CERS

Affiliation:

Affiliation Type Desc: CUPA District

Entity Name: Tuolumne County Env Health

Entity Title: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MILLER BROTHERS AUTOMOTIVE (Continued)

S121784244

Affiliation Address: 2 South Green Street

Affiliation City: Sonora Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: 95370 (209) 533-5633 Affiliation Phone:

Affiliation Type Desc: Parent Corporation Entity Name: Miller Brothers Automotive

Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Not reported Affiliation Country: Affiliation Zip: Not reported Affiliation Phone: Not reported

S121775093 **PML HARDWARE INC** CERS HAZ WASTE SW 17867 HIGHWAY 120 CERS N/A BIG OAK FLAT, CA 95305 **HWTS** < 1/8

0.053 mi. 280 ft.

Relative: **CERS HAZ WASTE:**

Lower PML HARDWARE INC Name: Address: 17867 HIGHWAY 120 Actual: City, State, Zip: BIG OAK FLAT, CA 95305 2933 ft.

> Site ID: 399707 CERS ID: 10635262

CERS Description: Hazardous Waste Generator

CERS:

PML HARDWARE INC Name: Address: 17867 HIGHWAY 120 City, State, Zip: BIG OAK FLAT, CA 95305

Site ID: 399707 CERS ID: 10635262

CERS Description: Chemical Storage Facilities

Violations:

Site ID: 399707

Site Name: PML Hardware Inc Violation Date: 05-13-2015

Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter

12, Section(s) 66262.12

Violation Description: Failure to obtain and/or maintain an Active EPA ID.

Returned to compliance on 07/09/2015. Violation Notes: Violation Division: Tuolumne County Environmental Health

Violation Program: HW Violation Source: **CERS**

Site ID: 399707

Site Name: PML Hardware Inc Violation Date: 05-13-2015

Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95,

Section(s) 25507

Violation Description: Failure to adequately establish and implement a business plan when

Distance
Elevation Site Database(s)

PML HARDWARE INC (Continued)

S121775093

EDR ID Number

EPA ID Number

storing/handling a hazardous material at or above reportable

quantities.

Violation Notes: Returned to compliance on 07/09/2015.

Violation Division: Tuolumne County Environmental Health

Violation Program: HMRRP
Violation Source: CERS

Site ID: 399707

Site Name: PML Hardware Inc Violation Date: 05-13-2015

Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95,

Section(s) 25508(d)

Violation Description: Failure to complete and/or electronically submit a business plan when

storing/handling a hazardous material at or above reportable

quantities.

Violation Notes: Returned to compliance on 07/09/2015.
Violation Division: Tuolumne County Environmental Health

Violation Program: HMRRP Violation Source: CERS

Site ID: 399707

Site Name: PML Hardware Inc Violation Date: 05-13-2015

Citation: HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11,

Section(s) 25404.1

Violation Description: Failure to obtain and/or maintain an active hazardous waste generator

permit.

Violation Notes: Returned to compliance on 06/22/2015.
Violation Division: Tuolumne County Environmental Health

Violation Program: HW
Violation Source: CERS

Site ID: 399707

Site Name: PML Hardware Inc Violation Date: 05-13-2015

Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter

6.95, Section(s) 25505(a)(4)

Violation Description: Failure to provide initial and annual training to all employees in

safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training

records for a minimum of three years.

Violation Notes: Not reported

Violation Division: Tuolumne County Environmental Health

Violation Program: HMRRP Violation Source: CERS

Site ID: 399707

Site Name: PML Hardware Inc

Violation Date: 05-13-2015

Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title

40, Chapter 1, Section(s) 262.34(d)(5)(iii)

Violation Description: Failure to ensure employees are familiar with the handling and

compliance of hazardous waste regulations and emergency response.

Violation Notes: Not reported

Violation Division: Tuolumne County Environmental Health

Violation Program: HW
Violation Source: CERS

Direction Distance

Elevation Site Database(s) EPA ID Number

PML HARDWARE INC (Continued)

S121775093

EDR ID Number

Site ID: 399707

Site Name: PML Hardware Inc Violation Date: 05-13-2015

Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title

40, Chapter 1, Section(s) 262.34(d)(5)(ii)

Violation Description: Failure to post, next to the telephone, Emergency Information (SQG)

containing the location of emergency equipment, contact names and

numbers.

Violation Notes: Not reported

Violation Division: Tuolumne County Environmental Health

Violation Program: HW
Violation Source: CERS

Evaluation:

Eval General Type: Other/Unknown
Eval Date: 05-13-2015
Violations Found: Yes

Eval Type: Other, not routine, done by local agency

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: HW
Eval Source: CERS

Eval General Type: Other/Unknown
Eval Date: 05-13-2015
Violations Found: Yes

Eval Type: Other, not routine, done by local agency

Eval Notes: facility operating without permit

Eval Division: Tuolumne County Environmental Health

Eval Program: HMRRP Eval Source: CERS

Enforcement Action:

Site ID: 399707

Site Name: PML Hardware Inc
Site Address: 17867 HIGHWAY 120
Site City: BIG OAK FLAT

 Site Zip:
 95305

 Enf Action Date:
 05-13-2015

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Tuolumne County Environmental Health

Enf Action Program: HMRRP Enf Action Source: CERS

Site ID: 399707

Site Name: PML Hardware Inc
Site Address: 17867 HIGHWAY 120
Site City: BIG OAK FLAT

 Site Zip:
 95305

 Enf Action Date:
 05-13-2015

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Tuolumne County Environmental Health

Distance Elevation Site

tion Site Database(s) EPA ID Number

PML HARDWARE INC (Continued)

S121775093

EDR ID Number

Enf Action Program: HW
Enf Action Source: CERS

Coordinates:

Site ID: 399707

Facility Name: PML Hardware Inc

Env Int Type Code: HMBP
Program ID: 10635262
Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.

Latitude: 37.825950 Longitude: -120.251130

Affiliation:

Affiliation Type Desc: Environmental Contact

Entity Name: Kristie Arehart
Entity Title: Not reported
Affiliation Address: 2215 N Gaffey St
Affiliation City: San Pedro

Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 90731
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer Entity Name: Kristie Arehart **Entity Title:** Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Not reported Affiliation Country: Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: **Document Preparer** Entity Name: Kristie Arehart Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address

Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 17867 Hwy 120
Affiliation City: Big Oak Flat

Affiliation State: CA

Affiliation Country:

Affiliation Zip:

Affiliation Phone:

Not reported

Not reported

Affiliation Type Desc: Legal Owner
Entity Name: PML Hardware Inc

Direction Distance

Elevation Site Database(s) EPA ID Number

PML HARDWARE INC (Continued)

Affiliation Zip:

S121775093

EDR ID Number

Entity Title: Not reported
Affiliation Address: 2215 N Gaffey St
Affiliation City: San Pedro

Affiliation State: CA
Affiliation Country: United States

Affiliation Phone: (310) 833-1369

90731

Affiliation Type Desc: Operator

Entity Name: PML Hardware Inc Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Not reported Affiliation Zip: Affiliation Phone: (209) 962-1884

Affiliation Type Desc: Parent Corporation PML Hardware Inc **Entity Name:** Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District

Entity Name: Tuolumne County Env Health

Entity Title: Not reported

Affiliation Address: 2 South Green Street

Affiliation City: Sonora
Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 95370

Affiliation Phone: (209) 533-5633

HWTS:

Name: PML HARDWARE INC Address: 17867 HIGHWAY 120

Address 2: Not reported

City, State, Zip: BIG OAK FLAT, CA 95305

 EPA ID:
 CAL000407345

 Inactive Date:
 06/30/2015

 Create Date:
 06/01/2015

 Last Act Date:
 01/27/2016

 Mailing Name:
 Not reported

 Mailing Address:
 2215 N GAFFEY ST

Mailing Address 2: Not reported

Mailing City,State,Zip:SAN PEDRO, CA 907311238Owner Name:PML HARDWARE INCOwner Address:17867 HIGHWAY 120

Owner Address 2: Not reported

Owner City,State,Zip: BIG OAK FLAT, CA 95305 Contact Name: STEVE SCUDDER

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PML HARDWARE INC (Continued) S121775093

Contact Address: 17867 HIGHWAY 120

Contact Address 2: Not reported

BIG OAK FLAT, CA 95305 City,State,Zip:

NAICS:

EPA ID: CAL000407345 Create Date: 2015-06-01 08:49:51

44413 NAICS Code:

NAICS Description: Hardware Stores Issued EPA ID Date: 2015-06-01 08:49:51 Inactive Date: 2015-06-30 00:00:00 Facility Name: PML HARDWARE INC Facility Address: 17867 HIGHWAY 120 Facility Address 2: Not reported

Facility City: **BIG OAK FLAT**

Facility County: 55 Facility State: CA Facility Zip: 95305

J.S. WEST - BIG OAK FLAT **A3 CUPA Listings** S112445252 N/A

WSW 17860 HIGHWAY 120 < 1/8 BIG OAK FLAT, CA 95305

0.079 mi.

418 ft. Site 2 of 2 in cluster A

Relative: **CUPA TUOLUMNE:** Lower

J.S. WEST - BIG OAK FLAT Name: Address: 17860 HIGHWAY 120 Actual: City,State,Zip: BIG OAK FLAT, CA 95305 2954 ft.

Facility ID: FA0002087

Facility Status: Haz-Mat Business Plan - Small 1-5 Chemicals

Mailing Address: PO BOX 3958 Mailing City/State/Zip: SONORA, CA PF. 2110 Latitude: Not reported Longitude: Not reported

HWY 120 TOWING & REPAIR CUPA Listings S111081706 wsw 17870 HIGHWAY 120 **HWTS** N/A < 1/8 BIG OAK FLAT, CA 95305

0.080 mi. 423 ft.

Relative: **CUPA TUOLUMNE:** Lower

HWY 120 TOWING & REPAIR Name: 17870 HIGHWAY 120 Address: Actual: City,State,Zip: BIG OAK FLAT, CA 95305 2939 ft.

Facility ID: FA0002362

Facility Status: CESQG with Business Plan

Mailing Address: **PO BOX 205** BIG OAK FLAT, CA Mailing City/State/Zip:

PE: 2201 Latitude: Not reported Longitude: Not reported

Name: **HWY 120 TOWING & REPAIR**

Direction Distance

Elevation Site Database(s) EPA ID Number

HWY 120 TOWING & REPAIR (Continued)

S111081706

EDR ID Number

Address: 17870 HIGHWAY 120 City,State,Zip: BIG OAK FLAT, CA 95305

Facility ID: FA0002362

Facility Status: Haz-Mat Business Plan - Small 1-5 Chemicals

Mailing Address: PO BOX 205
Mailing City/State/Zip: BIG OAK FLAT, CA

PE: 2110
Latitude: Not reported
Longitude: Not reported

HWTS:

Name: HWY 120 TOWING & REPAIR

Address: 17870 HIGHWAY 120

Address 2: Not reported

City,State,Zip: BIG OAK FLAT, CA 95305

 EPA ID:
 CAL000418806

 Inactive Date:
 06/30/2017

 Create Date:
 07/13/2016

 Last Act Date:
 07/13/2016

 Mailing Name:
 Not reported

 Mailing Address:
 PO BOX 205

 Mailing Address 2:
 Not reported

Mailing City, State, Zip: BIG OAK FLAT, CA 95305
Owner Name: ANNA HAMILTON
Owner Address: 17870 HIGHWAY 120

Owner Address 2: Not reported

Owner City,State,Zip: BIG OAK FLAT, CA 95305
Contact Name: AUTUMN PESTONI
Contact Address: 17870 HIGHWAY 120

Contact Address 2: Not reported

City,State,Zip: BIG OAK FLAT, CA 95305

NAICS:

EPA ID: CAL000418806 Create Date: 2016-07-13 11:04:10

NAICS Code: 811111

NAICS Description: General Automotive Repair Issued EPA ID Date: 2016-07-13 11:04:10 Inactive Date: 2017-06-30 00:00:00

Facility Name: HWY 120 TOWING & REPAIR

Facility Address: 17870 HIGHWAY 120

Facility Address 2: Not reported Facility City: BIG OAK FLAT

Facility County: 55
Facility State: CA
Facility Zip: 95305

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

B5 MINER'S MART UST U003971234 **WSW**

17451 HWY 120 N/A

< 1/8 BIG OAK FLAT, CA 95305

0.112 mi.

590 ft. Site 1 of 4 in cluster B

UST: Relative: Lower MINER'S MART Name: Address: 17451 HWY 120 Actual:

City,State,Zip: BIG OAK FLAT, CA 95305 2916 ft.

Facility ID: 75435

> Permitting Agency: TUOLUMNE COUNTY

Latitude: 37.82694 Longitude: -120.25215

HENLEY'S BUILDING SUPPLY U003971068 **B6** UST wsw **SWEEPS UST** 17867 HIGHWAY 120 N/A

< 1/8 **BIG OAK FLAT, CA 95305**

0.112 mi.

590 ft. Site 2 of 4 in cluster B

UST: Relative: Lower HENLEY'S BUILDING SUPPLY Name:

Address: 17867 HIGHWAY 120 Actual: City,State,Zip: BIG OAK FLAT, CA 95305 2916 ft.

> Facility ID: 45566

TUOLUMNE COUNTY Permitting Agency:

37.82694 Latitude: Longitude: -120.25215

SWEEPS UST:

Name: HENLEY'S BUILDING SUPPLY

Address: 17867 HIGHWAY 120 City: **BIG OAK FLAT**

Status: Active Comp Number: 45566 Number:

Board Of Equalization: 44-030476 Referral Date: 04-30-92 04-30-92 Action Date: Created Date: 12-31-88 Owner Tank Id: Not reported SWRCB Tank Id: Not reported Not reported Tank Status: Capacity: Not reported Active Date: Not reported Tank Use: Not reported STG: Not reported Content: Not reported Number Of Tanks: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

B7 NEILSEN'S MINI MART UST U003971174 **WSW**

17586 MAIN N/A

NEILSEN'S MINI MART

BIG OAK FLAT, CA 95305 < 1/8 0.112 mi.

590 ft. Site 3 of 4 in cluster B

UST: Relative: Lower Name:

Address: 17586 MAIN Actual:

City,State,Zip: BIG OAK FLAT, CA 95305 2916 ft.

Facility ID: 56444

Permitting Agency: TUOLUMNE COUNTY

Latitude: 37.82694 -120.25215 Longitude:

CERS HAZ WASTE S112445314 C8 THE TIRE SHOP wsw 11239 WARDS FERRY RD **CUPA Listings** N/A

1/8-1/4 **BIG OAK FLAT, CA 95305**

0.132 mi.

Site 1 of 4 in cluster C 698 ft.

CERS HAZ WASTE: Relative:

Lower THE TIRE SHOP Name:

Address: 11239 WARDS FERRY RD Actual: City,State,Zip: BIG OAK FLAT, CA 95305 2953 ft.

> Site ID: 403996 CERS ID: 10637719

Hazardous Waste Generator **CERS** Description:

CUPA TUOLUMNE:

THE TIRE SHOP Name:

Address: 11239 WARDS FERRY RD City,State,Zip: BIG OAK FLAT, CA 95305

Facility ID: FA0002629

Facility Status: Hazardous Waste Small Qty Gen w/ Bus Plan

Mailing Address: PO BOX 244 Mailing City/State/Zip: BIG OAK FLAT, CA

PE: 2202 Latitude: Not reported Longitude: Not reported

THE TIRE SHOP Name:

Address: 11239 WARDS FERRY RD City,State,Zip: BIG OAK FLAT, CA 95305

Facility ID: FA0002629

Facility Status: Haz-Mat Business Plan - Small 1-5 Chemicals

Mailing Address: PO BOX 244 Mailing City/State/Zip: BIG OAK FLAT, CA

PE: 2110 Latitude:

Not reported Longitude: Not reported

CERS:

THE TIRE SHOP Name:

Address: 11239 WARDS FERRY RD City,State,Zip: BIG OAK FLAT, CA 95305

Site ID: 403996 CERS ID: 10637719

CERS Description: Chemical Storage Facilities **CERS**

Map ID MAP FINDINGS
Direction

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

THE TIRE SHOP (Continued)

S112445314

Violations:

 Site ID:
 403996

 Site Name:
 The Tire Shop

 Violation Date:
 07-24-2014

Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter

12, Section(s) 66262.12

Violation Description: Failure to obtain and/or maintain an Active EPA ID.

Violation Notes: Not reported

Violation Division: Tuolumne County Environmental Health

Violation Program: HW
Violation Source: CERS

 Site ID:
 403996

 Site Name:
 The Tire Shop

 Violation Date:
 07-24-2014

Citation: HSC 6.5 25186.2 - California Health and Safety Code, Chapter 6.5,

Section(s) 25186.2

Violation Description: Failure to properly handle, store, or treat hazardous waste or

provided false information submitted on the permit application and

other documents.

Violation Notes: Returned to compliance on 07/27/2015.

Violation Division: Tuolumne County Environmental Health

Violation Program: HW
Violation Source: CERS

 Site ID:
 403996

 Site Name:
 The Tire Shop

 Violation Date:
 07-24-2014

Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22,

Chapter 12, Section(s) 66262.34(f)

Violation Description: Failure to properly label hazardous waste accumulation containers with

the following requirements: "Hazardous Waste", name and address of the

generator, physical and chemical characteristics of the Hazardous

Waste, and starting accumulation date.

Violation Notes: Returned to compliance on 07/27/2015.

Violation Division: Tuolumne County Environmental Health

Violation Program: HW
Violation Source: CERS

 Site ID:
 403996

 Site Name:
 The Tire Shop

 Violation Date:
 07-24-2014

Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95,

Section(s) 25508(d)

Violation Description: Failure to complete and/or electronically submit a business plan when

storing/handling a hazardous material at or above reportable

quantities.

Violation Notes: Returned to compliance on 07/27/2015.
Violation Division: Tuolumne County Environmental Health

Violation Program: HMRRP Violation Source: CERS

 Site ID:
 403996

 Site Name:
 The Tire Shop

 Violation Date:
 07-24-2014

Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title

40, Chapter 1, Section(s) 262.34(d)(5)(ii)

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

THE TIRE SHOP (Continued)

Violation Description: Failure to post, next to the telephone, Emergency Information (SQG)

containing the location of emergency equipment, contact names and

numbers.

Returned to compliance on 07/27/2015. Violation Notes: Violation Division: Tuolumne County Environmental Health

Violation Program: HW Violation Source: **CERS**

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-24-2014

Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: **HMRRP** Eval Source: **CERS**

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-24-2014 Violations Found: Yes

Routine done by local agency Eval Type:

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: HW Eval Source: **CERS**

Eval General Type: Other/Unknown Eval Date: 07-27-2015

Violations Found: No

Eval Type: Other, not routine, done by local agency

Eval Notes: onsite to provide CERS assistance, inspected for correction of waste

violations noted on 7/24/14

Eval Division: Tuolumne County Environmental Health

Eval Program: HW **Eval Source: CERS**

Enforcement Action:

Site ID: 403996 Site Name: The Tire Shop

Site Address: 11239 WARDS FERRY RD

Site City: **BIG OAK FLAT** Site Zip: 95305 Enf Action Date: 07-24-2014

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Tuolumne County Environmental Health

HMRRP Enf Action Program: Enf Action Source: **CERS**

Site ID: 403996 Site Name: The Tire Shop

11239 WARDS FERRY RD Site Address:

BIG OAK FLAT Site City:

Site Zip: 95305 S112445314

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

THE TIRE SHOP (Continued)

S112445314

Enf Action Date: 07-24-2014

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Tuolumne County Environmental Health

HW Enf Action Program: **CERS** Enf Action Source:

Coordinates:

Site ID: 403996 Facility Name: The Tire Shop Env Int Type Code: **HMBP** Program ID: 10637719 Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.

Latitude: 37.827920 Longitude: -120.252400

Affiliation:

Affiliation Type Desc: **CUPA District**

Entity Name: Tuolumne County Env Health

Entity Title: Not reported

Affiliation Address: 2 South Green Street

Affiliation City: Sonora Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: 95370

(209) 533-5633 Affiliation Phone:

Affiliation Type Desc: Operator Entity Name: Paul Henry Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported (209) 962-5919 Affiliation Phone:

Affiliation Type Desc: **Document Preparer** Entity Name: Sheilah Lillie **Entity Title:** Not reported Not reported Affiliation Address: Affiliation City: Not reported

Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Facility Mailing Address Affiliation Type Desc:

Entity Name: Mailing Address Entity Title: Not reported Affiliation Address: PO Box 244 Affiliation City: Big Oak Flat

Affiliation State: CA

Affiliation Country: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

THE TIRE SHOP (Continued) S112445314

Affiliation Zip: 95305 Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer **Entity Name:** Sheilah Lillie **Entity Title:** Regulator Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner Entity Name: Paul Henry **Entity Title:** Not reported Affiliation Address: PO Box 244 Affiliation City: Big Oak Flat

Affiliation State: CA

United States Affiliation Country: Affiliation Zip: 95305

Affiliation Phone: (209) 962-5919

Affiliation Type Desc: **Environmental Contact**

Entity Name: Paul Henry Entity Title: Not reported Affiliation Address: PO Box 244 Affiliation City: Big Oak Flat

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 95305 Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation The Tire Shop **Entity Name:** Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

В9 SUBURBAN PROPANE- BIG OAK FLAT AST A100424933 N/A

WSW 11236 WARDS FERRY RD 1/8-1/4 **BIG OAK FLAT, CA 95305**

0.145 mi.

Site 4 of 4 in cluster B 766 ft.

Relative: AST:

SUBURBAN PROPANE- BIG OAK FLAT Lower Name:

11236 WARDS FERRY RD Address: Actual: City/Zip: BIG OAK FLAT,95305 2936 ft.

Certified Unified Program Agencies: Not reported Owner: Suburban Propane Total Gallons: Not reported CERSID: 10639300

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SUBURBAN PROPANE- BIG OAK FLAT (Continued)

A100424933

N/A

Facility ID: Not reported

Business Name: Suburban Propane- Angels

1-209-962-7630 Phone: 1-209-962-4694 Fax: Mailing Address: 11236 Wards Ferry Rd

Mailing Address City: Big Oak Flat Mailing Address State: CA Mailing Address Zip Code: 95305

Operator Name: Suburban Propane Operator Phone: 1-800-776-7263 Owner Phone: 1-800-776-7263 Owner Mail Address: 11236 Wards Ferry Rd

Owner State: CA Owner Zip Code: 95305 Owner Country: **United States** Property Owner Name: Suburban Propane Property Owner Phone: 1-800-776-7263 Property Owner Mailing Address: 11236 Wards Ferry Rd

Property Owner City: Big Oak Flat Property Owner Stat: CA Property Owner Zip Code: 95305 Property Owner Country: **United States** Not reported EPAID:

C10 TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD **CERS TANKS** S121748666 **CERS**

WSW 11240 WARDS FERRY RD. 1/8-1/4 BIG OAK FLAT, CA 95305

0.150 mi.

790 ft. Site 2 of 4 in cluster C

Relative: **CERS TANKS:**

Lower Name: TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD

Address: 11240 WARDS FERRY RD. Actual: City,State,Zip: BIG OAK FLAT, CA 95305 2953 ft.

Site ID: 163803 CERS ID: 10509319

CERS Description: Aboveground Petroleum Storage

CERS:

TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD Name:

Address: 11240 WARDS FERRY RD. City, State, Zip: BIG OAK FLAT, CA 95305

Site ID: 163803 CERS ID: 10509319

CERS Description: Chemical Storage Facilities

Violations:

Site ID: 163803

Site Name: Tuolumne County C.R.A. Roads BIG Oak Flat Yard

Violation Date: 01-13-2016

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to establish and electronically submit an adequate emergency

response plan and procedures for a release or threatened release of a

hazardous material.

Violation Notes: Returned to compliance on 03/22/2016. Violation Division: Tuolumne County Environmental Health

Violation Program: **HMRRP**

Direction Distance

Elevation Site Database(s) EPA ID Number

TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD (Continued)

S121748666

EDR ID Number

Violation Source: CERS

Site ID: 163803

Site Name: Tuolumne County C.R.A. Roads BIG Oak Flat Yard

Violation Date: 01-13-2016

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter

6.95, Section(s) 25508(a)(1)

Violation Description: Failure to complete and electronically submit a site map with all

required content.

Violation Notes: Returned to compliance on 02/29/2016.
Violation Division: Tuolumne County Environmental Health

Violation Program: HMRRP Violation Source: CERS

Site ID: 163803

Site Name: Tuolumne County C.R.A. Roads BIG Oak Flat Yard

Violation Date: 01-13-2016

Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter

6.67, Section(s) 25270.4.5(a)

Violation Description: Failure to maintain SPCC plan onsite (applies if facility is manned at

least four (4) hours per day).

Violation Notes: Returned to compliance on 02/29/2016.
Violation Division: Tuolumne County Environmental Health

Violation Program: APSA Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-13-2016 Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-13-2016

Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: APSA Eval Source: CERS

Enforcement Action:

Site ID: 163803

Site Name: Tuolumne County C.R.A. Roads BIG Oak Flat Yard

Site Address: 11240 WARDS FERRY RD.

Site City: BIG OAK FLAT
Site Zip: 95305
Enf Action Date: 01-13-2016

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Tuolumne County Environmental Health

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD (Continued)

S121748666

Enf Action Program: **APSA** Enf Action Source: **CERS**

Site ID: 163803

Tuolumne County C.R.A. Roads BIG Oak Flat Yard Site Name:

11240 WARDS FERRY RD. Site Address:

Site City: **BIG OAK FLAT** Site Zip: 95305 Enf Action Date: 01-13-2016

Enf Action Type: Notice of Violation (Unified Program)

Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection

Enf Action Notes: Not reported

Enf Action Division: Tuolumne County Environmental Health

Enf Action Program: **HMRRP** Enf Action Source: **CERS**

Affiliation:

Affiliation Type Desc: **CUPA District**

Entity Name: Tuolumne County Env Health

Entity Title: Not reported

2 South Green Street Affiliation Address:

Affiliation City: Sonora Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 95370 Affiliation Phone: (209) 533-5633

Affiliation Type Desc: Facility Mailing Address

Entity Name: Mailing Address Not reported Entity Title: Affiliation Address: 2 South Green St.

Affiliation City: Sonora Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 95370 Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation **Entity Name:** Tuolumne County C.R.A.

Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Not reported Affiliation Country: Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer Entity Name: Raymond Ingalls Entity Title: Road Superintendent

Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD (Continued)

S121748666

EDR ID Number

Affiliation Type Desc: Operator

Entity Name: Tuolumne County C.R.A.

Entity Title:

Affiliation Address:

Affiliation City:

Affiliation State:

Affiliation Country:

Affiliation Zip:

Affiliation Phone:

Not reported

Not reported

Not reported

Not reported

(209) 962-7809

Affiliation Type Desc: **Document Preparer** Entity Name: Raymond. .Ingalls Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Not reported Affiliation State: Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact

Entity Name: Steve Stewart
Entity Title: Not reported
Affiliation Address: 2 Green St.
Affiliation City: Sonora
Affiliation State: CA

Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Not reported
95370
Not reported

Affiliation Type Desc:

Entity Name:

Entity Title:

Affiliation Address:

Legal Owner

Tuolumne County

Not reported

2 South Green St.

Affiliation City: Sonora
Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 95370

Affiliation Phone: (209) 533-5632

TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD

WSW 11240 WARDS FERRY RD. 1/8-1/4 BIG OAK FLAT, CA 95305 0.150 mi.

790 ft. Site 3 of 4 in cluster C

C11

Relative: AST:

Lower Name: TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD

 Actual:
 Address:
 11240 WARDS FERRY RD.

 2953 ft.
 City/Zip:
 BIG OAK FLAT,95305

Certified Unified Program Agencies: Not reported
Owner: Tuolumne County
Total Gallons: Not reported
CERSID: 10509319
Facility ID: Not reported

Business Name: Tuolumne County C.R.A.

Phone: 209-533-5632

A100425494

N/A

AST

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

TUOLUMNE COUNTY C.R.A. ROADS BIG OAK FLAT YARD (Continued)

A100425494

Fax: 209-533-5698 Mailing Address: 2 South Green St.

Mailing Address City: Sonora Mailing Address State: CA Mailing Address Zip Code: 95370

Operator Name: Tuolumne County C.R.A.

Operator Phone: 209-962-7809 Owner Phone: 209-533-5632 Owner Mail Address: 2 South Green St.

Owner State: CA 95370 Owner Zip Code: **United States** Owner Country: Property Owner Name: Not reported Property Owner Phone: Not reported Property Owner Mailing Address: Not reported Property Owner City: Not reported Property Owner Stat: Not reported Property Owner Zip Code: Not reported Property Owner Country: Not reported EPAID: Not reported

C12 **TUOLUMNE COUNTY BOF THHW FACILITY**

CERS HAZ WASTE \$121780619

N/A

1/8-1/4

11240 WARDS FERRY RD BIG OAK FLAT, CA 95305

0.150 mi.

wsw

790 ft. Site 4 of 4 in cluster C

Relative: CERS HAZ WASTE:

Lower TUOLUMNE COUNTY BOF THHW FACILITY Name: 11240 WARDS FERRY RD Address: Actual:

City,State,Zip: BIG OAK FLAT, CA 95305 2953 ft. Site ID: 420451

CERS ID: 10731055

CERS Description: Household Hazardous Waste Collection

Violations:

Site ID: 420451

Tuolumne County BOF THHW Facility Site Name:

Violation Date: 08-18-2018

Citation: 22 CCR 45 67450.4(d)(8) - California Code of Regulations, Title 22,

Chapter 45, Section(s) 67450.4(d)(8)

Violation Description: Failure of the THHWCF to post around the area signs stating "Danger!

Hazardous Waste Area - Unauthorized Personnel Keep Out" and are

visible at 25 ft.

Violation Notes: Returned to compliance on 09/28/2018. to submit statement addressing

how signage will be met at next event Tuolumne County Environmental Health

Violation Program: HHW Violation Source: **CERS**

Evaluation:

Violation Division:

Eval General Type: Compliance Evaluation Inspection

08-18-2018 Eval Date: Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: Tuolumne County Environmental Health

Eval Program: HHW

Distance

Elevation Site Database(s) EPA ID Number

TUOLUMNE COUNTY BOF THHW FACILITY (Continued)

S121780619

EDR ID Number

Eval Source: CERS

Affiliation:

Affiliation Type Desc: CUPA District

Entity Name: Tuolumne County Env Health

Entity Title: Not reported

Affiliation Address: 2 South Green Street

Affiliation City: Sonora
Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 95370
Affiliation Phone: (209) 533-5633

Affiliation Type Desc: Operator

Entity Name: County of Tuolumne Solid Waste Division

Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (209) 533-5588

Affiliation Type Desc: Identification Signer Sheilah Lillie Entity Name: **Entity Title:** Regulator Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc:
Entity Name:
Entity Title:
Affiliation Address:
Legal Owner
Tuolumne County
Not reported
2 S Green Street

Affiliation City: Sonora
Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 95370

Affiliation Phone: (209) 533-5588

Affiliation Type Desc: Parent Corporation
Entity Name: Tuolumne County C.R.A.

Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc:
Entity Name:
Sheilah Lillie
Entity Title:
Not reported
Affiliation Address:
Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

TUOLUMNE COUNTY BOF THHW FACILITY (Continued)

S121780619

Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Environmental Contact Affiliation Type Desc: Entity Name: Kim MacFarlane Entity Title: Not reported Affiliation Address: 2 S Green Street

Affiliation City: Sonora Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: 95370 Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address Mailing Address **Entity Name:** Entity Title: Not reported Affiliation Address: 2 S Green Street

Affiliation City: Sonora Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 95370 Affiliation Phone: Not reported

MINOR'S MART S105022769 LUST 13 wsw 17867 HWY 120 **SWEEPS UST** N/A 1/4-1/2 BIG OAK FLAT, CA 95305 **HIST CORTESE**

0.355 mi. 1876 ft.

Relative: LUST:

Lower HENLEY'S BUILDING SUPPLY Name:

Address: 17867 HWY 120 Actual:

2863 ft. City,State,Zip: BIG OAK FLAT, CA 95305 Lead Agency: **TUOLUMNE COUNTY**

Case Type: **LUST Cleanup Site**

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0610900065

Global Id: T0610900065 Latitude: 37.8246959 Longitude: -120.2565664

Status: Completed - Case Closed

06/03/1996 Status Date: Case Worker: SM RB Case Number: 550085

TUOLUMNE COUNTY Local Agency:

File Location: Not reported Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Gasoline Site History: Not reported

LUST:

Global Id: T0610900065

Contact Type: Local Agency Caseworker Contact Name: SYLVIA MIRELES

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MINOR'S MART (Continued)

TUOLUMNE COUNTY Organization Name: 2 SOUTH GREEN STREET Address:

City: **SONORA**

Email: smireles@co.tuolumne.ca.us

Phone Number: Not reported

LUST:

Global Id: T0610900065 Action Type: Other 04/15/1993 Date: Action: Leak Reported

Global Id: T0610900065 **ENFORCEMENT** Action Type: Date: 06/11/2015

Technical Correspondence / Assistance / Other Action:

Global Id: T0610900065 Action Type: **ENFORCEMENT** Date: 06/11/2015

Action: Technical Correspondence / Assistance / Other

Global Id: T0610900065 Action Type: Other 04/14/1993 Date: Action: Leak Discovery

LUST:

T0610900065 Global Id:

Open - Case Begin Date Status:

Status Date: 04/14/1993

Global Id: T0610900065

Open - Site Assessment Status:

04/14/1993 Status Date:

T0610900065 Global Id:

Open - Site Assessment Status:

04/15/1993 Status Date:

Global Id: T0610900065

Status: Completed - Case Closed

Status Date: 06/03/1996

LUST REG 5:

HENLEY'S BUILDING SUPPLY Name:

17867 HWY 120 Address: **BIG OAK FLAT** City:

Region:

Status: Case Closed Case Number: 550085 Case Type: Soil only Substance: **GASOLINE** Staff Initials: **PGM** Lead Agency: Local

S105022769

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MINOR'S MART (Continued) S105022769

Program: LUST MTBE Code: N/A

SWEEPS UST:

Name: MINOR'S MART Address: 17867 HWY 120 **BIG OAK FLAT** City:

Status: Active Comp Number: 75435 Number: 2

Board Of Equalization: Not reported Referral Date: 11-03-93 Action Date: 11-03-93 Created Date: 11-03-93 Not reported Owner Tank Id: SWRCB Tank Id: Not reported Tank Status: Not reported Capacity: Not reported Active Date: Not reported Tank Use: Not reported Not reported STG: Content: Not reported Number Of Tanks: Not reported

HIST CORTESE:

edr_fname: HENLEY'S BUILDING SUPPLY

edr fadd1: 17867 120

City, State, Zip: BIG OAK FLAT, CA 95305

Region: CORTESE Facility County Code: 55 Reg By: **LTNKA** Reg Id: 550085

14 **NEILSEN'S MINI MART** LUST S105022768

WSW 17586 120 **CUPA Listings** N/A

BIG OAK FLAT, CA 95305 **HIST CORTESE** 1/4-1/2

0.420 mi. 2215 ft.

Relative: LUST: Lower Name: NEILSEN'S MINI MART Address: 17586 HWY 120 Actual:

City, State, Zip: BIG OAK FLAT, CA 95305 2854 ft.

CENTRAL VALLEY RWQCB (REGION 5S) Lead Agency:

Case Type: LUST Cleanup Site

http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0610900121 Geo Track:

T0610900121 Global Id: Latitude: 37.8239888996175 Longitude: -120.257565379143 Status: Completed - Case Closed

08/14/2018 Status Date: Case Worker: BJL RB Case Number: 550145

Local Agency: **TUOLUMNE COUNTY** File Location: Regional Board Local Case Number: Not reported

Potential Media Affect: Aquifer used for drinking water supply

Direction Distance

Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

Potential Contaminants of Concern: Gasoline

Site History: The case was opened following an unauthorized release from an

underground storage tank system at the subject site. Corrective

action is underway as directed by the CVRWQCB. Corrective action may

consist of preliminary site investigation, planning and

implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.

LUST:

Global Id: T0610900121

Contact Type: Regional Board Caseworker **BENJAMIN LEHMANN** Contact Name:

Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)

Address: 11020 Sun Center Drive #200 RANCHO CORDOVA

City:

Email: benjamin.lehmann@waterboards.ca.gov

Phone Number: 9164644760

T0610900121 Global Id:

Contact Type: Local Agency Caseworker Contact Name: SYLVIA MIRELES **TUOLUMNE COUNTY** Organization Name: 2 SOUTH GREEN STREET Address:

City: **SONORA**

Email: smireles@co.tuolumne.ca.us

Phone Number: Not reported

LUST:

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 02/22/2007 Staff Letter Action:

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 11/03/2004 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 07/11/2008 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 10/08/2012 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 07/19/2013 Action: Staff Letter

Global Id: T0610900121

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

Action Type: **ENFORCEMENT** 08/28/2017 Date: Action: Staff Letter

T0610900121 Global Id: **RESPONSE** Action Type: Date: 10/15/2006

Other Report / Document Action:

Global Id: T0610900121 **RESPONSE** Action Type: Date: 05/30/2006

Action: Soil and Water Investigation Report

Global Id: T0610900121 Action Type: **RESPONSE** Date: 10/30/2007

Other Report / Document Action:

Global Id: T0610900121 Action Type: **RESPONSE** Date: 10/31/2006

Action: Monitoring Report - Quarterly

T0610900121 Global Id: Action Type: **RESPONSE** Date: 07/30/2008

Action: Monitoring Report - Quarterly

Global Id: T0610900121 **RESPONSE** Action Type: Date: 08/31/2007

Action: Well Installation Report

Global Id: T0610900121 **RESPONSE** Action Type: Date: 04/30/2013

Action: Monitoring Report - Quarterly

T0610900121 Global Id: RESPONSE Action Type: Date: 07/30/2013

Action: Monitoring Report - Quarterly

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 08/25/2005 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 12/24/2008

Technical Correspondence / Assistance / Other Action:

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 10/06/2008

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

Action: Technical Correspondence / Assistance / Other

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 05/24/2013 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 02/04/2013 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 03/08/2018 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 08/14/2018

Action: Closure/No Further Action Letter

Global Id: T0610900121 Action Type: Other 01/07/1999 Date: Action: Leak Reported

Global Id: T0610900121 **RESPONSE** Action Type: Date: 10/30/2008

Monitoring Report - Quarterly Action:

Global Id: T0610900121 Action Type: **RESPONSE** 01/31/2013 Date:

Action: Monitoring Report - Quarterly

Global Id: T0610900121 **RESPONSE** Action Type: Date: 06/27/2013 Action: Correspondence

Global Id: T0610900121 **RESPONSE** Action Type: Date: 10/30/2013

Action: Monitoring Report - Quarterly

T0610900121 Global Id: Action Type: **RESPONSE** 12/02/2010 Date:

Action: Other Report / Document

Global Id: T0610900121 Action Type: **RESPONSE** Date: 05/30/2013 Action: Correspondence

Direction Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 11/01/2006

Action: Verbal Communication

Global Id: T0610900121
Action Type: ENFORCEMENT
Date: 05/10/2006

Action: Site Visit / Inspection / Sampling

Global Id: T0610900121
Action Type: ENFORCEMENT
Date: 01/09/2001

Action: Referral to Regional Board

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 04/17/2009

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 07/23/2009

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 12/04/2013

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 02/03/2014

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 05/30/2017

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 06/30/2008

Action: Pilot Study/ Treatability Report

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 07/31/2009

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/16/2009

Action: Monitoring Report - Quarterly

Global Id: T0610900121 Action Type: RESPONSE

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

Date: 07/30/2014

Monitoring Report - Quarterly Action:

Global Id: T0610900121 Action Type: **RESPONSE** 04/15/2015 Date:

Other Report / Document Action:

Global Id: T0610900121 Action Type: **RESPONSE** 10/30/2014 Date: Action: Correspondence

Global Id: T0610900121 Action Type: **RESPONSE** Date: 07/30/2015

Action: Monitoring Report - Quarterly

Global Id: T0610900121 **RESPONSE** Action Type: Date: 03/15/2015

Other Report / Document Action:

Global Id: T0610900121 **RESPONSE** Action Type: 02/15/2015 Date:

Action: Other Report / Document

T0610900121 Global Id: **RESPONSE** Action Type: 04/30/2014 Date:

Action: Monitoring Report - Quarterly

Global Id: T0610900121 **RESPONSE** Action Type: 07/30/2014 Date:

Action: Well Installation Report

T0610900121 Global Id: Action Type: **ENFORCEMENT** Date: 06/16/2004 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 07/09/2001 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 10/22/2009

Action: Site Visit / Inspection / Sampling

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 08/28/2009

Action: Technical Correspondence / Assistance / Other

Direction Distance Elevation

levation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 01/07/2010

 Action:
 Verbal Enforcement

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 10/30/2008

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 01/31/2006

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 01/30/2010

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2010

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 01/30/2015

Action: Monitoring Report - Quarterly

Global Id: T0610900121
Action Type: RESPONSE
Date: 07/30/2014

Action: Well Installation Report

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2015

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 01/15/2015

Action: Other Report / Document

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 10/30/2014

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 09/30/2014

Action: CAP/RAP - Other Report

Global Id: T0610900121
Action Type: RESPONSE

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

Date: 11/15/2014

Action: Interim Remedial Action Report

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 03/21/2014 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** 08/05/2015 Date: Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 09/04/2014

Action: Technical Correspondence / Assistance / Other

Global Id: T0610900121 Action Type: **ENFORCEMENT** 10/01/2014 Date: Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 01/31/2011

Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 01/31/2011

Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 01/31/2011

Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

T0610900121 Global Id: Action Type: **ENFORCEMENT** Date: 04/25/2011

Clean Up Fund - Case Closure Review Summary Report (RSR) Action:

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 04/03/2012

Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 12/31/2009

Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0610900121 Action Type: RESPONSE 02/28/2015 Date:

Action: Pilot Study/ Treatability Report

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

Global Id: T0610900121 **ENFORCEMENT** Action Type: 01/04/2005 Date: Action: Staff Letter

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 09/16/2005

Action: Site Visit / Inspection / Sampling

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 05/17/2011

Action: Technical Correspondence / Assistance / Other

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 02/01/2011 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 07/01/2011 Action: Staff Letter

T0610900121 Global Id: Action Type: **ENFORCEMENT** Date: 02/17/2015

Action: Technical Correspondence / Assistance / Other

T0610900121 Global Id: Action Type: **RESPONSE** Date: 07/30/2010

Action: Monitoring Report - Quarterly

Global Id: T0610900121 Action Type: **RESPONSE** Date: 10/14/2015

Other Report / Document Action:

Global Id: T0610900121 Action Type: **RESPONSE** Date: 09/30/2015

Other Report / Document Action:

Global Id: T0610900121 Action Type: **RESPONSE** Date: 10/30/2015

Action: Monitoring Report - Quarterly

T0610900121 Global Id: Action Type: **RESPONSE** 10/15/2015 Date:

Action: Other Report / Document

Global Id: T0610900121 Action Type: **ENFORCEMENT**

Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

Date: 03/02/2006 Action: Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 07/06/2006

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 05/05/2006

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 06/19/2006

Action: Verbal Communication

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 10/16/2006

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 05/13/2011

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 10/11/2011

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 06/06/2017

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 03/25/2016

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 Other

 Date:
 12/17/1998

 Action:
 Leak Discovery

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 02/15/2005

Action: Soil and Water Investigation Workplan

Global Id: T0610900121
Action Type: RESPONSE
Date: 07/23/2004

Action: Other Report / Document

Direction Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 01/31/2011

Action: Monitoring Report - Semi-Annually

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 10/30/2010

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 10/03/2014

 Action:
 Correspondence

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2011

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 10/30/2010

Action: Monitoring Report - Other

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 07/30/2010

Action: Monitoring Report - Other

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 07/01/2015

Action: Interim Remedial Action Report

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 09/15/2015

Action: Other Report / Document

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 08/15/2015

Action: Final Remedial Action Report / Corrective Action Report

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 10/30/2015

Action: Other Report / Document

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 04/25/2007

 Action:
 Staff Letter

Global Id: T0610900121
Action Type: ENFORCEMENT

Direction Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

Date: 01/11/2008 Action: Staff Letter

Global Id: T0610900121
Action Type: ENFORCEMENT
Date: 01/07/1999

Action: Technical Correspondence / Assistance / Other

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 01/08/2016

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 07/15/2005

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 11/01/2004

Action: Soil and Water Investigation Workplan

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 02/15/2005

 Action:
 Other Workplan

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 05/15/2005

Action: Other Report / Document

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 01/15/2005

Action: Sensitive Receptor Survey Report

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 12/31/2004

Action: Soil and Water Investigation Report

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2006

Action: Interim Remedial Action Plan - Regulator Responded

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2007

Action: Interim Remedial Action Plan - Regulator Responded

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 07/30/2011

Action: Monitoring Report - Quarterly - Regulator Responded

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

Global Id: T0610900121 **RESPONSE** Action Type: Date: 05/12/2011

Action: Other Workplan - Regulator Responded

T0610900121 Global Id: RESPONSE Action Type: Date: 10/31/2011

Action: Monitoring Report - Quarterly - Regulator Responded

Global Id: T0610900121 **RESPONSE** Action Type: Date: 01/30/2011

Action: Other Workplan - Regulator Responded

Global Id: T0610900121 Action Type: **RESPONSE** Date: 01/30/2012

Action: Pilot Study / Treatability Workplan - Regulator Responded

Global Id: T0610900121 RESPONSE Action Type: Date: 08/15/2012

Action: Interim Remedial Action Plan - Regulator Responded

Global Id: T0610900121 Action Type: RESPONSE Date: 01/31/2013

Action: Monitoring Report - Quarterly - Regulator Responded

T0610900121 Global Id: Action Type: **RESPONSE** Date: 11/30/2012

Action: Corrective Action Plan / Remedial Action Plan - Addendum - Regulator Responded

Global Id: T0610900121 **RESPONSE** Action Type: Date: 04/30/2013

Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0610900121 **RESPONSE** Action Type: Date: 11/15/2013

Action: Soil and Water Investigation Workplan - Addendum - Regulator Responded

Global Id: T0610900121 Action Type: **RESPONSE** Date: 01/15/2014

Action: CAP/RAP - Other Report - Regulator Responded

T0610900121 Global Id: Action Type: **RESPONSE** Date: 02/28/2014

Corrective Action Plan / Remedial Action Plan - Addendum - Regulator Responded Action:

Global Id: T0610900121 Action Type: **RESPONSE**

Direction Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

Date: 08/30/2014

Action: CAP/RAP - Other Report - Regulator Responded

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 08/30/2015

Action: Correspondence - Regulator Responded

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 12/10/2009

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 12/10/2009

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 03/24/2010

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 06/16/2010

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 02/23/2010

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 06/16/2010

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 10/01/2010

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 10/01/2011

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 01/05/2010

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 08/22/2014

Action: In Situ Physical/Chemical Treatment (other than SVE)

Direction Distance Elevation

vation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

 Global Id:
 T0610900121

 Action Type:
 REMEDIATION

 Date:
 01/01/2012

Action: Soil Vapor Extraction (SVE)

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 02/10/2012

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 12/30/2016

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 07/26/2016

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 ENFORCEMENT

 Date:
 12/15/2015

 Action:
 Staff Letter

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 09/30/2005

Action: Other Report / Document

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2008

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 11/30/2004

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/15/2005

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 07/31/2007

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2006

Action: Monitoring Report - Quarterly

Global Id: T0610900121 Action Type: RESPONSE

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEILSEN'S MINI MART (Continued)

S105022768

Date: 10/15/2005

Monitoring Report - Quarterly Action:

Global Id: T0610900121 Action Type: **RESPONSE** 01/30/2008 Date:

Other Report / Document Action:

Global Id: T0610900121 Action Type: **RESPONSE** Date: 01/30/2012

Monitoring Report - Quarterly Action:

Global Id: T0610900121 Action Type: **RESPONSE** Date: 04/30/2012

Action: Monitoring Report - Quarterly

Global Id: T0610900121 **ENFORCEMENT** Action Type: Date: 04/22/2013 Meeting Action:

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 06/19/2012 Action: Staff Letter

Global Id: T0610900121 Action Type: **ENFORCEMENT** Date: 02/20/2013

Action: Technical Correspondence / Assistance / Other

Global Id: T0610900121 **ENFORCEMENT** Action Type: 06/10/2013 Date: Action: Meeting

T0610900121 Global Id: **ENFORCEMENT** Action Type: Date: 02/10/2017 Action: Staff Letter

Global Id: T0610900121 Action Type: **RESPONSE** Date: 10/31/2005

Action: Soil and Water Investigation Report

Global Id: T0610900121 Action Type: **RESPONSE** Date: 07/30/2006

Action: Monitoring Report - Quarterly

Global Id: T0610900121 Action Type: RESPONSE Date: 11/15/2006

Action: Other Report / Document Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 01/31/2007

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 04/30/2007

Action: Monitoring Report - Quarterly

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 06/30/2006

 Action:
 Other Workplan

 Global Id:
 T0610900121

 Action Type:
 RESPONSE

 Date:
 07/30/2012

Action: Monitoring Report - Quarterly

Global Id: T0610900121
Action Type: RESPONSE
Date: 10/30/2012

Action: Monitoring Report - Quarterly

LUST:

Global Id: T0610900121

Status: Open - Case Begin Date

Status Date: 12/17/1998

Global Id: T0610900121

Status: Open - Site Assessment

Status Date: 12/17/1998

Global Id: T0610900121

Status: Open - Site Assessment

Status Date: 11/01/2004

Global Id: T0610900121

Status: Open - Site Assessment

Status Date: 01/24/2005

Global Id: T0610900121

Status: Open - Site Assessment

Status Date: 05/25/2006

Global Id: T0610900121
Status: Open - Remediation

Status Date: 12/10/2009

Global Id: T0610900121

Status: Open - Verification Monitoring

Status Date: 08/14/2017

Global Id: T0610900121

Status: Open - Eligible for Closure

Status Date: 03/08/2018

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued)

S105022768

EDR ID Number

Global Id: T0610900121

Status: Completed - Case Closed

Status Date: 08/14/2018

LUST REG 5:

Name: NEILSEN'S MINI MART Address: 17586 HWY 120 City: BIG OAK FLAT

Region: 5

Status: Preliminary site assessment underway

Case Number: 550145

Case Type: Drinking Water Aquifer affected

Substance: GASOLINE
Staff Initials: PGM
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

CUPA TUOLUMNE:

Name: CLAIM JUMPER OUTPOST Address: 17586 HIGHWAY 120 City,State,Zip: BIG OAK FLAT, CA 95305

Facility ID: FA0001920

Facility Status: CESQG with Business Plan

Mailing Address: PO BOX 480
Mailing City/State/Zip: BIG OAK FLAT, CA

PE: 2201
Latitude: Not reported
Longitude: Not reported

Name: CLAIM JUMPER OUTPOST Address: 17586 HIGHWAY 120 City,State,Zip: BIG OAK FLAT, CA 95305

Facility ID: FA0001920

Facility Status: Underground Storage Tank Annual

Mailing Address: PO BOX 480
Mailing City/State/Zip: BIG OAK FLAT, CA

PE: 2310
Latitude: Not reported
Longitude: Not reported

Name: CLAIM JUMPER OUTPOST Address: 17586 HIGHWAY 120 City,State,Zip: BIG OAK FLAT, CA 95305

Facility ID: FA0001920

Facility Status: Haz-Mat Business Plan - Small 1-5 Chemicals

Mailing Address: PO BOX 480

Mailing City/State/Zip: BIG OAK FLAT, CA

PE: 2110
Latitude: Not reported
Longitude: Not reported

HIST CORTESE:

edr_fname: NEILSEN'S MINI MART

edr_fadd1: 17586 120

Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

NEILSEN'S MINI MART (Continued) S105022768

City, State, Zip: BIG OAK FLAT, CA 95305

Region: CORTESE
Facility County Code: 55
Reg By: LTNKA
Reg Id: 550145

15 GROVELAND MILL # 2 ENVIROSTOR S100183454
NE HIGHWAY 120/HELLS HOLLOW N/A

1/2-1 GROVELAND, CA 95321

0.817 mi. 4315 ft.

Relative: ENVIROSTOR:

Lower Name: GROVELAND MILL # 2
Actual: Address: HIGHWAY 120/HELLS HC

Actual: Address: HIGHWAY 120/HELLS HOLLOW 2812 ft. City,State,Zip: GROVELAND, CA 95321

Facility ID: 55240015

Status: Refer: Other Agency
Status Date: 10/06/1995
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported

NPL: NO

Regulatory Agencies: NONE SPECIFIED Lead Agency: NONE SPECIFIED NONE SPECIFIED Not reported

Supervisor: Referred - Not Assigned Division Branch: Cleanup Sacramento

Assembly: Not reported Senate: Not reported

Special Program: * Rural County Survey Program

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.83887
Longitude: -120.2308
APN: NONE SPECIFIED

APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 55240015

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: * 06/22/1988

Comments: FACILITY IDENTIFIED TUOLOMNE COUNTY HEALTH DEPARTMENT INTERVIEW. SITE

EAST OF GROVELAND, OPPOSITE ELMORE ELEMENTARY SCHOOL.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 06/23/1988

Comments: FACILITY DRIVE-BY DROVE BY AREA. SITE SCREENING DONE. PRELIMINARY

EDR ID Number

Map ID MAP FINDINGS Direction

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

GROVELAND MILL #2 (Continued)

S100183454

ASSESSMENT LOW PRIORITY RECOMMENDED. NEED TO DETERMINE IF WOOD TREATMENT DONE ON SITE.

Future Area Name: Not reported Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Future Due Date: Schedule Area Name: Not reported Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Not reported Schedule Due Date: Schedule Revised Date: Not reported Count: 3 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|--------------|------------|--------------------------------|--------------------------|-------|--------------------|
| BIG OAK FLAT | S117332768 | YOSEMITE WAY STATION MINI MART | HIGHWAY 120 &WAY STATION | 95305 | CUPA Listings |
| BIG OAK FLAT | S121692937 | YOSEMITE WAY STATION | YOSEMITE WAY STATION | 95305 | CIWQS |
| GROVELAND | S101305517 | TUOLUMNE MEADOWS CHEVRON | HWY 120 | 95321 | LUST, HIST CORTESE |

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/30/2020 Source: EPA
Date Data Arrived at EDR: 02/05/2020 Telephone: N/A

Date Made Active in Reports: 02/14/2020 Last EDR Contact: 03/25/2020

Number of Days to Update: 9 Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/30/2020 Source: EPA
Date Data Arrived at EDR: 02/05/2020 Telephone: N/A

Date Made Active in Reports: 02/14/2020 Last EDR Contact: 04/02/2020 Number of Days to Update: 9 Next Scheduled EDR Contact:

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 9

Source: EPA Telephone: N/A

Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019 Date Data Arrived at EDR: 04/05/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 39

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 04/03/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 9

Source: EPA Telephone: 800-424-9346

Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 9

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/16/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 4

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 03/25/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/16/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 4

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 03/25/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/16/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 4

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 03/25/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/16/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 4

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 03/25/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation
and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database
includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste
as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate
less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/16/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 4

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 03/25/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/04/2019 Date Data Arrived at EDR: 11/13/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 76

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 02/10/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/22/2019 Date Data Arrived at EDR: 11/22/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 67

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 02/20/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/22/2019 Date Data Arrived at EDR: 11/22/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 67

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 02/20/2020

Next Scheduled EDR Contact: 06/08/2020

Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

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Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/19/2019 Date Made Active in Reports: 03/06/2020

Number of Days to Update: 78

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 03/24/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/27/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/27/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020 Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/10/2020 Date Data Arrived at EDR: 02/11/2020 Date Made Active in Reports: 04/20/2020

Number of Days to Update: 69

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320 Last EDR Contact: 02/11/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 09/26/2011

Next Scheduled EDR Contact: 01/09/2012 Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 909-782-4496 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 760-776-8943 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-4834 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6710 Last EDR Contact: 09/06/2011

Next Scheduled EDR Contact: 12/19/2011 Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003

Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-542-4786 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa

Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-622-2433 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001 Date Made Active in Reports: 03/29/2001

Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)

Telephone: 707-570-3769 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005

Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Telephone: 760-241-7365 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 530-542-5572 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 66

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/03/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 72

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019 Date Data Arrived at EDR: 12/05/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 67

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019 Date Data Arrived at EDR: 12/17/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 55

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/02/2020 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/04/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/27/2020

Number of Days to Update: 85

Source: Environmental Protection Agency Telephone: 415-972-3372

Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003

Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006

Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007

Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 08/08/2011

Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/27/2019 Date Data Arrived at EDR: 08/28/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 75

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 03/19/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 12/06/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/25/2020

Number of Days to Update: 77

Source: State Water Resources Control Board

Telephone: 916-327-7844 Last EDR Contact: 03/11/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/21/2020

Number of Days to Update: 73

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016 Date Data Arrived at EDR: 07/12/2016 Date Made Active in Reports: 09/19/2016

Number of Days to Update: 69

Source: California Environmental Protection Agency

Telephone: 916-327-5092 Last EDR Contact: 03/12/2020

Next Scheduled EDR Contact: 06/29/2020

Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019 Date Data Arrived at EDR: 12/05/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 67

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 68

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/03/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 72

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/04/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/27/2020

Number of Days to Update: 85

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 04/24/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/27/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020 Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 03/18/2020

Next Scheduled EDR Contact: 07/06/2020

Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/18/2019 Date Data Arrived at EDR: 12/19/2019 Date Made Active in Reports: 02/19/2020

Number of Days to Update: 62

Source: State Water Resources Control Board

Telephone: 916-323-7905 Last EDR Contact: 03/24/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/02/2019 Date Data Arrived at EDR: 12/16/2019 Date Made Active in Reports: 03/06/2020

Number of Days to Update: 81

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 03/17/2020

Next Scheduled EDR Contact: 06/29/2020 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 04/16/2020

Next Scheduled EDR Contact: 08/10/2020 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/19/2020

Number of Days to Update: 71

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 11/15/2019 Date Data Arrived at EDR: 11/15/2019 Date Made Active in Reports: 01/23/2020

Number of Days to Update: 69

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 02/07/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 04/16/2020

Next Scheduled EDR Contact: 08/10/2020 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 01/31/2020

Next Scheduled EDR Contact: 05/11/2020 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019 Date Data Arrived at EDR: 06/13/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 82

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006

Number of Days to Update: 21

Source: Department of Toxic Substance Control

Telephone: 916-323-3400 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/27/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020 Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 70

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 04/20/2020

Next Scheduled EDR Contact: 07/20/2020

Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/21/2020 Date Data Arrived at EDR: 01/22/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 70

Source: CalEPA

Telephone: 916-323-2514 Last EDR Contact: 04/21/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup

has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-227-4364 Last EDR Contact: 01/26/2009

Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019 Date Data Arrived at EDR: 06/13/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 82

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020

Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/19/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/21/2020

Number of Days to Update: 60

Source: Department of Public Health Telephone: 707-463-4466

Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/01/2019 Date Data Arrived at EDR: 08/02/2019 Date Made Active in Reports: 10/11/2019

Number of Days to Update: 70

Source: San Francisco County Department of Public Health

Telephone: 415-252-3896 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020

Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/21/2020 Date Data Arrived at EDR: 01/22/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 70

Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 04/21/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 12/02/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 62

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 9

Source: Environmental Protection Agency Telephone: 202-564-6023

Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/03/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 62

Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 03/03/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/05/2019 Date Data Arrived at EDR: 12/06/2019 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 70

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 03/24/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/24/2019 Date Data Arrived at EDR: 01/22/2020 Date Made Active in Reports: 03/30/2020

Number of Days to Update: 68

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 04/21/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 66

Source: State Water Quality Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/22/2013

Number of Days to Update: 50

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/16/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 4

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 03/25/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/12/2019 Date Data Arrived at EDR: 11/19/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 70

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 02/19/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 04/10/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/11/2018 Date Made Active in Reports: 11/06/2019

Number of Days to Update: 574

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 04/06/2020

Next Scheduled EDR Contact: 07/20/2020

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 02/13/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/16/2019 Date Data Arrived at EDR: 12/19/2019 Date Made Active in Reports: 02/27/2020

Number of Days to Update: 70

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 03/24/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 02/03/2020

Next Scheduled EDR Contact: 05/18/2020 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 02/07/2020

Next Scheduled EDR Contact: 05/18/2020 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/21/2017 Date Made Active in Reports: 01/05/2018

Number of Days to Update: 198

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 03/20/2020

Next Scheduled EDR Contact: 06/29/2020 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 79

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 02/05/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 05/01/2019 Date Data Arrived at EDR: 10/23/2019 Date Made Active in Reports: 01/15/2020

Number of Days to Update: 84

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 04/21/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 9

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/05/2019 Date Data Arrived at EDR: 11/20/2019 Date Made Active in Reports: 04/17/2020

Number of Days to Update: 149

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 04/15/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 02/06/2020 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 8

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 05/18/2020 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019 Date Data Arrived at EDR: 10/11/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 70

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 04/10/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 03/26/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 10/25/2019 Date Made Active in Reports: 01/15/2020

Number of Days to Update: 82

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 04/10/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 01/15/2020

Number of Days to Update: 42

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 03/06/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017 Date Data Arrived at EDR: 03/05/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 251

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019 Date Data Arrived at EDR: 11/06/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 96

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 02/07/2020

Next Scheduled EDR Contact: 05/18/2020

Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 07/01/2019

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008

Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/17/2020

Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 01/28/2020

Next Scheduled EDR Contact: 05/11/2020 Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2019 Date Data Arrived at EDR: 01/17/2020 Date Made Active in Reports: 03/06/2020

Number of Days to Update: 49

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 03/26/2020

Next Scheduled EDR Contact: 07/20/2020

Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 03/25/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 04/10/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 01/31/2020

Next Scheduled EDR Contact: 05/18/2020 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019 Date Data Arrived at EDR: 11/15/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 74

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 02/14/2020

Number of Days to Update: 9

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites

may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health Telephone: 703-305-6451

Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 12/03/2019 Date Data Arrived at EDR: 12/03/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi

Telephone: 202-693-9424 Last EDR Contact: 03/02/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/06/2019 Date Data Arrived at EDR: 11/25/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 64

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 02/25/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 02/28/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 02/28/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/11/2019 Date Made Active in Reports: 02/27/2020

Number of Days to Update: 78

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 03/05/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/22/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 03/02/2020

Number of Days to Update: 89

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 03/03/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 01/17/2019 Date Made Active in Reports: 04/01/2019

Number of Days to Update: 74

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 04/03/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 07/26/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 71

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/05/2020 Date Data Arrived at EDR: 01/07/2020 Date Made Active in Reports: 03/06/2020

Number of Days to Update: 59

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 04/07/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels

Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/18/2019 Date Data Arrived at EDR: 11/19/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 70

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 02/19/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of

Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994

Number of Days to Update: 6

Source: Department of Health Services

Telephone: 916-255-2118 Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste

Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/18/2019 Date Data Arrived at EDR: 12/20/2019 Date Made Active in Reports: 02/20/2020

Number of Days to Update: 62

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 03/24/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2020 Date Data Arrived at EDR: 02/04/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 65

Source: San Francisco County Department of Environmental Health

Telephone: 415-252-3896 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019 Date Data Arrived at EDR: 05/14/2019 Date Made Active in Reports: 07/17/2019

Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department

Telephone: 925-454-2361 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 01/31/2020 Date Data Arrived at EDR: 01/31/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 69

Source: South Coast Air Quality Management District

Telephone: 909-396-3211 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020

Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/04/2019 Date Data Arrived at EDR: 01/29/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 71

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 12/02/2019 Date Data Arrived at EDR: 12/03/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 63

Source: Antelope Valley Air Quality Management District

Telephone: 661-723-8070 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020

Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/24/2019 Date Made Active in Reports: 08/22/2019

Number of Days to Update: 59

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 03/20/2020

Next Scheduled EDR Contact: 06/29/2020

Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of

Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/03/2020 Date Data Arrived at EDR: 04/07/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 8

Source: State Water Resoruces Control Board

Telephone: 916-445-9379 Last EDR Contact: 04/03/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/21/2020 Date Data Arrived at EDR: 01/23/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 69

Source: Department of Toxic Substances Control

Telephone: 916-255-3628 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/19/2020 Date Data Arrived at EDR: 02/20/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 64

Source: California Integrated Waste Management Board

Telephone: 916-341-6066 Last EDR Contact: 02/07/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 05/29/2019 Date Made Active in Reports: 07/22/2019

Number of Days to Update: 54

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 04/15/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/18/2020 Date Data Arrived at EDR: 02/19/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 65

Source: Department of Toxic Subsances Control

Telephone: 877-786-9427 Last EDR Contact: 02/19/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/18/2020 Date Data Arrived at EDR: 02/19/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 65

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/19/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/06/2020 Date Data Arrived at EDR: 01/07/2020 Date Made Active in Reports: 03/05/2020

Number of Days to Update: 58

Source: Department of Toxic Substances Control

Telephone: 916-440-7145 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/24/2020

Number of Days to Update: 76

Source: Department of Conservation Telephone: 916-322-1080

Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the

state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/22/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 62

Source: Department of Public Health

Telephone: 916-558-1784 Last EDR Contact: 03/03/2020

Next Scheduled EDR Contact: 06/15/2020

Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/10/2020 Date Data Arrived at EDR: 02/11/2020 Date Made Active in Reports: 04/20/2020

Number of Days to Update: 69

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 02/11/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/03/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 62

Source: Department of Pesticide Regulation

Telephone: 916-445-4038 Last EDR Contact: 03/03/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Quarterly

PROC: Certified Processors Database A listing of certified processors.

> Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/19/2020

Number of Days to Update: 71

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/11/2019 Date Data Arrived at EDR: 12/12/2019 Date Made Active in Reports: 02/21/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 03/12/2020

Next Scheduled EDR Contact: 06/29/2020 Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/06/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/19/2020

Number of Days to Update: 71

Source: Deaprtment of Conservation

Telephone: 916-445-2408 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resource Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020

Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019 Date Data Arrived at EDR: 01/07/2020 Date Made Active in Reports: 03/09/2020

Number of Days to Update: 62

Source: RWQCB, Central Valley Region

Telephone: 559-445-5577 Last EDR Contact: 04/10/2020

Next Scheduled EDR Contact: 07/20/2020

Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007 Date Data Arrived at EDR: 06/20/2007 Date Made Active in Reports: 06/29/2007

Number of Days to Update: 9

Source: State Water Resources Control Board

Telephone: 916-341-5227 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009 Date Data Arrived at EDR: 07/21/2009 Date Made Active in Reports: 08/03/2009

Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 03/18/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020

Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 916-341-5810 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 12/03/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 62

Source: State Water Resources Control Board

Telephone: 866-794-4977 Last EDR Contact: 03/03/2020

Next Scheduled EDR Contact: 06/15/2020

Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/21/2020 Date Data Arrived at EDR: 01/22/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 70

Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 04/21/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020

Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Varies

SAMPLING POINT: Sampling Point? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020

Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC

wells, water supply wells, etc?) being monitored

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/18/2020

Number of Days to Update: 70

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020

Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533 Last EDR Contact: 02/28/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

The Hazardous Waste Tracking System (HWTS) is the Department of Toxic Substances Control?s data repository for hazardous waste Identification (ID) numbers and manifest information. HWTS generates reports on hazardous waste shipments for generators, transporters, and TSDFs.

Date of Government Version: 10/15/2019 Date Data Arrived at EDR: 11/14/2019 Date Made Active in Reports: 02/07/2020

Number of Days to Update: 85

Source: Department of Toxic Substances Control

Telephone: 916-324-2444 Last EDR Contact: 03/26/2020

Next Scheduled EDR Contact: 07/20/2020

Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination

from leaking petroleum USTs).

Date of Government Version: 01/09/2019 Date Data Arrived at EDR: 01/11/2019 Date Made Active in Reports: 03/05/2019

Number of Days to Update: 53

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 03/26/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/06/2020 Date Data Arrived at EDR: 01/07/2020 Date Made Active in Reports: 03/06/2020

Number of Days to Update: 59

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 04/20/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 09/06/2019 Date Data Arrived at EDR: 09/10/2019 Date Made Active in Reports: 10/31/2019

Number of Days to Update: 51

Source: Amador County Environmental Health

Telephone: 209-223-6439 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020

Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017 Date Data Arrived at EDR: 04/25/2017 Date Made Active in Reports: 08/09/2017

Number of Days to Update: 106

Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 03/26/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 12/02/2019 Date Data Arrived at EDR: 12/03/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 63

Source: Calveras County Environmental Health

Telephone: 209-754-6399 Last EDR Contact: 03/18/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List

Cupa facility list.

Date of Government Version: 08/14/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/18/2019

Number of Days to Update: 59

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 04/06/2020

Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/14/2020 Date Data Arrived at EDR: 02/18/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 66

Source: Contra Costa Health Services Department Telephone: 925-646-2286

Telephone: 925-646-2286 Last EDR Contact: 04/16/2020

Next Scheduled EDR Contact: 08/10/2020 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List

Cupa Facility list

Date of Government Version: 12/27/2019 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 72

Source: Del Norte County Environmental Health Division

Telephone: 707-465-0426 Last EDR Contact: 04/16/2020

Next Scheduled EDR Contact: 08/10/2020

Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List

CUPA facility list.

Date of Government Version: 12/31/2019 Date Data Arrived at EDR: 01/03/2020 Date Made Active in Reports: 03/05/2020

Number of Days to Update: 62

Source: El Dorado County Environmental Management Department

Telephone: 530-621-6623 Last EDR Contact: 04/15/2020

Next Scheduled EDR Contact: 08/09/2020

Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/08/2019 Date Data Arrived at EDR: 10/10/2019 Date Made Active in Reports: 12/11/2019

Number of Days to Update: 62

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 03/31/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018 Date Data Arrived at EDR: 01/24/2018 Date Made Active in Reports: 03/14/2018

Number of Days to Update: 49

Source: Glenn County Air Pollution Control District

Telephone: 830-934-6500 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List

CUPA facility list.

Date of Government Version: 11/13/2019 Date Data Arrived at EDR: 11/14/2019 Date Made Active in Reports: 01/23/2020

Number of Days to Update: 70

Source: Humboldt County Environmental Health

Telephone: N/A

Last EDR Contact: 03/26/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List

Cupa facility list.

Date of Government Version: 01/21/2020 Date Data Arrived at EDR: 01/23/2020 Date Made Active in Reports: 03/30/2020

Number of Days to Update: 67

Source: San Diego Border Field Office

Telephone: 760-339-2777 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List

Cupa facility list.

Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/03/2018 Date Made Active in Reports: 06/14/2018

Number of Days to Update: 72

Source: Inyo County Environmental Health Services

Telephone: 760-878-0238 Last EDR Contact: 02/13/2020

Next Scheduled EDR Contact: 06/01/2020

Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 01/31/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 70

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/13/2020 Date Data Arrived at EDR: 02/14/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 70

Source: Kings County Department of Public Health

Telephone: 559-584-1411 Last EDR Contact: 02/13/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 01/15/2020 Date Data Arrived at EDR: 01/16/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 76

Source: Lake County Environmental Health

Telephone: 707-263-1164 Last EDR Contact: 04/13/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 01/31/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 69

Source: Lassen County Environmental Health

Telephone: 530-251-8528 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009

Date Made Active in Reports: 10/23/2009

Number of Days to Update: 206

Source: N/A Telephone: N/A

Last EDR Contact: 03/12/2020

Next Scheduled EDR Contact: 06/29/2020 Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/15/2020 Date Data Arrived at EDR: 01/16/2020 Date Made Active in Reports: 02/07/2020

Number of Days to Update: 22

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 03/26/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

> Date of Government Version: 01/13/2020 Date Data Arrived at EDR: 01/14/2020 Date Made Active in Reports: 03/24/2020

Number of Days to Update: 70

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 04/14/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019 Date Data Arrived at EDR: 01/15/2019 Date Made Active in Reports: 03/07/2019

Number of Days to Update: 51

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/27/2020

Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019

Number of Days to Update: 58

Source: Los Angeles Fire Department

Telephone: 213-978-3800 Last EDR Contact: 03/27/2020

Next Scheduled EDR Contact: 07/06/2020

Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012 Date Data Arrived at EDR: 04/17/2019 Date Made Active in Reports: 05/29/2019

Number of Days to Update: 42

Source: Los Angeles County Department of Public Works

Telephone: 626-458-6973 Last EDR Contact: 04/17/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019

Number of Days to Update: 58

Source: Los Angeles Fire Department

Telephone: 213-978-3800 Last EDR Contact: 03/27/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019

Number of Days to Update: 58

Source: Los Angeles Fire Department Telephone: 213-978-3800

Last EDR Contact: 03/27/2020

Next Scheduled EDR Contact: 07/06/2020

Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 12/31/2019 Date Data Arrived at EDR: 01/14/2020 Date Made Active in Reports: 03/24/2020

Number of Days to Update: 70

Source: Community Health Services Telephone: 323-890-7806 Last EDR Contact: 04/14/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 04/19/2017 Date Made Active in Reports: 05/10/2017

Number of Days to Update: 21

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/27/2019

Number of Days to Update: 65

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/02/2019

Number of Days to Update: 64

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/18/2019 Date Data Arrived at EDR: 11/20/2019 Date Made Active in Reports: 01/27/2020

Number of Days to Update: 68

Source: Madera County Environmental Health

Telephone: 559-675-7823 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites Currently permitted USTs in Marin County.

> Date of Government Version: 09/26/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/02/2018

Number of Days to Update: 29

Source: Public Works Department Waste Management

Telephone: 415-473-6647 Last EDR Contact: 03/20/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List

CUPA facility list.

Date of Government Version: 11/18/2019 Date Data Arrived at EDR: 11/20/2019 Date Made Active in Reports: 01/03/2020

Number of Days to Update: 44

Source: Merced County Environmental Health

Telephone: 209-381-1094 Last EDR Contact: 02/13/2020

Next Scheduled EDR Contact: 06/01/2020

Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List

CUPA Facility List

Date of Government Version: 11/20/2019 Date Data Arrived at EDR: 12/02/2019 Date Made Active in Reports: 02/07/2020

Number of Days to Update: 67

Source: Mono County Health Department

Telephone: 760-932-5580 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020

Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 11/06/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 01/08/2020

Number of Days to Update: 62

Source: Monterey County Health Department

Telephone: 831-796-1297 Last EDR Contact: 04/13/2020

Next Scheduled EDR Contact: 07/13/2020

Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 03/02/2017

Number of Days to Update: 50

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 10/31/2019

Number of Days to Update: 52

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 03/05/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 02/05/2020 Date Data Arrived at EDR: 02/06/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 69

Source: Community Development Agency

Telephone: 530-265-1467 Last EDR Contact: 04/16/2020

Next Scheduled EDR Contact: 08/10/2020

Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 70

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 02/03/2020

Next Scheduled EDR Contact: 05/18/2020 Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 70

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 02/03/2020

Next Scheduled EDR Contact: 05/18/2020 Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 02/04/2020 Date Made Active in Reports: 04/10/2020

Number of Days to Update: 66

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 02/04/2020

Next Scheduled EDR Contact: 05/18/2020 Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/02/2019 Date Data Arrived at EDR: 12/03/2019 Date Made Active in Reports: 02/07/2020

Number of Days to Update: 66

Source: Placer County Health and Human Services

Telephone: 530-745-2363 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/26/2019

Number of Days to Update: 64

Source: Plumas County Environmental Health

Telephone: 530-283-6355 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/17/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 12/13/2019

Number of Days to Update: 52

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 02/10/2020

Next Scheduled EDR Contact: 06/29/2020 Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/17/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 01/03/2020

Number of Days to Update: 73

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 02/10/2020

Next Scheduled EDR Contact: 06/29/2020 Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/14/2019 Date Data Arrived at EDR: 12/23/2019 Date Made Active in Reports: 02/20/2020

Number of Days to Update: 59

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 03/31/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/14/2019 Date Data Arrived at EDR: 12/23/2019 Date Made Active in Reports: 02/21/2020

Number of Days to Update: 60

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 03/31/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 02/12/2020 Date Data Arrived at EDR: 02/13/2020 Date Made Active in Reports: 04/23/2020

Number of Days to Update: 70

Source: San Benito County Environmental Health

Telephone: N/A

Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/26/2019 Date Data Arrived at EDR: 11/27/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 69

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 12/03/2019 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 02/04/2020

Number of Days to Update: 62

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 03/03/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018 Date Data Arrived at EDR: 04/24/2018 Date Made Active in Reports: 06/19/2018

Number of Days to Update: 56

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 12/26/2019 Date Data Arrived at EDR: 01/22/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 70

Source: Department of Environmental Health

Telephone: 858-505-6874 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010

Number of Days to Update: 24

Source: San Diego County Department of Environmental Health

Telephone: 619-338-2371 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 10

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 01/08/2020 Date Data Arrived at EDR: 01/09/2020 Date Made Active in Reports: 03/06/2020

Number of Days to Update: 57

Source: Department of Public Health Telephone: 415-252-3920

Last EDR Contact: 04/23/2020 Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018 Date Data Arrived at EDR: 06/26/2018 Date Made Active in Reports: 07/11/2018

Number of Days to Update: 15

Source: Environmental Health Department

Telephone: N/A

Last EDR Contact: 03/12/2020

Next Scheduled EDR Contact: 06/29/2020 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 02/18/2020 Date Data Arrived at EDR: 02/20/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 64

Source: San Luis Obispo County Public Health Department

Telephone: 805-781-5596 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 06/01/2020

Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020 Date Data Arrived at EDR: 02/20/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 02/20/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019 Date Data Arrived at EDR: 03/29/2019 Date Made Active in Reports: 05/29/2019

Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 03/05/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011 Date Data Arrived at EDR: 09/09/2011 Date Made Active in Reports: 10/07/2011

Number of Days to Update: 28

Source: Santa Barbara County Public Health Department

Telephone: 805-686-8167 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 02/14/2020 Date Data Arrived at EDR: 02/19/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 65

Source: Department of Environmental Health

Telephone: 408-918-1973 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 06/01/2020

Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county.

Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014 Date Data Arrived at EDR: 03/05/2014 Date Made Active in Reports: 03/18/2014

Number of Days to Update: 13

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 02/21/2020

Next Scheduled EDR Contact: 06/08/2020 Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 10/30/2019 Date Data Arrived at EDR: 11/01/2019 Date Made Active in Reports: 01/08/2020

Number of Days to Update: 68

Source: City of San Jose Fire Department

Telephone: 408-535-7694 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 05/23/2017

Number of Days to Update: 90

Source: Santa Cruz County Environmental Health

Telephone: 831-464-2761 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 06/01/2020

Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017 Date Data Arrived at EDR: 06/19/2017 Date Made Active in Reports: 08/09/2017

Number of Days to Update: 51

Source: Shasta County Department of Resource Management

Telephone: 530-225-5789 Last EDR Contact: 02/14/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019 Date Data Arrived at EDR: 06/06/2019 Date Made Active in Reports: 08/13/2019

Number of Days to Update: 68

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 12/09/2019 Date Data Arrived at EDR: 12/11/2019 Date Made Active in Reports: 02/21/2020

Number of Days to Update: 72

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List

Cupa Facility list

Date of Government Version: 02/25/2020 Date Data Arrived at EDR: 02/26/2020 Date Made Active in Reports: 03/11/2020

Number of Days to Update: 14

Source: County of Sonoma Fire & Emergency Services Department

Telephone: 707-565-1174 Last EDR Contact: 03/18/2020

Next Scheduled EDR Contact: 07/06/2020

Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 01/03/2020 Date Made Active in Reports: 03/05/2020

Number of Days to Update: 62

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 04/06/2020

Next Scheduled EDR Contact: 07/06/2020 Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 02/04/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection

Telephone: 209-525-6751 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2019 Date Data Arrived at EDR: 12/03/2019 Date Made Active in Reports: 02/07/2020

Number of Days to Update: 66

Source: Sutter County Environmental Health Services

Telephone: 530-822-7500 Last EDR Contact: 02/27/2020

Next Scheduled EDR Contact: 06/15/2020 Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 05/20/2019 Date Data Arrived at EDR: 05/21/2019 Date Made Active in Reports: 07/18/2019

Number of Days to Update: 58

Source: Tehama County Department of Environmental Health

Telephone: 530-527-8020 Last EDR Contact: 03/17/2020

Next Scheduled EDR Contact: 05/18/2020

Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 01/21/2020 Date Data Arrived at EDR: 01/23/2020 Date Made Active in Reports: 03/30/2020

Number of Days to Update: 67

Source: Department of Toxic Substances Control

Telephone: 760-352-0381 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

> Date of Government Version: 02/10/2020 Date Data Arrived at EDR: 02/11/2020 Date Made Active in Reports: 04/20/2020

Number of Days to Update: 69

Source: Tulare County Environmental Health Services Division

Telephone: 559-624-7400 Last EDR Contact: 04/23/2020

Next Scheduled EDR Contact: 08/17/2020

Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List

Cupa facility list

Date of Government Version: 04/23/2018 Date Data Arrived at EDR: 04/25/2018 Date Made Active in Reports: 06/25/2018

Number of Days to Update: 61

Source: Divison of Environmental Health

Telephone: 209-533-5633 Last EDR Contact: 04/09/2020

Next Scheduled EDR Contact: 08/03/2020

Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste

Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2019 Date Data Arrived at EDR: 01/24/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 68

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 04/20/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012

Number of Days to Update: 49

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 03/20/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 37

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 02/07/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2019 Date Data Arrived at EDR: 01/24/2020 Date Made Active in Reports: 04/01/2020

Number of Days to Update: 68

Source: Ventura County Resource Management Agency

Telephone: 805-654-2813 Last EDR Contact: 04/20/2020

Next Scheduled EDR Contact: 08/03/2020 Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/26/2019 Date Data Arrived at EDR: 12/10/2019 Date Made Active in Reports: 02/21/2020

Number of Days to Update: 73

Source: Environmental Health Division Telephone: 805-654-2813

Last EDR Contact: 03/10/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/12/2019 Date Data Arrived at EDR: 01/15/2020 Date Made Active in Reports: 03/25/2020

Number of Days to Update: 70

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 03/20/2020

Next Scheduled EDR Contact: 07/13/2020 Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 01/27/2020 Date Data Arrived at EDR: 02/12/2020 Date Made Active in Reports: 04/23/2020

Number of Days to Update: 71

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523 Last EDR Contact: 04/16/2020

Next Scheduled EDR Contact: 08/10/2020

Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 01/30/2020 Date Made Active in Reports: 03/09/2020

Number of Days to Update: 39

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 01/30/2020

Next Scheduled EDR Contact: 05/25/2020 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/16/2019

Number of Days to Update: 36

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 04/10/2020

Next Scheduled EDR Contact: 07/20/2020 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019 Date Data Arrived at EDR: 05/01/2019 Date Made Active in Reports: 06/21/2019

Number of Days to Update: 51

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 01/31/2020

Next Scheduled EDR Contact: 05/11/2020 Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/19/2019 Date Made Active in Reports: 09/10/2019

Number of Days to Update: 53

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 04/02/2020

Next Scheduled EDR Contact: 07/27/2020 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 10/02/2019 Date Made Active in Reports: 12/10/2019

Number of Days to Update: 69

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 02/18/2020

Next Scheduled EDR Contact: 06/01/2020 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 03/09/2020

Next Scheduled EDR Contact: 06/22/2020 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

YONDER YOSEMITE HIGHWAY 120 GROVELAND, CA 95321

TARGET PROPERTY COORDINATES

Latitude (North): 37.829286 - 37° 49' 45.43" Longitude (West): 120.246885 - 120° 14' 48.79"

Universal Tranverse Mercator: Zone 10 UTM X (Meters): 742304.8 UTM Y (Meters): 4190241.0

Elevation: 2993 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5636543 GROVELAND, CA

Version Date: 2012

West Map: 5640010 MOCCASIN, CA

Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

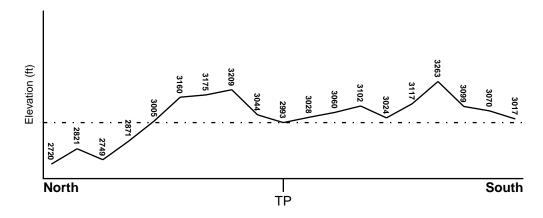
TOPOGRAPHIC INFORMATION

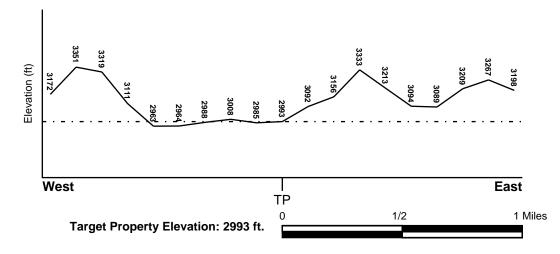
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property FEMA Source Type

06109C1225C FEMA FIRM Flood data

Additional Panels in search area: FEMA Source Type

06109C1200C FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property Data Coverage

GROVELAND YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| | LOCATION | GENERAL DIRECTION |
|--------|--------------------|-------------------|
| MAP ID | FROM TP | GROUNDWATER FLOW |
| 1 | 1/4 - 1/2 Mile NNE | Not Reported |

1 1/4 - 1/2 Mile NNE Not Reported 1G 1/4 - 1/2 Mile NNE Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era: Paleozoic Category: Eugeosynclinal Deposits

System: Pennsylvanian Series: Upper Paleozoic

Code: uPze (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ROCK OUTCROP

Soil Surface Texture: unweathered bedrock

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

| | Soil Layer Information | | | | | | | | | | |
|-------------------------|------------------------|-----------|------------------------|--------------|--------------|------------------------------|------------------------|--|--|--|--|
| Boundary Classification | | | | | | | | | | | |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | Permeability Rate (in/hr) | Soil Reaction (pH) | | | | |
| 1 | 0 inches | 60 inches | unweathered bedrock | Not reported | Not reported | Max: 0.00 Min: 0.00 | Max: 0.00 Min: 0.00 | | | | |

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loam

gravelly - clay loam extremely stony - loam

silt loam

stony - clay loam stony - loam gravelly - loam gravelly - silt loam

Surficial Soil Types: loam

gravelly - clay loam extremely stony - loam

silt loam

stony - clay loam stony - loam gravelly - loam gravelly - silt loam

Shallow Soil Types: gravelly - loam

gravelly - clay

loam

Deeper Soil Types: weathered bedrock

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

MAP ID WELL ID LOCATION FROM TP

No Wells Found

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID EROM TP

2 CA5500210 LOCATION FROM TP

1/2 - 1 Mile SW

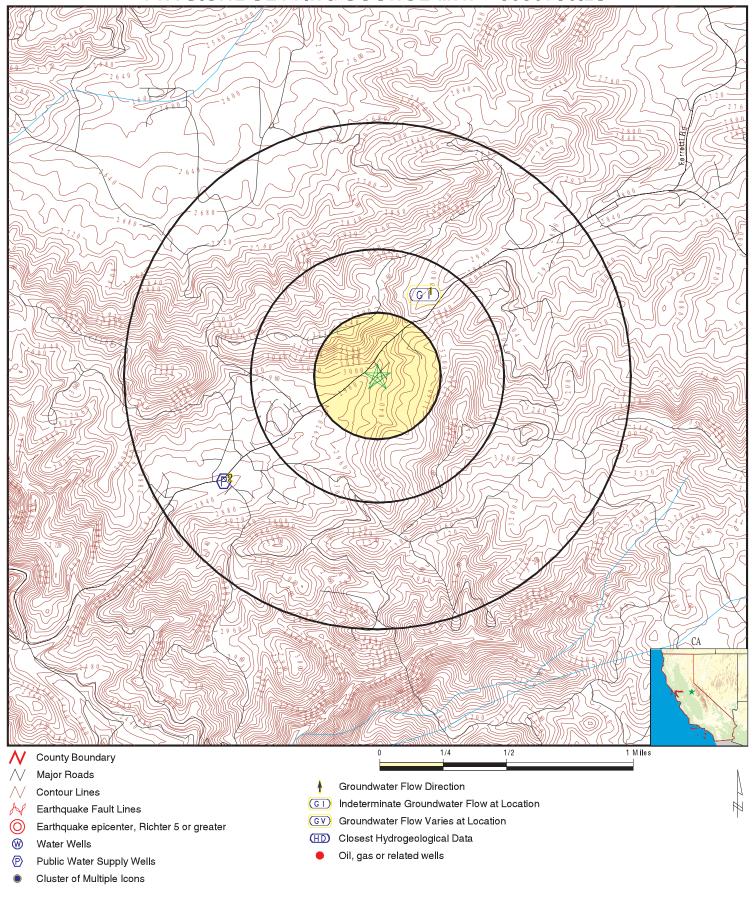
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID WELL ID LOCATION FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 6050736.2s



SITE NAME: Yonder Yosemite ADDRESS: Highway 120

Groveland CA 95321 LAT/LONG: 37.829286 / 120.246885 CLIENT: Padre Associates, Inc CONTACT: Eric Snelling

INQUIRY#: 6050736.2s

DATE: April 27, 2020 10:47 pm

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance

Elevation Database EDR ID Number

NNE 1/4 - 1/2 Mile Higher Site ID: 550118
Groundwater Flow: Not Reported

Shallow Water Depth: 26 Deep Water Depth: 28

Average Water Depth: Not Reported Date: 01/21/1999

SW FRDS PWS CA5500210

1/2 - 1 Mile Lower

Epa region: 09 State: CA

Pwsid: CA5500210 Pwsname: HISTORIC PRIEST STATION, LLC

Cityserved:Not ReportedStateserved:CAZipserved:Not ReportedFipscounty:06109Status:ActiveRetpopsrvd:25

Pwssvcconn:7Psource longname:GroundwaterPwstype:TNCWSOwner:Private

Contact:ANKER, DENISEContactorgname:ANKER, DENISEContactphone:209-962-5853Contactaddress1:P.O. BOX 455Contactaddress2:Not ReportedContactcity:BIG OAK FLAT

Contactstate: CA Contactzip: 95305

Pwsactivitycode: A

PWS ID: CA5500210 PWS type: System Owner/Responsible Party

PWS name: PRIEST STATION MOTEL & REST

PWS address: Not Reported PWS city: BIG OAK FLAT

PWS state: CA PWS zip: 95305

PWS name: PRIEST STATION REST. & MOTEL

PWS type code: NC Retail population served: 25

Contact: JOHN AND BARBARA WILBUR Contact address: 20618 NOB HILL CIRCLE

Contact address: GROVELAND Contact city: CA

Contact state: 95 Contact zip: Not Reported

Contact telephone: Not Reported

PWS ID: CA5500210 Activity status: Active

Date system activated: 7706 Date system deactivated: Not Reported
Retail population: System name: PRIEST STATION MOTEL & REST

System address: PRIEST STATION MOTEL & REST
System address: 16756 OLD PRIEST GRADE System city: GROVELAND

System state: CA System zip: 95321

Population served: Under 101 Persons Treatment: Untreated

Latitude: 374924 Longitude: 1201525

Violation id:600002Orig code:SState:CAViolation Year:2005

Contamination code: 3100 Contamination Name: Coliform (TCR)

Violation code:24Violation name:Monitoring, Routine Minor (TCR)Rule code:110Rule name:TCR

Violation measur:

Not Reported

Unit of measure:

Not Reported

State mcl:

Not Reported

Cmp bdt:

09/01/2005

Cmp edt: 09/30/2005

Violation ID: 600002 Orig Code: S

Enforcement FY: 2006 Enforcement Action: 11/08/2005

AQUIFLOW

68705

GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Enforcement Detail: St Other Enforcement Category: Informal

PWS name: PRIEST STATION REST. & MOTEL

Population served: 25 PWS type code: NC

Violation ID: 0600002 Contaminant: COLIFORM (TCR)

Violation type: Monitoring, Routine Minor (TCR)

Compliance start date: 9/1/2005 0:00:00 Compliance end date: 9/30/2005 0:00:00 Enforcement date: 11/8/2005 0:00:00 Enforcement action: State Other

Violation measurement: Not Reported

1G NNE 1/4 - 1/2 Mile Lower Site ID: 550118
Groundwater Flow: Not Reported

Shallow Water Depth: 26
Deep Water Depth: 28

Average Water Depth: Not Reported Date: 01/21/1999

AQUIFLOW 68705

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---------|-----------|-----------|
| | | |
| 95321 | 163 | 73 |

Federal EPA Radon Zone for TUOLUMNE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95321

Number of sites tested: 1

Area Average Activity % <4 pCi/L % 4-20 pCi/L % >20 pCi/L 3.000 pCi/L Living Area - 1st Floor 100% 0% 0% Living Area - 2nd Floor Not Reported Not Reported Not Reported Not Reported Not Reported Basement Not Reported Not Reported Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558 Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

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APPENDIX D QUALIFICATIONS



QUALIFICATIONS

The environmental professionals responsible for conducting or reviewing this Phase I ESA and preparing the report include Mr. Alan Klein, Mr. Eric Snelling, and Mr. Jerome Summerlin. We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as per the ASTM standard.

Eric K. Snelling, is a Principal with Padre. He holds a Bachelor of Science degree in City and Regional Planning from California Polytechnic State University at San Luis Obispo and a Master's Degree in Water Resource Management from California State University at Fresno. Mr. Snelling also obtained a Professional Certificate in Hazardous Materials Management from the University of California at Santa Barbara in 1998. Mr. Snelling is also a Registered Environmental Property Assessor. Mr. Snelling's responsibilities include completion of Phase I and II environmental site assessment projects and implementation of soil and groundwater remediation programs within Padre's Geo-environmental group. Mr. Snelling has performed over 200 Phase I ESAs throughout California and also in Washington, Nevada, and Texas. Mr. Snelling routinely manages the completion of Phase II site assessments for determining whether soil and groundwater impacts have occurred from current or historical site uses. Mr. Snelling manages the implementation of remediation activities, including soil vapor extraction, groundwater treatment systems, and excavation with either on-site treatment or off-site disposal.

Jerome K. Summerlin, P.G., C.E.G., C.Hg., is a Principal Geologist with Padre Associates, Inc.. He holds a Bachelor of Science degree in Geology from California State University, Chico. Mr. Summerlin obtained a Professional Certificate in Hazardous Materials Management from the University of California at Santa Barbara Extension in 1991 and a Professional Certificate in Site Assessment and Remediation from the University of California at Davis in 1993. Mr. Summerlin is a State of California Professional Geologist, Certified Engineering Geologist, and Certified Hydrogeologist. Mr. Summerlin is responsible for the firm's Geo-environmental assessment and remediation practices. Mr. Summerlin has been responsible for and participated in a variety of geotechnical, geologic, hydrogeologic, and geoenvironmental projects throughout California, Nevada, Utah, Alaska, Wyoming, Texas, Arizona, and Hawaii. He has managed environmental assessment and remediation projects, which have included preliminary site assessment (Phase I), site assessment (Phase II), remedial action design and planning/permitting, implementation of remedial action programs (Phase III), and verification monitoring upon completion of remedial actions (Phase IV). His training and experience includes a firm understanding of environmental laws and regulations, sample collection, analytical procedures and protocols, site safety procedures, quality assurance/quality control requirements, remedial action feasibility analyses, and design of remedial systems.

APPENDIX D

WATER DEMAND CALCULATIONS

Land & Structure

Zachariah P Garman C.E. 69194 105 South Stewart Street, Sonora Ca 95370 (209 532-5173 e. zac@landstruc.com *Data compiled using TUD Water Service User Classification Schedule* sfe - Single Family Equivalent - usage locally measured

Estimated Water Demand for Yonder Yosemite

| <u>Project</u> | User Classification | <u>Unit</u> | <u>Usage Factor</u> | Quantity | Demand per unit (gal/unit) | <u>sfe</u> (264 gpd) | Total Daily Flow TDF (gpd) | Average Daily Demand ADD (gpm) | Estimated Peak Demand *** (gpm) |
|----------------|---|----------------|---------------------|----------|-------------------------------|-------------------------|-------------------------------|--------------------------------|---------------------------------|
| onder Yosemite | Cabins | per room | 0.303 | 200 | 80.0 | 60.6 | 16,000.0 | 11.1 | 27.8 |
| | Site Amenities | | | | | | | | |
| | Lodge: Staff | per occupant | 0.100 | 4 | 26.4 | 0.4 | 105.6 | 0.1 | 0.2 |
| | Restaurant | per occupant | 0.090 | 74 | 23.8 | 6.7 | 1,758.2 | 1.2 | 3.1 |
| | Library / Lounge | per occupant | 0.005 | 216 | 1.3 | 1.1 | 285.1 | 0.2 | 0.5 |
| | Management Residence - 2 Bedroom | per residence | 0.700 | 1 | 184.8 | 0.7 | 184.8 | 0.1 | 0.3 |
| | Pool / Poolhouse | by calculation | 0.010 | 1 | 200.0 | - | 200.0 | 0.1 | 0.3 |
| | Events Pavillion | per occupant | 0.005 | 203 | 1.3 | 1.0 | 268.0 | 0.2 | 0.5 |
| | Office For Landscaping & Maitennace Staff | per employee | 0.100 | 4 | 26.4 | 0.4 | 105.6 | 0.1 | 0.2 |
| | Staff housing | per occupant | 0.500 | 20 | 132.0 | 10.0 | 2,640.0 | 1.8 | 4.6 |
| | Subtotal | | | | | | 21,547.3 | 15.0 | 37.4 |
| | Landscape ** | by calculation | | | | | 7,925.0 | 5.5 | 13.8 |
| | | | | | | | 29,472.3 | 20.5 | 51.2 |
| _ | | | | _ | _ | | gpd | gpm | gpm |

| Landscape for first 18 months | by calculation | | | 21,863.0 | gpd |
|-------------------------------------|----------------|--|--|----------|-----|
| Landscape for after first 18 months | by calculation | | | 5,465.8 | gpd |

| <u>Project</u> | <u>User Classification</u> | <u>Unit</u> | Generation Factor | Quantity | Total Fire Flow Volume | |
|-----------------|----------------------------|-------------|--------------------------|----------|------------------------|--|
| | | | | | (gallons) | |
| Yonder Yosemite | Entire Site | minutes | 1500.000 / minute | 120 | 180,000.0 | |

Estimated Sewer Demand for Yonder Yosemite

| Project | <u>User Classification</u> | <u>Unit</u> | <u>Usage Factor</u> | Quantity (occupancy) | Demand per unit (gal/unit) | <u>sfe</u> (160 gpd) | Total Dally Flow (gpd) | Average Dally Flow (gpm) | Estimated Peak Demand *** (gpm) |
|-----------------|---|--------------|---------------------|-------------------------|----------------------------|-------------------------|---------------------------|-----------------------------|---------------------------------|
| Yonder Yosemite | Cabins | per room | 0.500 | 200 | 80 | 100 | 16,000.0 | 11.1 | 27.8 |
| | Site Amenities | | | | | | | | |
| | Lodge: Staff | per occupant | 0.100 | 4 | 16 | 0.4 | 64.0 | 0.0 | 0.1 |
| | Restaurant | per occupant | 0.090 | 74 | 14.4 | 6.7 | 1,065.6 | 0.7 | 1.9 |
| | Library / Lounge | per occupant | 0.005 | 216 | 0.8 | 1.1 | 172.8 | 0.1 | 0.3 |
| | Management Residence - 2 Bedroom | per room | 0.700 | 2 | 112 | 1.4 | 224.0 | 0.2 | 0.4 |
| | Pool / Poolhouse | per occupant | 0.060 | 106 | 9.6 | 6.4 | 1,017.6 | 0.7 | 1.8 |
| | Events Pavillion | per occupant | 0.005 | 203 | 0.8 | 1.0 | 162.4 | 0.1 | 0.3 |
| | Office For Landscaping & Maitennace Staff | per employee | 0.100 | 4 | 16 | 0.4 | 64.0 | 0.0 | 0.1 |
| | Staff housing | per occupant | 0.500 | 20 | 80 | 10 | 1,600.0 | 1.1 | 2.8 |
| | | | | | | | | | |
| | | | | | | | 20,370.4 | 14.1 | 35.4 |
| | | | | | | | gpd | gpm | gpm |

^{*} Occupancy use is accessory to the structures being supported and therefore accounted for within the cabin occupancy.

Table value based on annualized 10-year Consumption = [21,863 gal/day* 365 days * 1.5 years] + [5,466 gal/day*365 days * 8.5 years] / [10 years * 365 days] = 7,925 gal/day

Additional Water Volume Demands

Maximum Month Demand MMD = TDF x 1.5 (gpd)

44,208.5

Maximum Day Demand MDD = MMD x 1.5 (gpd)

66,312.7

Peak Hour Demand
PHD = MDD x 3/(24 x 60) (gpm)

138.2

Additional Wastewater Volume Demands

Maximum Month Demand MMD = TDF x 1.5 (gpd)

30,555.6

Maximum Day Demand MDD = MMD x 1.5 (gpd)

45,833.4

Peak Hour Demand PHD = MDD x 3/(24 x 60) (gpm)

95.5

^{**} Landscape : Consumption = 21,863 gal/day for the first 18 months then a 75% reduction thereafter to yeild 5,466 gal/day

^{***} Estimated Peak Demand = Average Daily Flow x 2.5