MARIPOSA COUNTY

MARIPOSA CREEK PARKWAY PHASE III HILLSIDE TRAILS PROJECT

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

MARIPOSA COUNTY
AUGUST 2025

PREPARED FOR:
Mariposa County
5100 Bullion Street, Mariposa, CA 95338

PREPARED BY:
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ACRONYMS & ABBREVIATIONS

AB ..... Assembly Bill

BMP ..... Best Management Practices

CalEEMod ..... California Emissions Estimator Modeling (software)

CAL FIRE ..... California Department of Forestry and Fire Protection

CARB ..... California Air Resources Board

CCAA ..... California Clean Air Act

CCIC ..... Central California Information Center

CDFW ..... California Fish and Wildlife

CEQA ..... California Environmental Quality Act

CGP ..... Construction General Permit

CH_4 ..... Methane

CNDDB ..... California Natural Diversity Database

CNPS ..... California Native Plant Society

CO ..... Carbon monoxide

CO_2 ..... Carbon dioxide

CO_2e ..... Carbon dioxide equivelent

County ..... Mariposa County

dBA ..... A-weighted decibels

DBH ..... diameter at breast height

DTSC ..... Department of Toxic Substances Control

EIR ..... Environmental Impact Report

FMMP ..... Farmland Mapping and Monitoring Program

GHG ..... Greenhouse Gas

GWP ..... Global Warming Potential

IS ..... Initial Study

IS/MND ..... Initial Study/Mitigated Negative Declaration

Lmax ..... maximum instantaneous noise level

MCAB ..... Mountain Counties Air Basin

MCAPCD ..... Mariposa County Air Pollution Control District

MMRP ..... Mitigation Monitoring and Reporting Program

MND ..... Mitigated Negative Declaration

MPUD ..... Mariposa Public Utility District

MT ..... Metric Tons

NAHC ..... Native American Heritage Commission
ND ..... Negative Declaration
NO_2 ..... Nitrogen Dioxide
NOx ..... Nitrogen Oxides
NPDES ..... National Pollutant Discharge Elimination System
O_3 ..... Ozone
O&M ..... Operation and Maintenance
Pb ..... Lead
PG&E ..... Pacific Gas & Electric Company
PM_{10} ..... particulate matter 10 microns in size
$PM_{2.5}$ ..... particulate matter 2.5 microns in size
ppb ..... parts per billion
ppm ..... parts per million
PPV ..... Peak Particle Velocity
Project ..... Mariposa Creek Parkway Phase III Hillside Trails Project
ROG ..... Reactive Organic Gases
SO_2 ..... Sulfur Dioxide
SR ..... State Route
SRA ..... State Responsibility Area
SWPPP ..... Storm Water Pollution Prevention Plan
SWRCB ..... State Water Resources Control Board
TPA ..... Town Planning Area
USACE ..... United States Army Corps of Engineers
USEPA ..... United States Environmental Protection Agency
USFWS ..... United States Fish and Wildlife Service
µg/m3 ..... micrograms per cubic meter
VMT ..... vehicle miles traveled

1 INTRODUCTION

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the County of Mariposa to address the potential environmental effects of the Mariposa Creek Parkway Phase III Hillside Trails Project (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. The County is the CEQA lead agency for this Project.

The site and the Project are described in detail in Chapter 2 Project Description.

1.1 REGULATORY INFORMATION

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, *et seq.*)-- also known as the CEQA Guidelines--Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead, if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or *mitigated* ND shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or
b. The IS identified potentially significant effects, but:
    1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and
    2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.

1.2 DOCUMENT FORMAT

This IS/MND contains six chapters. Chapter 1 Introduction, provides an overview of the Project and the CEQA process. Chapter 2 Project Description, provides a detailed description of proposed Project components and objectives. Chapter 3 Determination, the Lead Agency's determination based upon this initial evaluation. Chapter 4 Environmental Impact Analysis presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 5 Mitigation, Monitoring, and Reporting Program (MMRP), provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation. Chapter 6 References, details the documents and reports this document relies upon to provide its analysis.

The California Emissions Estimator Modeling (CalEEMod) Output Files, Biological Resources Evaluation, and Class III Inventory/ Phase I Survey Report, are provided as technical Appendix A, Appendix B, and Appendix C respectively, at the end of this document.

2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

2.1.1 PROJECT TITLE

Mariposa Creek Parkway Phase III Hillside Trails Project

2.1.2 LEAD AGENCY NAME AND ADDRESS

Mariposa County
Planning Department
5100 Bullion Street, Ste 1
Mariposa, CA 95338

2.1.3 CONTACT PERSON AND PHONE NUMBER

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2.1.4 CEQA CONSULTANT

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Briza Grace Sholars, Environmental Project Manager
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2.1.5 PROJECT LOCATION

The proposed trail project is located within the unincorporated community of Mariposa in Mariposa County, California, approximately 110 miles southeast of Sacramento and 150 miles northwest of Bakersfield (see Figure 2-1 and Figure 2-2). The centroid of the Project site is .37° 28’ 51.68” W, 119° 58’ 15.87” W.

2.1.6 GENERAL PLAN DESIGNATION AND ZONING

Table 2-1: General Plan Land Use Designation and Zoning District

Project Area	General Plan Designation	Zoning District
ONSITE	Mariposa Town Planning Area Town Plan - Expanded Mariposa Town Planning Area	MHZ: Mountain Home SR-20: Scenic Resources-20 acres SR: Scenic Resources - - 5 acres P/Q-P: Public/Quasi Public
ADJACENT LANDS	Mariposa Town Planning Area Town Plan - Expanded Mariposa Town Planning Area	GC: General Commercial MHZ: Mountain Home MFR: Multi-Family Residential SR-20: Scenic Resources-20 acres SR: Scenic Resources – 5 acres P/Q-P: Public/Quasi Public SFR-9K: Single Family Residential, 9,000 square feet

2.1.7 DESCRIPTION OF THE PROJECT

2.1.7.1 PROJECT BACKGROUND AND PURPOSE

The Mariposa Town Planning Area (TPA) Town Plan identifies the Mariposa Creek Parkway as a priority project with multiple social, economic, and environmental benefits. The Mariposa TPA Town Plan states the following:

"The Park will provide a pedestrian and bicyclist corridor...wide enough for two-way traffic...for walkers, joggers, or bicyclists...will tie together a number of tourist facilities and destinations...residents near the park will also use the creek trail."

Since it was first described in the Mariposa TPA Town Plan, a creek parkway trail system has been further recommended and refined in a range of other collaborative planning and design processes, highlighted by the Mariposa Creek Parkway Master Plan. Funded by a grant from Caltrans, the County began work on the master plan in 2018. The master plan process relied on extensive community engagement to develop a comprehensive vision for the creek corridor, and to define priority actions for implementing that vision. On January 28, 2020, the Mariposa Creek Parkway Master Plan was adopted.

Though the Mariposa Creek Parkway Master Plan focuses its attention on the creek corridor, the proposed Mariposa Creek Parkway Phase III Hillside Trails Project ("Hillside Trails Project") focuses on the hillside on the west side of the creek corridor. Although the proposed Project is not specifically called out in the master plan, the hillside trails would extend the existing creek parkway trail system, provide a connection to the Phase III segment of the Creek Parkway and Highway 140/Martin Road, and increase recreational opportunities for local residents and visitors alike.

The conceptual design has been developed with a significant amount of community input and guidance on aesthetics, recreational features, and ecological performance.

The Project would achieve the following objectives:

1. Promote health, wellness, and trail stewardship by creating a catalytic trails project for Mariposa County.
2. Consider multiple functions for sustainable trails relating to restoration and wildfire resiliency.
3. Provide a range of trail types from ADA accessible to more challenging trails that cater to both the local population and visitors alike.
4. Bring trail users to a variety of destinations and trail routes to encourage trail users to return again and again.
5. Plan for a hierarchy of trailheads within the system while promoting the use of active transportation to access the site.
6. Expand the reach of the Mariposa Creek Parkway and its trailheads.
7. Provide outdoor education and environmental values.

2.1.7.2 PROJECT DESCRIPTION

The Hillside Trails Project proposes to construct approximately 12.3 miles of nature trails branching off the planned Phase III section of the Mariposa Creek Parkway Trail. The total Project area consists of approximately 235 acres. Trail widths would vary from two to eight feet. The intent of the proposed project is to bring a balance of recreation, adventure and tranquility to the area. The new trails would be divided into four different segments based on their location and intended purpose. These lengths are an estimate and include the following:

Front-Country Trails

- 0.8- and 1.6-mile stacked loops from the Mariposa Creek Parkway
- Trail running grades 5-7%

Destination Trails

- 1.6-mile trail from Mariposa Creek Parkway up to overlook
- 2.8-mile trail from Mariposa Creek Parkway up to highpoint of the site
- Trail running grade 5-8%
- Opportunity for more technically challenging trails

Oak Woodland Trails

- 1.6-mile woodland loop from proposed trailhead
- 0.7-mile trail from proposed trailhead up to high point of the site
- Trail running grades <5%
- Opportunity for more accessible trails

Park Trails

- 2.5-mile loop option from the County Park
- 1.9-mile trail from County Park to overlook
- Trail running grade 4-8%

Trail Amenities and Features

The proposed Project would include various amenities and features within the trail system. They are anticipated to include the following if possible:

- Shaded benches
- Scenic viewpoints
- Restrooms with drinking fountains
- Ecological restoration areas
- Educational signage
- Pet facilities (i.e., waste bags and waterspouts)
- Americans with Disabilities Act (ADA) accessible routes
- Bike racks, repair, and wash station
- Isolated meditation areas
- Swing benches
- Large gathering spaces with table seating
- Exercise stations
- Outdoor classroom
- Bike jumps
- Bird blinds
- Hitching post
- Parking
- Conservation zones

The proposed trail Project also includes management and maintenance strategies that are proposed in the Mariposa Forest Management Plan, including the use of herbicide, cultural and prescribed burning, and prescribed grazing to control invasive vegetation as well as irrigation to support any plantings of native vegetation.

Trail Uses

The Project is expected to encourage the following uses:

- Hiking
- Scenic viewing
- Mountain biking
- Picnicking

- Dog walking
- Learning
- Bird watching
- Group gatherings
- Trail running
- Meditating or Meditation
- Horseback riding

ZONE AMENDMENT

The Project would also require a zone amendment for the Project parcels that are currently not zoned Public Quasi-Public. See Figure 2-4 for the existing zoning designation for the Project parcels.

2.1.7.3 CONSTRUCTION SCHEDULE

While construction funding or schedule is not identified, construction of the Hillside Trails Project is anticipated to generally occur between the months of April and October, outside of the rainy season.

2.1.7.4 OPERATION AND MAINTENANCE

Operation and Maintenance (O&M) of the Project would be handled by the Mariposa County Public Works Department, Road and/or Parks and Recreation Divisions. O&M would include the following:

- Mowing – Mowing each side of trail where applicable.
- Pruning - Prune woody limbs and shrubs near sides of trail.
- Removal of Trees/Limbs - Evaluation/removal of unhealthy or dead trees and limbs. Fallen trees may remain as access control and to minimize disturbance.
- Signage - Maintain directional and informational signs.
- Trail Surface – Restore, regrade, clean and/or resurface when necessary.
- Litter Pick Up - Trailside-litter pickup. Access area litter pickup. Encourage continued user "carry-in, carry-out" policy.
- Trash Collection - Removal of trash from receptacles at access areas.
- Lighting – maintain functional safety lighting (replace luminaires, repair outages)
- Restroom – cleaning of restroom and pumping of vault

2.1.8 OTHER PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED

- California Department of Fish and Wildlife
- California Regional Water Quality Control Board
- United States Army Corps of Engineers

2.1.9 CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Public Resources Code Section 21080.3.1, *et seq. [codification of Assembly Bill (AB) 52, 2013-14]* requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

The County of Mariposa has received written correspondence from the North Fork Mono Tribe, the North Fork Rancheria of Mono, the Picayune Rancheria of Chukchansi, and the Southern Sierra Miwuk Nation pursuant to AB 52 requesting notification of proposed projects.

The County sent consultation letters, pursuant to Assembly Bill (AB) 52, to the list of all tribes provided by the Native American Heritage Commission with the Sacred Land File Search results. For this Project, the County sent out AB 52 Tribal consultation letters to 12 tribes. The Southern Sierra Miwuk Nation (SSMN) has knowledge of tribal cultural resources within portions of the Project area and requested to review the Cultural Report. A full list of tribes and further discussion can be found below in Section 4.18.

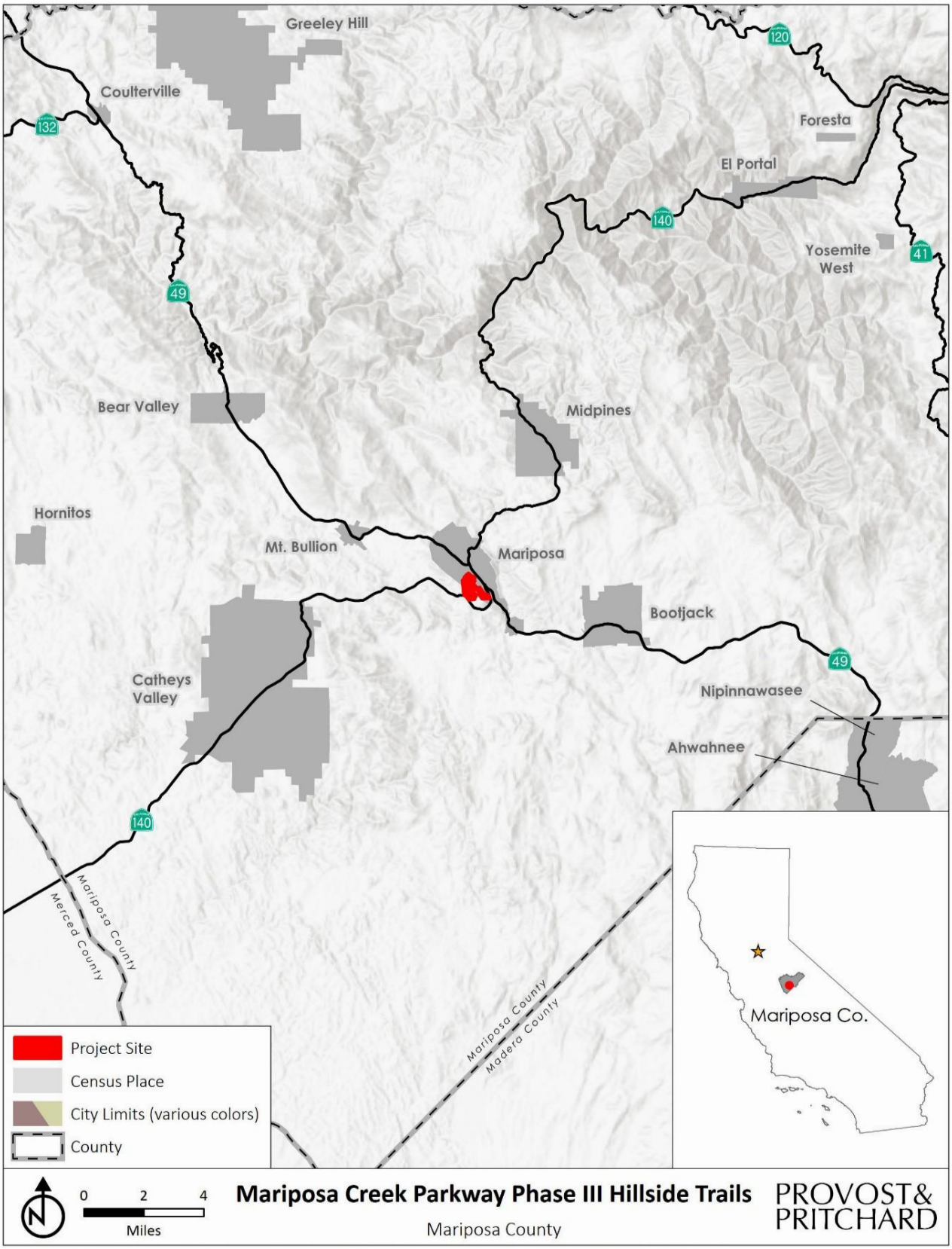


Figure 2-1: Regional Location Map

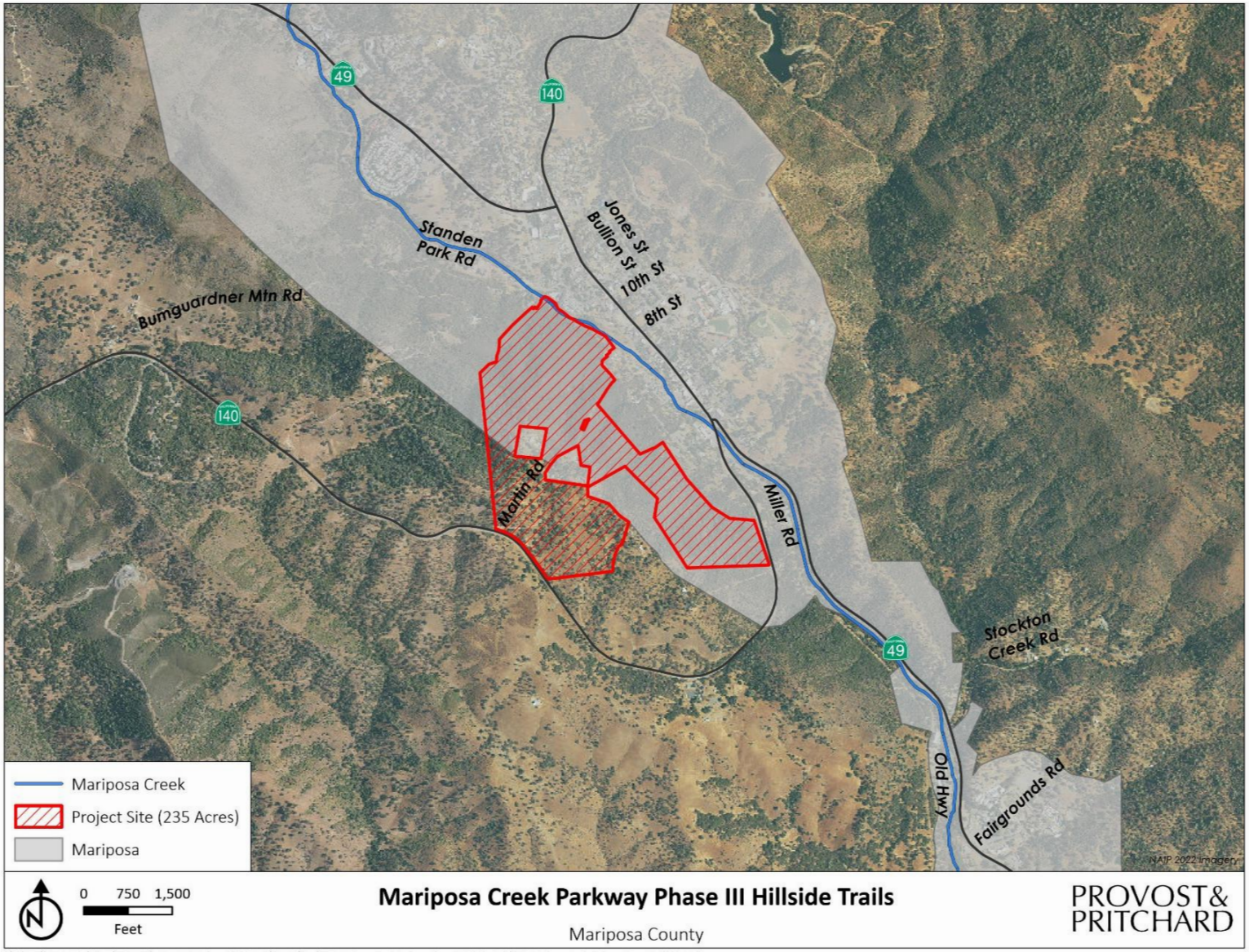


Figure 2-2: Aerial Site Map

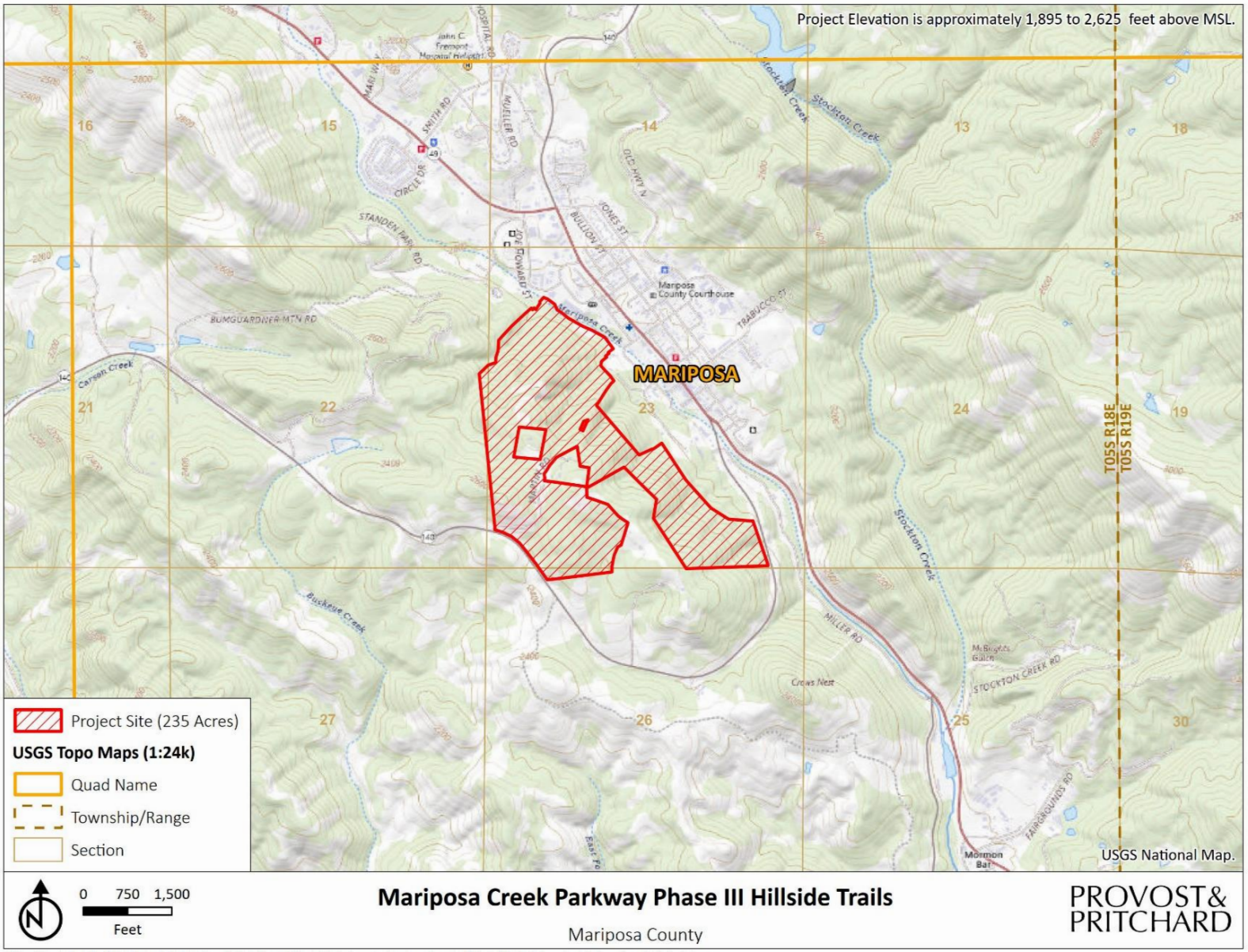


Figure 2-3: Topo Quad Map

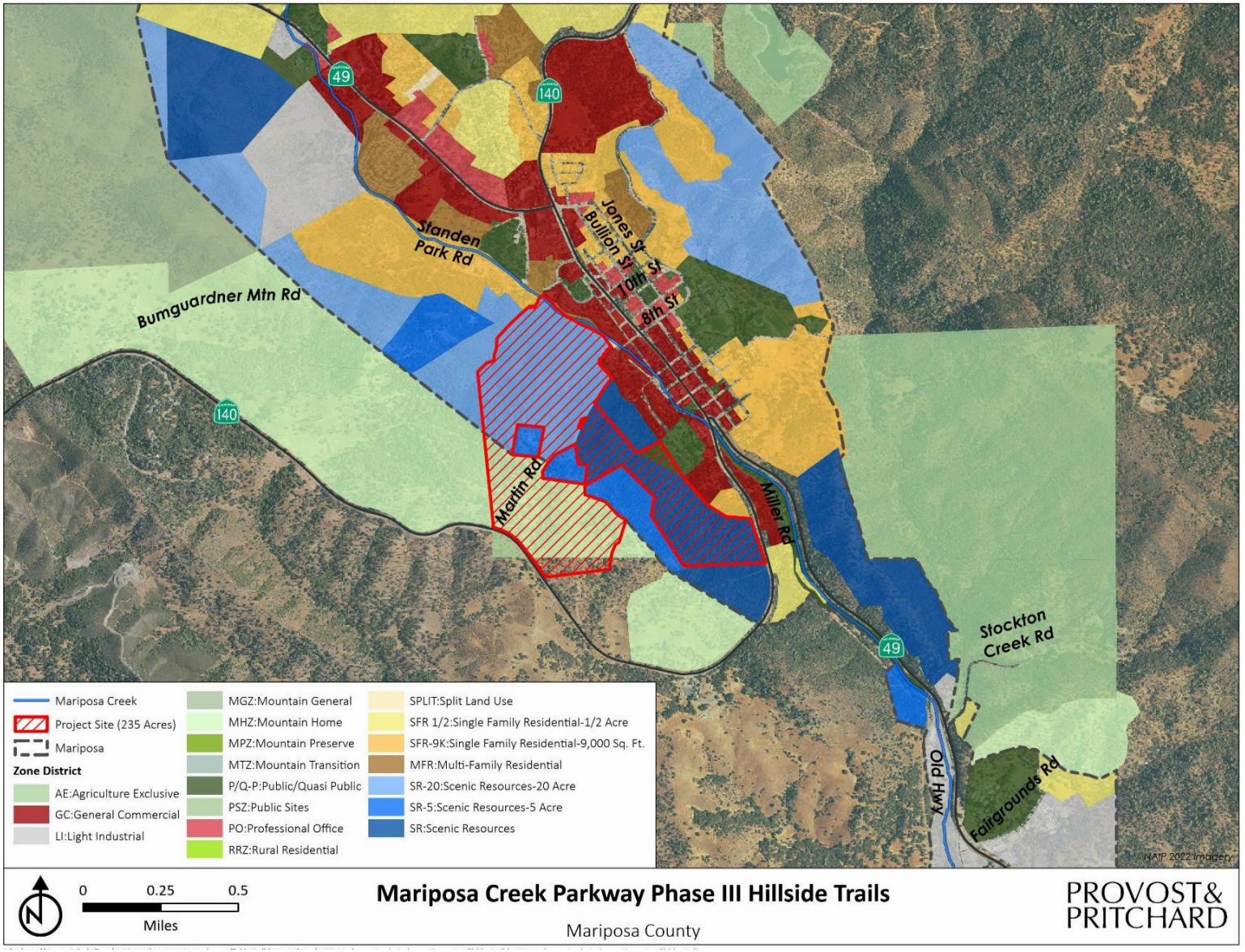


Figure 2-4: Zone District Map

3 DETERMINATION

3.1 POTENTIAL ENVIRONMENTAL IMPACTS

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

The analyses of environmental impacts in Chapter 4 Impact Analysis result in an impact statement, which shall have the following meanings.

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 DETERMINATION

On the basis of this initial evaluation (to be completed by the Lead Agency):

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

8/18/2025
Date

Ben Goger, Senior Planner
Printed Name/Position

4 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AESTHETICS

Table 4-1: Aesthetics Impacts

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In 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?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

4.1.1 BASELINE CONDITIONS

The visual quality of Mariposa County is defined by its natural and constructed scenery, with an overall rural character. The Project area itself is located adjacent to the town of Mariposa along Mariposa Creek. Mariposa is a mountain community surrounded by a mix of chaparral and woodland habitats. Flow levels in Mariposa Creek fluctuate on a seasonal basis and during storms. During large rain events, the creek can flood, and during dryer times, typically towards the end of summer, the creek tends to be significantly lower. At 8th Street, Mariposa Creek is diverted into a culvert, which is multipurposed to act as a bridge crossing for trail users utilizing the existing segment of the Mariposa Creek Parkway. Various vegetation types, native and non-native, lie along the creek bed in the Project area. East of the Trail Project lies several commercial establishments. These businesses front State Route (SR) 140/49 on the non-creek side. There are several smaller local roadways that connect these businesses to the highway. To the west of the Project area is primarily woodland and riparian habitat along Mariposa Creek, with the exception of a few scattered residences. The Project area does not include any designated scenic vistas.

There is one designated State Highway with a scenic segment (SR 140 from Mariposa to Yosemite National Park), one designated National Scenic Byway (SR 120 in Yosemite National Park), and two State highway segments that are eligible for designation as State Scenic Highways under Caltrans guidelines (SR 49 through the County and SR 41 from Yosemite National Park to Oakhurst where only a short portion of the latter route is located in Mariposa County).

4.1.2 IMPACT ANALYSIS

a) Have substantial adverse effect on a scenic vista?

No Impact. Although the Project area, including most of the County, is considered visually pleasing and scenic, it does not contain a County-designated scenic vista. The natural landscape of Mariposa Creek and its natural surroundings is mostly intact despite the commercial and residential developments in the Project vicinity. In addition to the provision of recreational amenities for residents and tourists, the Project, in combination with existing trail facilities, would continue to facilitate existing and future development to tie to the aesthetic nature of Mariposa Creek.

In addition to the hillside trails, the Project would include trailway amenities that would provide users with additional features to utilize in order to take advantage of Mariposa's scenery and natural amenities. Overall, the Project would not result in a substantial adverse effect on a scenic vista but would rather improve and complement the scenic qualities that already exist. Therefore, there would be no impact.

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

No Impact. The Project would not damage scenic resources within a State Scenic Highway. The nearest State Scenic Highway is SR 140, which is located approximately 600 feet east of the Project. No feature of the Project, or the Project as a whole, would damage a scenic resource. There would be no substantial impact to a scenic resource through implementation of the Project during construction or operation.

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?

No Impact. The Project would provide access to a naturally scenic area. The Project would also clear any debris and trash from the area, helping combat any degradation that currently exists on-site. New landscaping, pavement, and amenities listed in Chapter 2 Project Description would complement the natural character of the Project area. There would be no impact.

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 Incorporated. The Project would provide new sources of light and glare by installing trail lighting fixtures. These lighting fixtures are proposed to illuminate the trail and the surrounding environment during low light times. The Conservation and Open Space Element of the Mariposa County General Plan contains a policy and implementation measure relating to limiting light and glare impacts from new development. It states:

> *Policy 11-1d: Ensure that light sources in new development are compatible with rural character and that the light sources do not produce glare that interferes with vision.*

In order to implement Policy 11-1d, AES-1 will be incorporated in order to reduce light and glare impacts to a less than significant level.

4.1.3 MITIGATION

AES-1 All outdoor lighting shall adhere to International Dark Sky Association standards, including the requirement that all outdoor lighting shall be hooded or screened as to

direct the source of light downward and focus onto the property from which it originates and shall not negatively impact adjacent properties or directly reflect upon any adjacent properties. A lighting plan shall be submitted to the Mariposa Planning Department prior to the issuance of grading or construction permits for the Project.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Table 4-2: Agriculture and Forest Impacts

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

4.2.1 BASELINE CONDITIONS

The Project area is located within Mariposa County, within the town of Mariposa and its Planning Study Area and is adjacent to portions of Mariposa Creek. The Project area does not contain any farmland and contains a dense coverage of native trees and shrubs.

Farmland Mapping and Monitoring Program (FMMP): The FMMP produces maps and statistical data used for analyzing impacts to California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance. The California Department of Conservation's (DOC) 2018 FMMP is a non-regulatory program that produces "Important Farmland" maps and statistical data used for analyzing impacts on California's agricultural resources. The Important Farmland maps identify eight land use categories, five of which are agriculture related: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land — rated according to soil quality and irrigation status. Each is summarized below:

- *PRIME FARMLAND (P): Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.*

- *FARMLAND OF STATEWIDE IMPORTANCE (S): Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.*
- *UNIQUE FARMLAND (U): Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated but may include non- irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.*
- *FARMLAND OF LOCAL IMPORTANCE (L): Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.*
- *GRAZING LAND (G): Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for Grazing Land is 40 acres.*
- *URBAN AND BUILT-UP LAND (D): Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.*
- *OTHER LAND (X): Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.*
- *WATER (W): Perennial water bodies with an extent of at least 40 acres.*

As demonstrated in Figure 4-1, the FMMP for Mariposa County designates the Project site as Grazing Land.[1]

4.2.2 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 Resources Agency, to non-agricultural use?

No Impact. The Project area is designated Grazing Land. There are no lands within the Project area determined to be Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, there would be no impact.

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

No Impact. The Project area is not designated, zoned, or used for agricultural related purposes, nor are the Project lands subject to a Williamson Act contract. Therefore, there would be no impact.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. There are no lands zoned for forest or timberland use in the Project area. Therefore, the Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned - timberland production. There would be no impact.

[1] (California Department of Conservation 2016)

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

Less than Significant Impact. Mariposa County is full of forested lands. The Project area itself consists primarily of woodland habitat with dense chaparral and poison oak. Trees and shrubs will need to be cleared to accommodate Project design of approximately 10-12 feet wide trail corridor. Although trees may be removed, numerous similar trees and vegetation would remain available in the Project area. The proposed trail Project is in a high fire severity area and providing trail access and removal of some trees and vegetation would provide a safer recreational area which would result in a less than significant impact.

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?

Less than Significant Impact. The Project does not contain any land designated for farmland. , The Project would ensure that any removal of trees would be replaced with more at a higher rate. The Project does not include any element that would 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. Impacts would be less than significant.

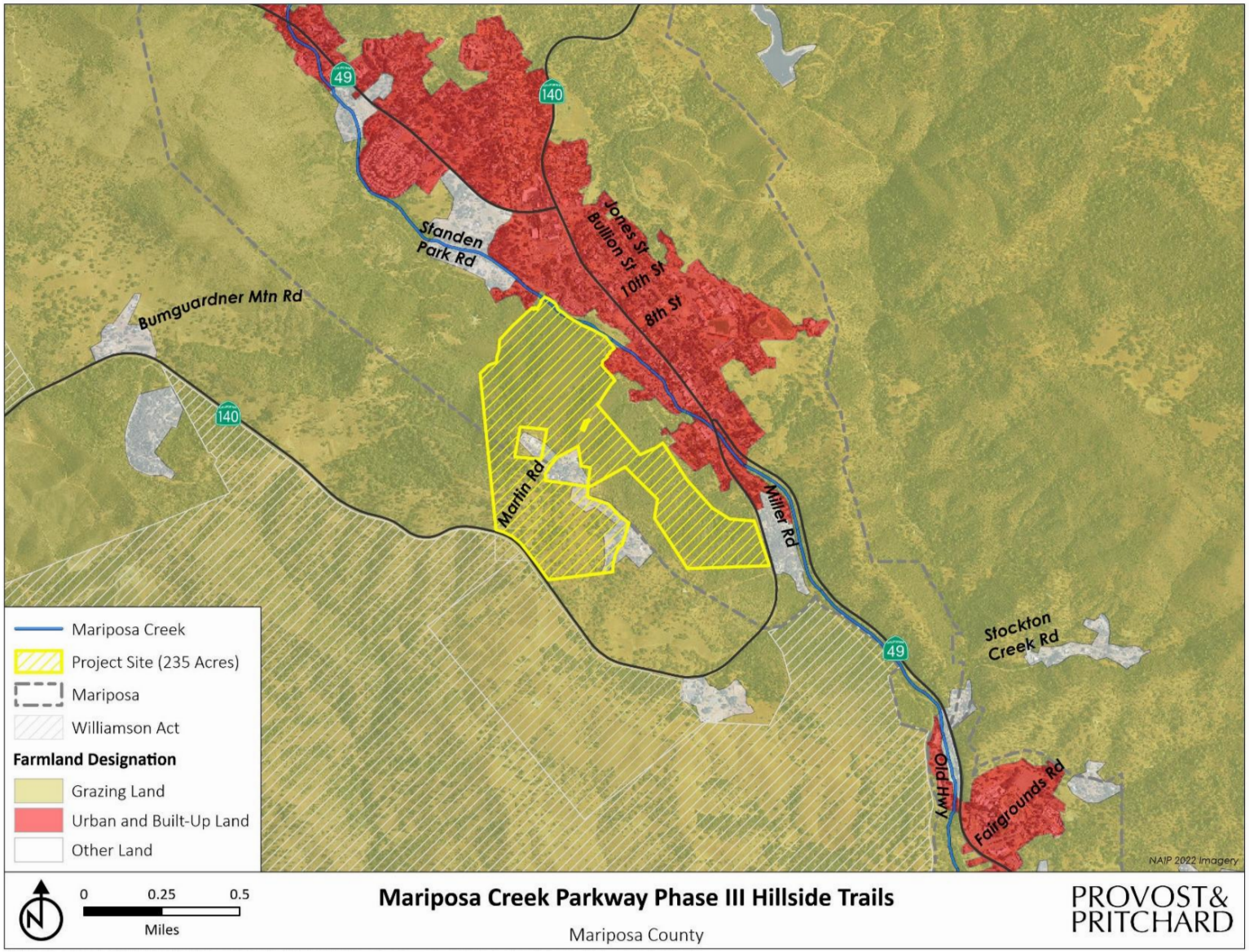


Figure 4-1: Farmland Designation Map

4.3 AIR QUALITY

Table 4-3: Air Quality Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

4.3.1 BASELINE CONDITIONS

The Project area is located in the unincorporated community of Mariposa, within the boundaries of the Mariposa County Air Pollution Control District (MCAPCD) and the Mountain Counties Air Basin (MCAB). The MCAB boundaries align with those of Mariposa County. Mariposa County is bounded by Madera County to the east and south, Merced County and Stanislaus County to the west, and Tuolumne County to the north. The western portion of the county contains foothills which lead into the San Joaquin Valley while the central and northeastern portions of the county include the Sierra Nevada Mountain Range and Yosemite National Park.

Regulatory Attainment Designations

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The United States Environmental Protection Agency (USEPA) designates areas for ozone, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The USEPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, USEPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for PM_{10} based

on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified."

According to the USEPA, Mariposa County was in non-attainment for two pollutant concentrations, with 8-hour Ozone (2008) and 8-hour Ozone (2015) being classified as in moderate non-attainment as of May 27th, 2025.[2]

Table 4-4: Summary of Ambient Air Quality Standards and Attainment Designation

Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm	Nonattainment / Severe	–	No Federal Standard
	8-hour	0.070 ppm	Nonattainment	0.075 ppm	Nonattainment (Extreme)**
Particulate Matter (PM_{10})	AAM	20 µg/m^3	Nonattainment	–	Attainment
	24-hour	50 µg/m^3		150 µg/m^3	
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m^3	Nonattainment	12 µg/m^3	Nonattainment
	24-hour	No Standard		35 µg/m^3	
Carbon Monoxide (CO)	1-hour	20 ppm	Attainment/ Unclassified	35 ppm	Attainment/ Unclassified
	8-hour	9 ppm		9 ppm	
	8-hour (Lake Tahoe)	6 ppm		–	
Nitrogen Dioxide (NO_2)	AAM	0.030 ppm	Attainment	53 ppb	Attainment/ Unclassified
	1-hour	0.18 ppm		100 ppb	
Sulfur Dioxide (SO_2)	AAM	–	Attainment	--	Attainment/ Unclassified
	24-hour	0.04 ppm		--	
	3-hour	–		0.5 ppm	
	1-hour	0.25 ppm		75 ppb	
Lead (Pb)	30-day Average	1.5 µg/m^3	Attainment	–	No Designation/ Classification
	Calendar Quarter	–		--	
	Rolling 3-Month Average	–		0.15 µg/m^3	
Sulfates (SO_4)	24-hour	25 µg/m^3	Attainment	No Federal Standards	
Hydrogen Sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m^3)	Unclassified		
Vinyl Chloride (C_2H_3Cl)	24-hour	0.01 ppm (26 µg/m^3)	Attainment		
Visibility-Reducing	8-hour	Extinction coefficient: 0.23/km-visibility of	Unclassified		

[2] (United States Environmental Protection Agency, 2025)

Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
Particle Matter		10 miles or more due to particles when the relative humidity is less than 70%.			

** For more information on standards visit: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf*
*** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard 5/27/2025.*
****Secondary Standard*
Source: http://www.valleyair.org/aqinfo/attainment.htm. Accessed 2015

Construction Generated Emissions

Construction of the trail Project is assumed to be completed over approximately four months. Emissions associated with the Project were calculated using the CalEEMod Air Quality Model, Version 2022.1.1.29 (California Emissions Estimator Modeling). The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on anticipated construction schedules and the default parameters contained in the model. Localized air quality impacts associated with the Project would be minor and were qualitatively assessed. Modeling assumptions and output files are included in Appendix A.

Thresholds of Significance

To assist local jurisdictions in the evaluation of air quality impacts, the MCAPCD has published the *Mariposa County Air Pollution Control District Rules and Regulations*.[3] This document includes thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, these thresholds of significance are used to determine whether implementation of the Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact on human health and welfare. The threshold for any criteria air contaminant or precursor is 100 tons per year. Odor impacts associated with the Project would be considered significant if the Project has the potential to frequently expose members of the public to objectionable odors.

4.3.2 IMPACT ANALYSIS

Short-Term Construction Generated Emissions

Estimated construction-generated emissions are summarized in Table 4-5.

Table 4-5: Unmitigated Short-Term Construction Generated Emissions of Criteria Air Pollutants

Source	Annual Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Annual Project Construction Emissions	0.14	1.22	1.29	< 0.005	0.26	0.14
MCAPCD Threshold	*100*	*100*	*100*	*100*	*100*	*100*
Threshold Exceeded?	No	No	No	No	No	No

[3] (Mariposa County Air Pollution Control District, 2021)

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The Project would not conflict with or obstruct implementation of any applicable air quality plan. The proposed Project would not exceed any threshold for air quality emissions that has been set by the MCAPCD. Therefore, there would be no impact.

b) Would the project 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 Project would not result in a cumulatively considerable net increase of any criteria pollutant for which Mariposa County is in non-attainment under an applicable federal or State ambient air quality standard. As shown in Table 4-5, the Project would not be in exceedance of an emission threshold for any pollutant identified by the MCAPCD. Additionally, due to the nature of the Project, it would result in negligible operational emissions, if any. Therefore, impacts would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Due to the nature of the Project, there would be negligible amounts of operational emissions, if any. Short-term construction activities, however, could result in temporary increases in pollutant concentrations that could impact nearby sensitive receptors such as the residential dwellings near the Project site. Pollutants of primary concern commonly associated with construction-related activities include toxic air contaminants (i.e., diesel particulate matter), asbestos, and fugitive dust. The potential impact to sensitive receptors diminishes as distance from the source increases. Given that construction would occur over a large area and construction activities would not remain in one place, the potential impact of the pollutants mentioned above would be less than significant in nature. Therefore, impacts would be less than significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. During construction activities, construction equipment exhaust and application of asphalt, structural coating, and other construction applications would temporarily emit odors. Construction would be completed within the community of Mariposa and would have an effect on some residences that would be located near the construction area of the Project. Construction of the Project would be temporary, and odors would not remain after Project completion. Therefore, impacts would be less than significant.

4.4 BIOLOGICAL RESOURCES

Table 4-6: Biological Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as 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 federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

4.4.1 BASELINE CONDITIONS

4.4.1.1 GENERAL

The Project site is located in Sierra Nevada Mountain Range northeast of the City of Merced and south/southwest of the unincorporated community of Mariposa in the middle portion of Mariposa County. The Project site is located within the *Mariposa* U.S. Geological Survey (USGS) 7.5-minute quadrangle within the southwest portion of Section 23, a small portion on the east side of Section 22, and a small portion on the north side of Section 26, Township 05 South, Range 18 East. The topography of the site consists of rolling hills and mountains with elevations ranging from approximately 1,895 to 2,625 feet above mean sea level.

Like most of California, the area experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. In the summer, average high temperatures range between 85- and 88-degrees Fahrenheit (°F), but do not often exceed 96 °F, and the humidity is generally low. Winter temperatures are often below 50 °F during the day and rarely exceed 55 °F. On average, the community of Mariposa Valley receives approximately 30 inches of precipitation in the form of rain and snow yearly, most of which occurs between October and May, and the site would be expected to receive similar amounts of precipitation.[4]

A site survey for potential biological resources was performed on January 30th and 31st, by P&P staff biologist. The Area of Potential Effect (APE) that was used for the Biological Resources Evaluation is identified as 235 acres.

4.4.1.2 SOILS

Five soil mapping units representing four soil types were identified within the site and are listed in Table 4-7 (see Appendix D of Appendix B for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. These soils are primarily used for livestock grazing, wildlife habitat, recreation, watershed, and home site development.

Table 4-7: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Loafercreek-Gopheridge	Complex, 15 to 30 percent slopes	1.3%	Nonhydric	Well drained	Low to high	High
	Complex, 30 to 60 percent slopes	14.8%	Nonhydric	Well drained	Low to high	High
Gardellones-Gopheridge	Motherlode complex, 30 to 60 percent slopes	65.3%	Nonhydric	Well drained	Low to moderately high	High
Trabuco-Jasperpeak	Rock outcrop complex, 8 to 30 percent slopes	15.3%	Nonhydric	Well drained	Low to moderately high	Medium to rapid
Riverwash and Tailings	-	3.3%	Partially hydric	-	-	-

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. Hydric soil ratings are derived from specific soil properties as well as climate, parent material, vegetation, landform type, and biological activity of a certain location. One of the major soil mapping units is partially hydric and makes up 3.3% of the site and is located along Mariposa Creek. The remainder of the soil mapping units within the site are nonhydric.

4.4.1.3 BIOTIC HABITATS

Four biotic habitats were observed within the site and included oak woodland, mixed oak/pine forest, chaparral, and creek habitat (see Figure 4-2). Birds observed throughout all habitats included bushtit (*Psaltriparus minimus*), northern flicker (*Colaptes auratus*), house finch (*Haemorhous mexicanus*), oak

[4] (Weatherspark 2025)

titmouse (*Baeolophus inornatus*), ruby-crowned kinglet (*Regulus calendula*), spotted towhee (*Pipilo maculatus*), Nuttall's woodpecker (*Dryobates nuttallii*), California scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), phainopepla (*Phainopepla nitens*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), wrentit (*Chamaea fasciata*), California towhee (*Melozone crissalis*), white-breasted nuthatch (*Sitta carolinensis*), acorn woodpecker (*Melanerpes formicivorus*), and yellow-rumped warbler (*Setophaga coronata*). These habitats and their constituent plant and animal species are described in more detail in the following sections.

4.4.1.4 OAK WOODLAND

This habitat within the site is dominated by widely spaced interior live oak (*Quercus wislizeni*), blue oak (*Quercus douglasii*), patches of Pacific poison oak (*Toxicodendron diversilobum*), and non-native annual grasses. Vegetation throughout this habitat included common evening primrose (*Oenothera biennis*), gray pine (*Pinus sabiniana*), common vetch (*Vicia sativa*), mistletoe (*Viscum album*), bristly dogtail grass (*Cynosurus echinatus*), and common hedge parsley (*Torilis arvensis*). Wavyleaf soap plant (*Chlorogalum pomeridianum*) was located within the oak woodland near small depressions in the hillside. Arizona cypress (*Cupressus arizonica*) and deodar cedar (*Cedrus deodara*) were planted within the site near private properties.

The survey resulted in the observation of Botta's pocket gopher (*Thomomys bottae*), and Pacific tree frogs (*Pseudacris regilla*) were heard calling within this habitat.

A large portion of oak woodland habitat within the site was highly disturbed adjacent to Martin Road due to vegetation clearing. The remainder of this habitat provides expansive high-quality habitat to a variety of wildlife, year-round. The site likely serves mule deer (*Odocoileus hemionus*), foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

4.4.1.5 MIXED OAK/PINE FOREST

This habitat within the site is dominated by an overstory of gray pine, interior live oak, and patches of Pacific poison oak. Vegetation located in the understory included California cudweed (*Pseudognaphalium californicum*), Pacific snakeroot (*Sanicula crassicaulis*), mushroom (*Suillaceae* sp.), goldback fern (*Pentagramma triangularis*), white horehound (*Marrubium vulgare*), white leaf manzanita (*Arctostaphylos viscida*), toyon (*Heteromeles arbutifolia*), California buckeye (*Aesculus californica*), buckbrush ceanothus (*Ceanothus cuneatu*), mountain sweet cicely (*Osmorhiza berteroi*), hollyleaf redberry (*Rhamnus ilicifolia*), birchleaf mountain mahogany (*Cercocarpus montanus*), western buttercup (*Ranunculus occidentalis*), gooseberry (*Phyllanthus emblica*), Oregon grape (*Berberis aquifolium*), sticky cinquefoil (*Drymocallis glandulosa*), and two incense cedars (*Calocedrus decurrens*) were located along the trail opposite Mariposa Creek.

The survey resulted in the observation of western gray squirrel (*Sciurus griseus*), and Pacific tree frogs were heard calling within this habitat.

The mixed oak/pine forest habitat within the site provides expansive high-quality habitat to a variety of wildlife, year-round. The site likely serves mule deer and foraging birds during the day, as well as owls, bats, coyotes, and other nocturnal animals at night.

4.4.1.6 CHAPARRAL

This habitat within the site is dominated by white leaf manzanita, chamise (*Adenostoma fasciculatum*), and deerweed (*Acmispon glaber*). Other vegetation located within this habitat included toyons, interior live oaks, Pacific poison oak, California buckeye, filiform rockjasmine (*Androsace filiformi*), yerba santa (*Eriodictyon californicum*), common hedge parsley (*Torilis arvensis*), Himalayan blackberry (*Rubus*

armeniacus), mushroom sp., flaxleaf fleabane (*Conyza bonariensis*), pipestem clematis (*Clematis lasiantha*), sticky cinquefoil, California cudweed, willows (Salix spp.), golden-fleece (*Ericameria arborescens*), and bigflower agoseris (*Agoseris grandiflora*). No wildlife species exclusive to this habitat were observed during the survey.

The chaparral habitat within the site is highly disturbed along the powerlines due to vegetation clearing. The Project site outside of the cleared area provides expansive high-quality habitat to a variety of wildlife, year-round. The site likely serves mule deer, foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

4.4.1.7 CREEK

This habitat occurs along Mariposa Creek and an unnamed stream which both contained water at the time of the survey. Mariposa Creek is located along the north/northeast portion of the site and the unnamed creek is located along the south portion of the site. Both waterways contained sand-gravel-boulder bottoms and slow-moving water.

Naturally occurring vegetation within this habitat included white alder (*Alnus rhombifolia*), curly dock (*Rumex crispus*), willows, valley oak trees (*Quercus lobata*), miner's-lettuce (*Claytonia perfoliate*), ribwort plantain (*Plantago lanceolata*), Himalayan blackberry, watercress (*Nasturtium officinale*), tall flatsedge (*Cyperus eragrostis*), and one grey pine tree adjacent to Mariposa Creek. Restoration plantings were located within this habitat and included silver lupine (*Lupinus albifrons*), American alumroot (*Heuchera americana*), western redbud (*Cercis occidentalis*), California bay laurel (*Umbellularia californica*), and California wildrose (*Rosa californica*). No wildlife species exclusive to this habitat were observed during the survey.

4.4.2 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. The California Department of Fish and Wildlife (CDFW) has classified and mapped all natural communities in California. Just as the special status plant and animal species (see Section 2.6), these natural communities of special concern can be found within the California Natural Diversity Database (CNDDB). There are no recorded observations of a natural community of special concern mapped within the site and no natural communities of special concern were observed during the field survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. Mariposa Creek and the unnamed stream located withing the site contained riparian habitat, but they would not be impacted during the Project.

4.4.3 DESIGNATED CRITICAL HABITAT

The United States Fish and Wildlife Service (USFWS) often designates areas of “critical habitat” when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to the IPaC, designated critical habitat is absent from the site and vicinity.

4.4.4 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements.

Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

The oak woodland and mixed oak/pine forest habitats of the site and surrounding areas consisted of expansive open grassland and forests where species could move through. Numerous game trails were observed during the field survey in these habitats. Mariposa Creek and the unnamed stream within the site could act as a corridor for aquatic and terrestrial wildlife though these waterways and would not be impacted during the Project.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. Large trees with natural cavities were located within and adjacent to the site and could function as native wildlife nursery sites for bats. Mariposa Creek and the unnamed stream could be used by amphibian species as wildlife nursery sites though these waterways would not be impacted during the Project.

4.4.5 SPECIAL STATUS PLANTS AND ANIMALS

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Mariposa* USGS 7.5-minute quadrangle that contains the site, and for the eight surrounding USGS quadrangles: *Bear Valley, Ben Hur, Buckingham Mountain, Catheys Valley, Feliciana Mountain, Horsecamp Mountain, Illinois Hill,* and *Stumpfield Mountain*. A query of the IPaC was also completed for the site. These species, and their potential to occur within the site, are listed in Table 4-8 and Table 4-9, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 4-9. Species lists obtained from CNDDB and IPaC are available in Appendix B and Appendix C, respectively of Appendix B. All relevant sources of information, as discussed in the Study Methodology section of this report, as well as field observations, were used to determine if any special status species have the potential to occur within the site.

Table 4-8: List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Beaked clarkia (*Clarkia rostrata*)	California Native Plant Society (CNPS) 1B	Found in woodlands and valley foothill grasslands on the west slope of the Sierra Nevada range, around 1,650 feet in elevation. Blooms April – May.	**Possible.** The oak woodland habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles northwest of the site in 1985.
Big-scale balsamroot (*Balsamorhiza macrolepis*)	CNPS 1B	Found in open, grassy, or rocky slopes within chaparral, grassland, and cismontane woodland habitats at elevations less than 5,000 feet. Blooms March – July.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles southeast of the site in 1886.
Congdon's lomatium (*Lomatium congdonii*)	CNPS 1B	Occurs in cismontane woodland and chapparal habitats. Especially in serpentine soils with serpentine chaparral plants and grey pines. Grows at elevations between 1,100 and 2,100 feet. Blooms March – June.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1903.
Congdon's woolly sunflower (*Eriophyllum congdonii*)	CNPS 1B	Found in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grasslands. Occurs in cracks in rock outcroppings, and on talus; sometimes with blue oaks, and	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 9 miles northeast of the site in 1999.

Species	Status*	Habitat	Occurrence within the Site
		California buckeye. Found at elevations between 1,640 and 6,230 feet. Blooms March – June.	
Grassland suncup (*Camissonia lacustris*)	CNPS 1B	Occurs in valley and foothill grasslands, cismontane woodland, lower montane coniferous forest, and chaparral, often on gravelly, serpentine, and granitic soils at elevations between 590 and 4,000 feet. Blooms April – June.	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 10 miles southeast of the site in 1963.
Koch's cord moss (*Entosthodon kochii*)	CNPS 1B	Occurs in cismontane woodland. Often found growing on soil on riverbanks at elevations between 600 and 1,200 feet.	**Absent.** The site is outside of the elevational range for this species.
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found within openings of foothill woodland, often yellow-pine forest, and chaparral at elevations between 1,000 and 4,300 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1896.
Mariposa clarkia (*Clarkia biloba* ssp. *australis*)	CNPS 1B	Found in chaparral and cismontane woodland and several sites occur in the foothill woodland/riparian ecotone. Often occurs on serpentine soil at elevations between 980 and 1,800 feet. Blooms May – June.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 1 mile northwest of the site in 2009.
Mariposa cryptantha (*Cryptantha mariposae*)	CNPS 1B	Usually occurs in chaparral communities. Can be found on rocky, semi barren ridges, dry slopes, and serpentine outcrops at elevations between 650 and 2,200 feet. Blooms April – June.	**Possible.** The chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 1 mile northwest of the site in 1994.
Mariposa daisy (*Erigeron mariposanus*)	CNPS 1A	Found in cismontane woodland. One known site. Occurs at elevations between 1,970 and 2,625 feet. Blooms June – August.	**Possible.** The oak woodland habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1900.
Mariposa lupine (*Lupinus citrinus* var. *deflexus*)	CNPS 1B	Found in chaparral and cismontane woodland. Occurs on decomposed granitic sand on hilltops and hillsides on the western slope of the Sierra Nevada, mostly in areas with southern exposure. Found at elevations between 1,310 and 1,970 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles east of the site in 2008.
Mariposa pussypaws (*Calyptridium pulchellum*)	FT, CNPS 1B	Found in cismontane woodland and chaparral. Occurs on granite domes and is restricted to exposed sites at elevations between 1,300 and 3,600 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 3 miles south of the site in 2011.
Parry's horkelia (*Horkelia parryi*)	CNPS 1B	Found in chaparral and cismontane woodland. Occurs in openings in chaparral or woodland; especially known from the Ione formation in Amador County. Found at elevations	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 8 miles northeast of the site in 2013.

Species	Status*	Habitat	Occurrence within the Site
		between 275 and 3,655 feet. Blooms April – September.	
Pleasant Valley mariposa-lily (*Calochortus clavatus* var. *avius*)	CNPS 1B	Found in the lower montane coniferous forests of the Sierra Nevada range, often in rocky areas at elevations between 2,900 and 5,900 feet. Blooms May – July.	**Absent.** The site is outside of the elevational range for this species.
Recurved larkspur (*Delphinium recurvatum*)	CNPS 1B	Occurs in chenopod scrub, cismontane woodland, and grassland habitats on poorly drained, fine, alkaline soils; often in valley saltbush or valley chenopod scrub communities at elevations between 100 and 2,600 feet. Blooms March – June.	**Unlikely.** The soils onsite are unsuitable for this species. The nearest recorded observation of this species within the vicinity was approximately 16 miles southeast of the site in 1979.
Shaggyhair lupine (*Lupinus spectabilis*)	CNPS 1B	Found in chaparral and cismontane woodland habitats. Associated with open rocky slopes of serpentine and grey pine woodland. Occurs at elevations between 850 and 2,700 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 1 mile northwest of the site in 1994.
Slender-stalked monkeyflower (*Erythranthe gracilipes*)	CNPS 1B	Found in disturbed areas, such as road shoulders and burns. Can also be found in the cracks of large granitic rocks in chaparral habitats. Grows at elevations between 1,600 and 4,300 feet. Blooms April – May.	**Possible.** The chaparral habitat of the site was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 0.5 miles southeast of the site in 1897.
Slender-stemmed monkeyflower (*Erythranthe filicaulis*)	CNPS 1B	Found in cismontane woodland, lower and upper montane coniferous forests, and meadows and seeps. Often within the transition zone of the Sierra Nevada on moist granitic sand and meadow edges and in vernally mesic sites. Occurs at elevations between 3,935 and 5,740 feet. Blooms May – July.	**Absent.** The site is outside of the elevational range for this species.
Yellow-lip pansy monkeyflower (*Diplacus pulchellus*)	FT, CSSC	Found in yellow pine forest, meadows, and wetland-riparian habitats. Often in vernally wet depressions or seepage areas at elevations between 1,970 and 6,560 feet. Blooms April – July.	**Possible.** The creek habitat and portions of the oak woodland habitat within the site were suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 4.5 miles southeast of the site in 1958.
Yosemite onion (*Allium yosemitense*)	CNPS 1B	Found in broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest. Occurs in pockets of wet soil or in wet cracks of metamorphic rock, and on slopes and walls. Found at elevations between 2,625 and 7,220 feet. Blooms May – June.	**Absent.** The site is outside of the elevational range for this species.

Table 4-9: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Bald eagle (*Haliaeetus leucocephalus*)	CE, CFP	Resides in old growth forests as well as lower montane coniferous forests. Can also be found in open uplands in the winter. Nests are generally found in large trees within a mile of water. Nests and winters along ocean shores, lake margins, and rivers.	**Unlikely.** While this species could forage or fly over the site, no waterbodies are within the site, and it is unlikely this species would nest within the site. The nearest recorded observation of this species within the vicinity was approximately 15 miles south of the site in 2007.
California condor (*Gymnogyps californianus*)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but have also been recorded nesting in giant sequoias in Tulare County. Requires vast expanses of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages for carrion up to 100 miles from their roost/nest sites.	**Unlikely.** While this species could forage or fly over the site, no cliffs are within the site, and it is unlikely this species would nest within the site. There are no recorded observations of this species on CNDDB within the regional vicinity of the Project.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Inhabits perennial rivers, creeks, and stock ponds with vegetative cover within the Coast Range and northern foothills of the Sierra Nevada.	**Possible.** Waterways within the site could support this species. There are no recorded observations of this species on CNDDB within the regional vicinity of the Project.
California tiger salamander – central California DPS (*Ambystoma californiense*)	FT, CT	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	**Absent.** The site is outside of the elevational range for this species.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. This species overwinters under leaf litter or soft soil.	**Possible.** The site contained suitable habitat that would provide foraging habitat for this species and contained dead trees and small mammal burrows where this species could nest and overwinter. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles southwest of the site in 2020.
Foothill yellow-legged frog – south Sierra Distinct Population Segment (*Rana boylii*)	FE, CE	Frequents rocky streams and rivers with rocky substrate and open, sunny banks in forests, chaparral, and woodlands. Occasionally found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	**Possible.** Waterways within the site could support this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1899.
Fisher- Southern Sierra Nevada-ESU (*Pekania pannanti*)	FE, CT	Can be found in intermediate to large-tree stages of coniferous forests with high percent canopy closure, generally within the low-medium elevational areas of the southern Sierra Nevada.	**Absent.** The site is outside of the elevational range for this species.

Species	Status*	Habitat	Occurrence within the Site
Hardhead (*Mylopharodon conocephalus*)	CSSC	Occurs in low- to mid-elevation streams in the Sacramento-San Joaquin drainage. Clear, deep pools with sand-gravel-boulder bottoms and slow-moving water are required. This species is often sympatric with Sacramento pikeminnow and Sacramento sucker. Hardhead are typically absent from streams occupied by sunfishes and from heavily altered habitats.	**Possible.** Waterways within the site could support this species. The nearest recorded observation of this species within the vicinity was approximately 0.5 mile southeast of the site in Stockton Creek in 2017.
Limestone salamander (*Hydromantes brunus*)	CFP, CT	Found in limestone outcrops in the foothill pine-chaparral belt along the Merced River and its tributaries, from 800-2600 feet in elevation. California buckeye is an indicator of optimal habitat. Seeks cover in limestone caverns, talus, rock fissures, and surface objects.	**Absent.** The site is outside of the known range for this species.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Possible.** The site contained suitable foraging habitat for this species. Monarchs could travel through the site during the breeding season. While they could travel through the site, roosting habitat was absent. The nearest observation on iNaturalist occurred within Mariposa.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Possible.** Waterways within the site could support this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa on an unknow date.
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Possible.** The site provides suitable foraging and roosting habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 8 miles north of the site in 1997.
Sierra Nevada yellow-legged frog (*Rana sierrae*)	FT, CE	Prefer lakes, ponds, marshes, meadows, and streams at elevations ranging from 4,500 to 12,000 feet. They are always encountered within a few feet of water.	**Absent.** The site is outside of the elevational range for this species.
Spotted bat (*Euderma maculatum*)	CSSC	Roosts in cliffs, rock crevices, and caves. Often forages over water and along washes. This species feeds almost exclusively on moths.	**Unlikely.** While this species could forage or fly over the site, no cliffs are within the site, and it is unlikely this species would roost within the site. The nearest recorded observation of this species within the vicinity was approximately 8 miles north of the site in 1996.
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC	Occurs in a variety of habitats, but prefers cool, dark roost sites, and is often found in caves and mines. They roost in the open, hanging from walls and ceilings. Western	**Unlikely.** While this species could forage or fly over the site, no cliffs or caves are within the site, and it is unlikely this species would roost within the site. The nearest recorded observation of this

Species	Status*	Habitat	Occurrence within the Site
		populations typically forage on moths in areas of dense foliage.	species within the vicinity was approximately 4.5 miles northwest of the site in 1956.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent.** The site is outside of the known range for this species.
Western spadefoot (*Spea hammondii*)	FPT, CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	**Absent.** The site is outside of the known range for this species.

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CFP	California Fully Protected
		CSSC	California Species of Special Concern

CNPS LISTING

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

4.4.6 IMPACT ANALYSIS

a) Would the project 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 Impact with Mitigation Incorporated. Of the 20 regionally occurring special status plant species, five are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include Koch's cord moss, Pleasant Valley mariposa-lily, recurved larkspur, slender-stemmed monkeyflower, and Yosemite onion. Since it is unlikely that these species would occur onsite, implementation of the Project would have no impact on

these five special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

Of the 17 regionally occurring special status animal species, 10 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include Bald eagle, California condor, California tiger salamander, fisher, limestone salamander, Sierra Nevada yellow-legged frog, spotted bat, Townsend's big-eared bat, valley elderberry longhorn beetle, and western spadefoot. Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these 10 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

General Project-Related Impacts

Species protected by California Fish and Game Code, CDFW, USFWS, or CEQA that have the potential to be impacted by Project activities include: beaked clarkia, big-scale balsamroot, Congdon's lomatium, Congdon's woolly sunflower, grassland suncup, Madera leptosiphon, Mariposa clarkia, Mariposa cryptantha, Mariposa daisy, Mariposa lupine, Mariposa pussypaws, Parry's horkelia, shaggyhair lupine, slender-stalked monkeyflower, yellow-lip pansy monkeyflower, California red-legged frog, Crotch's bumble bee, foothill yellow-legged frog, hardhead, monarch butterfly, northwestern pond turtle, and pallid bat. Other sensitive resources that have the potential to be impacted by the Project include nesting migratory birds, jurisdictional waters, wildlife movement corridors, and native wildlife nursery sites.

While the Project has the potential to impact a number of sensitive resources, and specific mitigation would be incorporated to reduce such impacts, general mitigation measures, memorialized as BIO-1 and BIO-2 will help reduce potential impacts to these resources to a less than significant level under CEQA and will help with complying with State and federal laws protecting these resources.

Project-Related Impacts to Special Status Plant Species

The following special status plant species were identified to potentially occur within or adjacent to the site: beaked clarkia, big-scale balsamroot, Congdon's lomatium, Congdon's woolly sunflower, grassland suncup, Madera leptosiphon, Mariposa clarkia, Mariposa cryptantha, Mariposa daisy, Mariposa lupine, Mariposa pussypaws, Parry's horkelia, shaggyhair lupine, slender-stalked monkeyflower, and yellow-lip pansy monkeyflower. Beaked clarkia and Mariposa daisy may occur within the oak woodland habitat of the site. Mariposa cryptantha and slender-stalked monkeyflower may occur within the chaparral habitat of the site. Yellow-lip pansy monkeyflower may occur within the creek habitat of the site. Big-scale balsamroot, Congdon's lomatium, Madera leptosiphon, Mariposa clarkia, Mariposa lupine, Mariposa pussypaws, Parry's horkelia, and shaggyhair lupine may occur within the oak woodland and chaparral habitats of the site. Congdon's woolly sunflower and grassland suncup may occur within all habitats of the site.

The survey of the site was conducted outside the blooming season for these plants. Projects that adversely affect special status plants or result in the mortality of special status plants would be considered a significant impact under CEQA and may be a violation of State and/or federal laws.

Implementation of mitigation measures BIO-3, BIO-4, and BIO-5 will reduce potential impacts to special status plants to a less than significant level under CEQA and will help the Project comply with State and federal laws protecting these plant species.

Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds

The site and adjacent areas contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, and raptors. It is anticipated that during the nesting bird season,

protected birds could nest on the ground or in shrubs and trees within and adjacent to the site, and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by Project-related activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by Project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of State and federal laws and considered a potentially significant impact under CEQA.

While foraging habitat for protected birds, such as California condor and bald eagle, is present on the site, suitable foraging habitat is located adjacent to the site and within the vicinity of the site. Loss of the foraging habitat from implementation of the Project is not considered a significant impact.

Implementation of mitigation measures BIO-6, BIO-7, and BIO-8 will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and will help the Project comply with State and federal laws protecting these avian species.

Project-Related Mortality and/or Disturbance to California Red-Legged Frog

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site. These waterways provide suitable aquatic habitat, and the oak woodland and mixed oak/pine forest habitats provide suitable upland habitat for California red-legged frog (CRLF). CRLF within the site during construction have the potential to be injured or killed by Project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and a violation of federal law protecting this species.

Implementation of mitigation measures BIO-9, BIO-10, and BIO-11 will reduce potential impacts to CRLF to a less than significant level under CEQA and will help the Project comply with state and federal laws protecting this species.

Project-Related Mortality and/or Disturbance to Crotch's Bumble Bee

Habitats within the site and surrounding area were determined to be suitable for foraging, nesting, and overwintering Crotch's bumble bee. Queens are actively flying for only two months from March until May and reach maximum flying activity in April. Males are generally present and flying from May to September with peak flying activity occurring in July. Workers of this species are present and flying from April to August, with peak flying activity occurring between May and June. There is abundant foraging habitat adjacent to the APE that could be used, and implementation of the Project would not significantly reduce potential foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of foraging habitat. Construction activities occurring within nesting or overwintering habitat could result in injury, mortality, displacement, disturbance, or inhibit the movement of this species, and would be considered a significant impact under CEQA and a violation of the California Endangered Species Act.

Implementation of mitigation measures BIO-12 and BIO-13 will reduce potential impacts to nesting and overwintering Crotch's bumble bee to a less than significant level under CEQA will help the Project comply with State laws protecting this species.

Project-Related Mortality and/or Disturbance to Monarch Butterfly

Habitats within portions of the site are likely to be suitable for foraging monarch butterflies. Monarchs could travel through the site during the breeding season and potentially lay eggs on milkweeds. While monarchs could travel through the site, roosting habitat was absent. There is abundant foraging habitat adjacent to the site that could be used, and implementation of the Project is unlikely to significantly reduce potential foraging habitat for this species. Therefore, no mitigation measures are warranted for

loss of foraging habitat. Construction activities during the breeding season could result in injury, mortality, displacement, or disturbance and would be considered a significant impact under CEQA.

Implementation of mitigation measures BIO-14 through BIO-18 will reduce potential impacts to monarch eggs and larvae to a less than significant level under CEQA and will help the Project comply with federal laws protecting this species.

Project-Related Mortality and/or Disturbance of Maternity Roosting Bats and Special Status Bats

Trees with natural cavities occurred within the site may support tree-roosting species of bats such as pallid bats. Roosting habitat becomes especially sensitive to bat populations during the maternity season (March 1 to September 30) when pups are maturing and during the overwintering season (November 1 through February 28). Projects that impact maternity roosting bats or hibernating roosting special status bats would be considered a significant impact under CEQA.

Implementation of mitigation measures BIO-19 through BIO-22 will reduce potential impacts to roosting maternity bats and roosting special status bats to a less than significant level under CEQA.

Project-Related Mortality and/or Disturbance to Foothill Yellow-Legged Frog

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site. These waterways provide suitable aquatic habitat, and the oak woodland and mixed oak/pine forest habitats provide suitable upland habitat for foothill yellow-legged frogs (FYLF). FYLF within the site during construction have the potential to be injured or killed by Project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and a violation of federal law protecting this species.

Implementation mitigation measures BIO-23 through BIO-26 will reduce potential impacts to FYLF to a less than significant level and help the Project comply with federal and state laws that protect this species.

Project-Related Mortality and/or Disturbance to Hardhead

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site through no Project activities are proposed within the creek habitat. These waterways provide suitable aquatic habitat for hardhead. Hardhead present within the creek during construction have the potential to be injured or killed by Project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and a violation of federal law protecting this species.

Implementation of mitigation measures BIO-27, BIO-28, and BIO-29 will reduce potential impacts to the hardhead to a less than significant level under CEQA and will ensure compliance with state laws protecting this species.

Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site. The creek habitat could be used by northwestern pond turtle for dispersal and basking. The oak woodland habitat of the site could be used by northwestern pond turtle for nesting and foraging. Upland areas would be permanently impacted through no Project activities are proposed within the creek habitat. Noise, vegetation removal, movement of workers, construction, and ground disturbance as a result of Project activities have the potential to significantly impact northwestern pond turtle. Potentially significant impacts associated with Project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA.

Mitigation measures BIO-30, BIO-31, and BIO-32 will be implemented prior to the start of construction and will reduce impacts to northwestern pond turtle to a less than significant level under CEQA.

b) Would the project 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 Impact with Mitigation Incorporated. Riparian habitat is present along Mariposa Creek and the unnamed stream. though impacts to these waterways and riparian habitat are not proposed during the Project. If the Project were to impact riparian habitat, impacts are addressed under mitigation described in impact analysis question "c" (BIO-35). Although there are no recorded observations of a natural community of special concern mapped within the site and no natural communities of special concern were observed during the field survey, the Project could impact high quality habitat for wildlife species in the area. Implementation of mitigation measures BIO-33 and BIO-34 will reduce potential impacts to high quality habitat to a less than significant level under CEQA and will ensure compliance with applicable State laws.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact with Mitigation Incorporated. The Project involves the construction of approximately 12.3 miles of nature trails. No work is currently proposed to occur within Mariposa Creek or the unnamed stream. Project-related impacts to some or all of these waters would be considered a potentially significant impact under CEQA. Impacts to waters of the U.S. are also subject to the permit requirements of Sections 401 and 404 of the Clean Water Act and impacts to waters of the state are subject to the permit requirements of Section 401 of the Clean Water Act and California Fish and Game Code. The placement of fill within any wetlands or other jurisdictional features will require a 401 Water Quality Certification from the RWQCB, 404 permit from the United States Army Corps of Engineers (USACE), and a Lake or Streambed Alteration Agreement from CDFW.

There are no designated wild and scenic rivers within the site; therefore, the Project would not result in direct impacts to wild and scenic rivers.

If construction involves ground disturbance over an area greater than one acre, the Project would need to obtain a Construction General Permit under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan to ensure construction activities do not adversely affect water quality. This plan will need to be prepared in support of the Construction General Permit application.

Implementation of mitigation measure BIO-35 will reduce potential impacts to waters to a less than significant level under CEQA and will ensure compliance with State and federal laws protecting these waters.

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

Less than Significant Impact with Mitigation Incorporated. The oak woodland and mixed oak/pine forest habitats of the site and surrounding areas consist of expansive open grassland and forests where species could move through. Numerous game trails were observed during the field survey in these habitats.

Mariposa Creek and the unnamed stream within the site could act as a corridor for aquatic and terrestrial wildlife, but no impacts are proposed to these waterways and wildlife will be able to continue using these features while construction is occurring and would be able to continue utilizing them after construction activities are completed.

The site has suitable features that could be used as native wildlife nursery sites. Large trees with natural cavities were located within and adjacent to the site and could function as native wildlife nursery sites for bats. Mariposa Creek and the unnamed stream could be used by amphibian species as wildlife nursery sites, though no work is proposed within these waterways. Project-related impacts to any native wildlife nursery sites would be considered a significant impact under CEQA.

The potential impacts to species that could use the trees as a wildlife nursery site have been addressed in Mitigation Measures BIO-19, and BIO-22. Impacts to species that could use the waterways as a wildlife nursery site have been addressed in Mitigation Measures BIO-32. Implementation of these measures will reduce potential impacts to native wildlife nursery sites to a less than significant level under CEQA. Implementation of mitigation measure BIO-33 will reduce potential impacts to wildlife movement corridors to less than significant under CEQA.

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?

No Impact. The Project appears to be consistent with the goals and policies of the State Oak Woodland Protection Statute. There are no known Habitat Conservation Plans (HCPs) or Natural Communities Conservation Plan (NCCPs) in the Project vicinity. There would be no impact and mitigation measures are not warranted.

4.4.7 MITIGATION

General Project-Related Impacts

BIO-1 (*WEAP Training*): Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur within the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the Project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them. These signed forms shall be provided to the Mariposa County Planning Department prior to initiation of construction activities.

BIO-2 (*BMPs*): The Project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes
- All open trenches, holes, sumps, and other excavations greater than 6-inches with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped.
- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits or relevant experience) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or state take permit.

BIO-3 The presence of any special status species will be reported to the Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

Any written BMPs provided to workers shall be provided to the Mariposa County Planning Department prior to initiation of construction activities.

Project-Related Impacts to Special Status Plant Species

BIO-4 (*Pre-Construction Survey*): Prior to Project activities occurring onsite, a qualified botanist/biologist will conduct focused botanical surveys during the appropriate blooming seasons. At a minimum three (3) surveys will be conducted, each at least one (1) month apart, across the blooming periods for beaked clarkia (April – May), big-scale balsamroot (March – July), Congdon's lomatium (March – June), Congdon's woolly sunflower (March – June), grassland suncup (April – June), Madera leptosiphon (April – May), Mariposa clarkia (May – June), Mariposa cryptantha (April – June), Mariposa daisy (June – August), Mariposa lupine (April – May), Mariposa pussypaws (April – May), Parry's horkelia (April – September), shaggyhair lupine (April – May), slender-stalked monkeyflower (April – May), and yellow-lip pansy monkeyflower (April – July) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-5 (*Avoidance*): If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area so as not to disturb the plants or its root system. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided

to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-6 (*Formal Consultation*): If rare plant individuals or populations are detected within Project work areas during the focused botanical surveys, and the plants cannot be avoided, the Project proponent will initiate consultation with CNPS (for CNPS-ranked species), CDFW (for California proposed, threatened, or endangered species), and/or USFWS (for threatened or endangered species) to determine next steps for salvage and relocation. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds

BIO-7 (*Avoidance*): The Project's construction activities will occur, if feasible, between August 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

BIO-8 (*Pre-construction Surveys*): If activities must occur within the nesting bird season (February 1 to August 15), a qualified biologist (someone able to identify these species) will conduct a pre-construction survey for active nests within seven (7) calendar days prior to the start of construction. It will be completed within the site, and up to 100 feet outside of the site for nesting migratory birds and up to 500 feet outside of the site for nesting raptors. Raptor nests are considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-9 (*Avoidance Buffers*): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Disturbance to California Red-Legged Frog

BIO-10 (*Pre-construction Take Avoidance Surveys*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction take avoidance survey for CRLF within seven (7) days of construction in accordance with the *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog* (USFWS 2005) or current guidance for CRLF to determine if CRLF are within or adjacent (within 100 feet) to the creek habitat. This survey will be completed when adult frogs are most likely to be detected at night between January 1 and June 30. If construction activities will begin outside of this timeframe two surveys will be required, one between January 1 and June 30 and the second survey within seven (7) days prior to construction

activities within or adjacent (within 100 feet) of the creek habitat. If no CRLFs are found during the pre-construction survey(s) work may commence without further surveys. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-11 (*Monitor*): If CRLF are observed during the surveys or during construction, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within or adjacent (within 100 feet) of the creek habitat. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-12 (*FYLF Take Authorization*): If avoidance is not feasible the Project will consult with the USFWS to acquire take permits for CRLF prior to any Project activities. Copies of take permits shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Disturbance to Crotch's Bumble Bee

BIO-13 (*Flying Bumble Bee and Nest Surveys*): A qualified biologist (someone who is familiar with and can identify bumble bees) will conduct three flying bumble bee and nest surveys during the peak flying periods (April, May to June, and July) prior to initial ground disturbing activities within or adjacent (within 100 feet) of the creek habitat. The biologist will walk throughout the creek habitat onsite and up to 100 feet outside of the creek habitat during the optimal time of the day to inspect for bumble bees and any nests. If an individual is observed, it will be followed until it can be determined if a nest is present within the survey boundary. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-14 (*Identification and Protection Plan*): Bumble bee individuals need to be captured to be identified. If a bumble bee nest is observed, no Project activities will occur within 50 feet of the nest until a plan to identify the species using the nest and protect nesting and overwintering Crotch's bumble bee has been submitted to CDFW and approved in writing by CDFW. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Disturbance to Monarch Butterfly

BIO-15 (*Avoidance*): Vegetation removal will not occur during the monarch breeding season (February 1 to August 31). This measure will be implemented by the Mariposa County Planning Department through the construction permitting process.

BIO-16 (*Pre-construction Surveys*): If vegetation removal will occur during the breeding season (February 1 to August 31) a pre-construction survey of the BSA will be conducted by a qualified biologist (someone who can identify the species and is familiar with the species'

host plants) within 15 days prior to construction activities to determine if milkweeds (*Asclepias* spp.) plants are located within the site. If no milkweed plants are observed, no further mitigation is required. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-17 (***Buffers***)**:** If milkweeds are observed within the BSA during the breeding season (February 1 to August 31), an avoidance buffer will be placed around the area as to not to disturb the plant or its root system. The buffer will be left in place until a qualified biologist has determined the buffers are no longer warranted. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-18 (***Monarch Egg and Larvae Survey***)**:** If milkweeds are observed within the BSA during the breeding season (February 1 to August 31) and cannot be avoided, a qualified biologist will conduct a monarch egg and larvae survey to look for eggs and larvae on milkweeds within seven (7) days prior to their removal. If no eggs or larvae are observed the milkweed plants can be removed under the supervision of a qualified biologist and will be replanted at a 3:1 ratio. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-19 (***Consultation with USFWS if Listed***)**:** In the event a milkweed plant with monarch eggs or larvae is detected during the pre-construction survey and cannot be avoided and this species is listed under the ESA prior to this observation, consultation with USFWS will be completed to avoid take. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Disturbance of Maternity Roosting Bats and Special Status Bats

BIO-20 (***Pre-Construction Survey***)**:** A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction survey for cavities and if needed, and emergence survey, within 7 days or less prior to construction if construction activities fall between March 1 and September 30 (bat maternity season) and/or November 1 through February 28 (overwintering season). This survey would help identify current bat roosting locations in trees or cavities within or near the Project site prior to the start of construction. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-21 (***Establish Buffers***)**:** On discovery of any bat roosts near work areas a qualified biologist will determine appropriate construction setback distances (buffer zones) based on the biology of the species, conditions of the roost(s), and the level of Project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing,

or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-22 (*Avoidance*): Project activities are not to occur within 100 feet of the identified maternity bat roost between sunset and sunrise during maternity season from March 1 through September 30 and the special status species overwintering bat roost from November 1 through February 28. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or adjacent to the roost. This measure will be implemented by the Mariposa County Planning Department through the construction permitting process.

BIO-23 (*Disturbance to Trees*): If a tree or trees must be removed a qualified biologist will inspect the tree prior to removal to verify that the tree is not active roosting habitat. Once the tree is deemed clear of bats, the tree will be removed within two days. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Disturbance to Foothill Yellow-Legged Frog

BIO-24 (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (California Department of Fish and Wildlife 2018), or current guidance for FYLF to determine if FYLF are within or adjacent (within 100 feet) of the creek habitat. If no FYLFs are found during the pre-construction survey and no surface water is present in the creeks, work may commence without further surveys. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-25 (*FYLF Consultation and Avoidance*): If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-26 (*Monitor*): If FYLF have been observed during preconstruction surveys or at any time during construction and ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will

conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within FYLF habitat. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-27 (*FYLF Take Authorization*): If avoidance is not feasible the Project will consult with the USFWS and CDFW to acquire take permits for FYLF prior to any Project activities. Copies of any take permits shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Disturbance to Hardhead

BIO-28 (*Avoidance*): If possible, construction activities will not occur in or within 50 feet of Mariposa Creek or the unnamed creek when water is present. This measure will be implemented by the Mariposa County Planning Department through the construction permitting process.

BIO-29 (*Pre-construction Survey*): If construction activities must occur in or within 50 feet of the waterways when water is present a pre-construction survey will be conducted by a qualified biologist (someone who is familiar with and can identify fish species) to look for hardhead and other special status fish species that may be present in Mariposa Creek or the unnamed creek. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-30 (*Formal Consultation*): If hardhead or other special status fish species are observed within Mariposa Creek or the unnamed creek and cannot be avoided the Project proponent will initiate consultation with the National Marine Fisheries Service and/or CDFW to determine any additional mitigation and minimization measures to avoid impacts to special status fish within the creeks. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle

BIO-31 (*Pre-construction Survey and Avoidance Buffers*): Within seven (7) days prior to the start of construction, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction survey for northwestern pond turtle within the creek habitat and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion* (United States Geological Survey 2006), or current guidance. If no northwestern pond turtles are observed during the pre-construction survey, then construction activities may begin. If the surveys result in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own or a qualified biologist (must possess appropriate collecting/handling permits or relevant experience) will stop work and relocate the individual. The qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the

individual(s). The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-32 (*Monitor*): If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities until the individual(s) have left the site. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-33 (*Formal Consultation*): Should northwestern pond turtles get listed by the ESA in this area and the Project/qualified biologist needs to move an individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Impacts to Riparian Habitat and Natural Communities of Special Concern

BIO-34 (*Analysis for Revegetation*): If trees are to be removed during Project activities a qualified biologist will complete an analysis on the number of trees and impacts to the habitat to determine if a habitat restoration and revegetation plan (HRRP) will be needed. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

BIO-35 (*HRRP*): If determined by the qualified biologist's analysis an HRRP is required, one will be developed for the Project. Upon completion of the Project, all vegetation impacted by permanent and temporary impacts, including trails, staging areas, temporary roads, and borrow sites, will be recontoured if necessary and revegetated to promote restoration of the area to pre-Project conditions. The HRRP will detail the process or processes to be implemented to restore the target areas and replant vegetation removed during the Project and will include the following Project-specific information, at a minimum:

- summary of habitat impacts and proposed habitat restoration actions;
- location of the restoration sites and existing site conditions;
- restoration design, including a proposed restoration site schedule and descriptions of existing and proposed soils and hydrology;
- site preparation requirements (including soil amendments, if required);
- invasive species eradication plan if applicable, planting plan, and maintenance plan;
- monitoring measures, with performance and success criteria;
- monitoring methods, duration, and schedule; and contingency measures and remedial actions.

The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

Project-Related Impacts to Regulated Waters, Wetlands, and Water Quality

BIO-36 (*Permits*): If the Project intends to impact potentially jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with state and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation. Copies of any permits, certifications, and agreements shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.

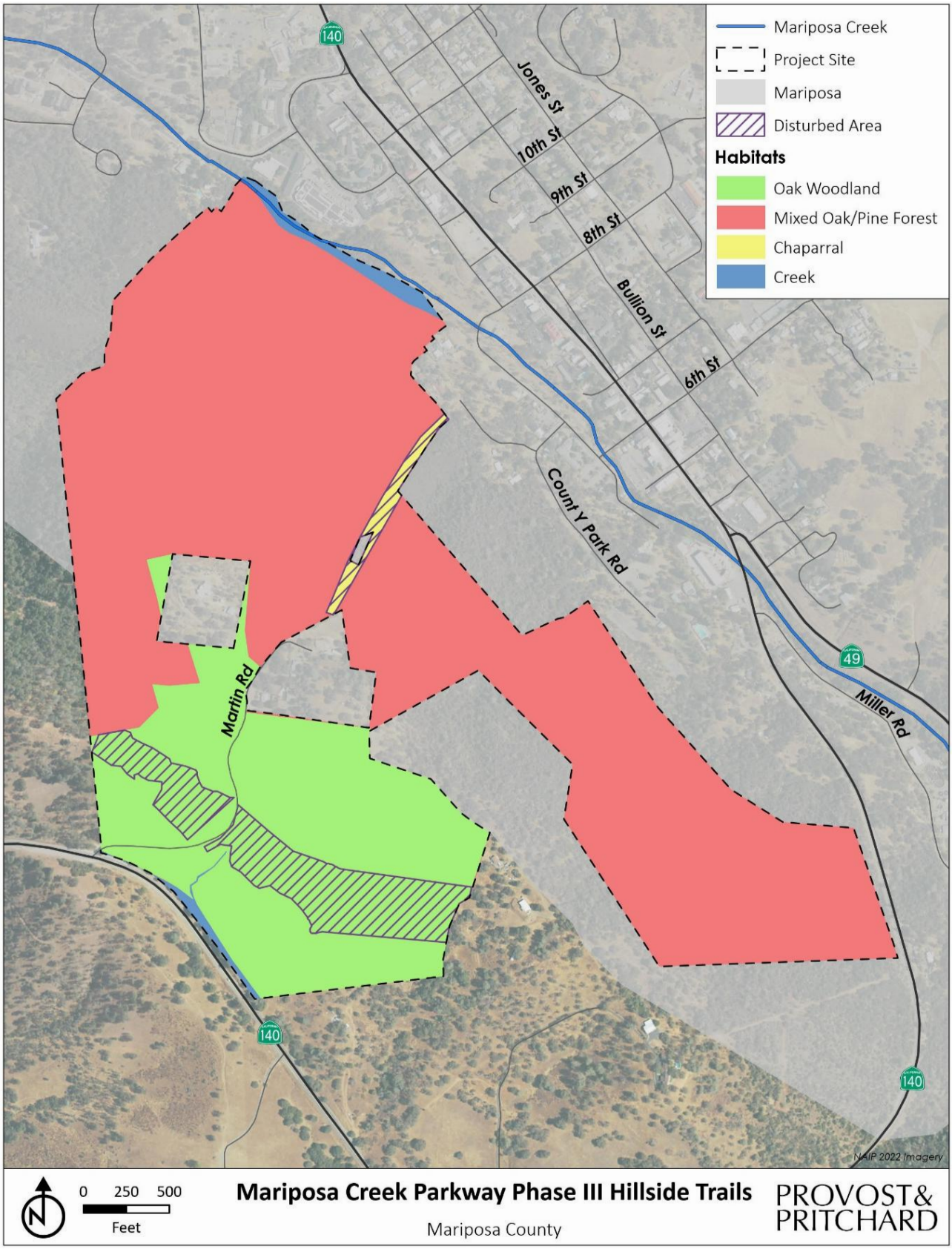


Figure 4-2: Habitat Map

4.5 CULTURAL RESOURCES

Table 4-10: Cultural Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 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 dedicated cemeteries?	☐	☒	☐	☐

4.5.1 BASELINE CONDITIONS

Mariposa was originally founded as a mining camp on Agua Fría Creek approximately 6-miles west of present-day Mariposa. The town was moved to its current location in 1850 due to dwindling gold returns in Agua Fría Creek and frequent fires and flooding. The Frémont adobe, built as Frémont's office in 1850, was one of the first permanent structures in the new town that would become the county seat of Mariposa County the following year. The Mariposa courthouse was constructed in 1854 and is still in operation (Durham 1998). The town has many additional structures, a few of which are the Mariposa Meat Market (1859), the Bogan Building (1850s), the International Order of Oddfellow's Hall (1855), and the Capitol Saloon (1867). The Masonic Hall was constructed in 1851 and after fires in 1858 and 1866, the hall was rebuilt again in 1917. It has been recently renovated. The present-day Mariposa Hotel was originally Gallison's Hotel housed in the Stolder Building from 1877 until it burned in 1887. It was rebuilt in 1901 (See Appendix C).

While tourism has played a part in the economy of Mariposa since the 1870s, it wasn't until the route now known as Highway 140 was completed in 1926 that it really took off. For the first time, Yosemite travelers were passing through the heart of Mariposa. At the same time, the increasing affordability of automobiles meant that more people than ever were able to travel at their leisure. Tourism still plays a major role in Mariposa's economy, with over 50 percent of the population employed in tourism-related industries (See Appendix C).

4.5.1.1 PHASE I PEDESTRIAN SURVEY

A Phase I Survey Cultural Resources Report was prepared for the Project, dated August 2024. A site survey for potential archaeological and historic resources was conducted July 31st to August 2, 2024, by ASM & Affiliates staff archaeologist. The Area of Potential Effect (APE) that was used for the Phase I Survey Cultural Resources Report is identified as 235 acres. The field methods employed included intensive pedestrian examination of the ground surface for evidence of archaeological sites in the form of artifacts, surface features (such as bedrock mortars, historical mining equipment), and archaeological indicators (e.g., organically enriched midden soil, burnt animal bone); the identification and location of any discovered sites, should they be present; tabulation and recording of surface diagnostic artifacts; site sketch mapping; preliminary evaluation of site integrity; and site recording, following the California Office of Historic Preservation Instructions for Recording Historic Resources (See Appendix C).

4.5.1.2 RECORDS SEARCH

In order to determine whether the study area had been previously surveyed for cultural resources, and/or whether any such resources were known to exist on any of them, an archival records search was conducted by ASM Affiliates and staff of the Central California Information Center (CCIC) on March 14, 2024. The records search was completed to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the study area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Records examined included archaeological site files and maps, the National Register of Historic Places, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest.

According to the CCIC record search, three previous studies have been conducted within the study area. An additional 36 studies have been completed within a 0.5-mi radius of the study area. The CCIC results identified no previously recorded cultural resources within the Project site. A total of 80 previously recorded cultural resources were identified within the 0.5-mi. buffer, with the nearest located less than 0.1 mi. from the Project site.

4.5.1.3 NATIVE AMERICAN OUTREACH

The Native American Heritage Commission (NAHC) in Sacramento was contacted for the Project. They were provided with a brief description of the Project and a map showing its location and were requested to perform a search of the Sacred Lands File to determine if any Native American resources have been recorded in the immediate Project area. The NAHC identifies, catalogs, and protects Native American cultural resources -- ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC is also charged with ensuring California Native American tribes' accessibility to ancient Native American cultural resources on public lands, overseeing the treatment and disposition of inadvertently discovered Native American human remains and burial items, and administering the California Native American Graves Protection and Repatriation Act, among many other powers and duties. NAHC provided a current list of Native American Tribal contacts in the Project area to notify of the proposed trail Project.

The results of the search indicated that no known sacred sites or tribal cultural resources were located within the Project area. Mariposa County sent outreach letters by certified mail to all the tribes listed on the NAHC contact list pursuant Assembly Bill 52. The Southern Sierra Miwuk Nation (SSMN) has knowledge of tribal cultural resources within portions of the project area and requested to review the Cultural Report. On June 4, the Phase I Survey Cultural Resources Report was provided to the SSMN.

4.5.2 IMPACT ANALYSIS

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

a and b) Less than Significant Impact with Mitigation Incorporated. A CHRIS records search, from the CCIC, was conducted March 14, 2024. According to the CCIC, three previous studies have been conducted within the study area. An additional 36 studies have been completed within a 0.5-mi radius of the study area. The CCIC results identified no previously recorded cultural resources within the Project site. A total of 80 previously recorded cultural resources were identified within the 0.5-mi. buffer, with the nearest located less than 0.1 mi. from the Project site. It is unlikely that the Project has the potential to result in significant impacts or adverse effects to cultural or historical resources, such as archaeological remains, artifacts, or historic properties. However, in the improbable event that cultural resources are

encountered during Project construction, implementation of mitigation measure CUL-1 outlined below would reduce impacts to less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact with Mitigation Incorporated. There is no evidence or record that the Project has the potential to be an unknown burial site, or the site of buried human remains. In the unlikely event of such a discovery, mitigation shall be implemented. With incorporation of mitigation measure CUL-2 outlined below, impacts resulting from the discovery of remains interred on the Project site would be less than significant.

4.5.3 MITIGATION

CUL-1 (Archaeological Remains) Should archaeological remains or artifacts be unearthed during any stage of project activities, work in the area of the discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist. The Mariposa County Planning Department shall be immediately notified of any find and mitigation measure recommended.

CUL-2 (Human Remains) In the event human remains, artifacts, or potentially significant cultural resources are discovered during ground disturbance on the project site, a Native American monitor shall be on-site for the duration of ground disturbance. During any construction activity that involves ground disturbance, if any signs of prehistoric, historic, archaeological, paleontological resources are evident, all work activity within fifty feet of the find shall stop and the Mariposa County Planning Department shall be notified immediately. No work shall be done within fifty feet of the find until Planning has identified appropriate measures to protect the find and those measures have been implemented by the project proponent. Protection measures for the site may include, but not be limited to, requiring the project proponent to hire a qualified archaeologist who shall conduct necessary inspections and research, and who may supervise all further ground disturbance activities and make any such recommendations as necessary to ensure compliance with applicable regulations. In addition to the Planning Department, the Mariposa County Coroner and the Native American Heritage Commission shall be notified should human remains be discovered. If the remains are determined by the Native American Heritage Commission to be Native American, the NAHC guidelines shall be adhered to in treatment and disposition of the remains. Representatives of the Most Likely Descendant shall be requested to be on-site during disturbance and/or removal of human remains.

4.6 ENERGY

Table 4-11: Energy Impacts

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

4.6.1 BASELINE CONDITIONS

California's major sources of energy are petroleum products (i.e., gasoline, diesel, and oil), electricity, and natural gas. Pacific Gas and Electric (PG&E) supplies electricity to the Project area. PG&E obtains its power through hydroelectric, thermal (natural gas), wind, and solar generation or purchases. PG&E continually produces new electric generation and natural gas sources and implements continuous improvements to gas lines throughout its service areas to ensure the provision of services to residents. New construction would be subject to Titles 20 and 24 of the California Code of Regulations which each serve to reduce demand for electrical energy by implementing energy-efficient standards for residential, as well as non-residential buildings.

4.6.2 IMPACT ANALYSIS

a) Would the project 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. Implementation of the Project would require the temporary use of energy resources for removal of existing features and construction of new trail features. This energy use would primarily be in the form of petroleum products and electricity used to operate construction equipment and consumed during vehicle trips associated with material delivery/debris hauling and commuting workers. Indirect energy use would also occur and include the extraction, production, and transportation of goods and materials needed for construction. While construction activities would result in the temporary consumption of energy resources in the form of vehicle and equipment fuels (gasoline and diesel fuel) and electricity (directly or indirectly), such consumption would be incidental and temporary and would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Maintenance of these structures would require minimal energy use, similar to existing County infrastructure maintenance activities. These activities would occur on an as-needed basis. Additionally, the Project does not involve constructing habitable structures; therefore, no energy efficiency policies apply. For these reasons, energy impacts during Project construction, maintenance, and operation would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The Project would not conflict with or obstruct a plan for renewable energy or energy efficiency. Project would follow any applicable State or local plan regarding renewable energy or energy efficiency. There would be no impact.

4.7 GEOLOGY AND SOILS

Table 4-12: Geology and Soils Impacts

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

4.7.1 BASELINE CONDITIONS

4.7.1.1 GEOLOGY AND SOILS

Mariposa is situated in the western foothills of the central section of the Sierra Nevada mountain range. The Sierra Nevada mountain range is a granitic batholith formed by the uplifting of metamorphic and igneous rocks. The Mariposa TPA, which includes the Project area, is primarily underlain by metamorphic rocks.[5] The soils onsite consist of sand and sandy loam (see Section 4.4.1.2).

[5] (Mariposa County, 2006)

4.7.1.2 FAULTS AND SEISMICITY

The Foothills Fault System traverses Mariposa County. This fault system has a total length of more than 200 miles, located primarily along the western front of the Sierra Nevada foothills and consists of two major parallel fault and fracture zones that run northwest-southeast across Mariposa County: the Bear Mountains Fault Zone and the Melones Fault Zone. The Bear Mountains Fault Zone crosses the northern Mariposa County line at Highway 132 near the northwest corner of Lake McClure. It runs south-southeast over the lake near New Exchequer Dam but does not continue more than a few miles to the southeast beyond the lake. The Melones Fault Zone also runs southeast across the County closely following SR 49 from the area of Jamestown through Bear Valley to the town of Mariposa. Although, the Foothills Fault System is considered active (since the 1975 Oroville Earthquake, the majority of the County, including the Project area falls within the low-risk category for seismic activity.[6]

4.7.1.3 LIQUEFACTION

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. Soil conditions are key factors in selecting locations for direct groundwater recharge projects. Using the United States Department of Agriculture Natural Resources Conservation Service soil survey of Mariposa County, an analysis of the soils onsite was performed. The Mariposa County General Plan deems the dangers of liquefaction in the County as minimal.[7]

4.7.1.4 SOIL SUBSIDENCE

There are two types of Subsidence: Land subsidence and hydrocompaction subsidence. Hydrocompaction subsidence occurs when a large land area settles due to over-saturation. These areas are typically composed of open-textured soils that become saturated, high in silt or clay content. Land subsidence occurs when an extensive amount of ground water, oil, or natural gas is withdrawn from below the ground surface. The soils onsite have a low to moderate risk of subsidence.

4.7.1.5 DAM AND LEVEE FAILURE

The closest dam or levee to the Project site is the Stockton Creek Dam. The Project area is outside of the Stockton Creek Dam Failure Inundation Boundary.[8]

4.7.2 IMPACT ANALYSIS

a) Would the project 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.

No Impact. According to the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist, the Project area is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site.[9] There would be no impact.

[6] (Mariposa County, 2006)
[7] Ibid.
[8] (California Department of Water Resources n.d.)
[9] (California Department of Conservation, 2021)

ii. Strong seismic ground shaking?

No Impact. The Project area is not likely to be impacted by strong seismic ground shaking. Therefore, there would be no impact.

iii. Seismic-related ground failure, including liquefaction?

No Impact. The Project is not located in or near a fault zone and the underlying soil is not susceptible to liquefaction.[10] There would be no impact.

iv. Landslides?

Less than Significant Impact. Landslides occur when masses of rock, earth, or debris move down a slope, including rock falls, deep failure of slopes, and shallow debris flows. Often, they accompany other natural hazards such as floods and earthquakes. The Project would construct trails along steep slopes that have the potential to degrade, resulting in landslides. To reduce potential impacts related to landslides, the Project would comply with all applicable California Building Code (CBC) requirements. In addition, Project design would include features that would maintain soil slope stability. These design features include planting and encouraging natural growth of vegetation and the use of retaining walls. Both features are an effective means of slope stabilization. With the inclusion of said Project features and compliance with the CBC, impacts would be less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Earthmoving activities associated with the Project would include excavation and pond construction. These activities could expose soils to erosion processes and the extent of erosion would vary depending on slope steepness/stability, vegetation/cover, concentration of runoff, and weather conditions. Dischargers whose projects disturb one (1) or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Since the Project would comply with the California State Water Resources Control Board (SWRCB) requirements of implementing a SWPPP, the impact would be less than significant.

c) Would the project 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 mentioned, the Project is not susceptible to liquefaction or lateral spreading. The hillside trail system and recreational features would involve excavation and grading that could increase the instability of underlying geologic units or soil. In order to maintain a safe work environment from potential landslides and rockfall hazards, construction safety protocols would be implemented. Cal/OSHA requires construction projects to abide by and maintain safety plans. Abiding by Cal/OSHA requirements would assist in minimizing potential hazards from landslides and rock falls, ultimately maintaining a safe work environment.

[10] (California Department of Conservation, 2021)

As mentioned earlier, Project design would include features that would help the Project soils maintain soil slope stability. These design features include planting and encouraging natural growth of vegetation and the use of retaining walls. Both features are an effective means of slope stabilization. Therefore with the incorporation of such design features, compliance with all applicable building code and Cal/OSHA requirements, impacts would be less than significant.

d) Would the project 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?

No Impact. The Project is not located on expansive soil, as defined in Table 18-1-8 of the Uniform Building Code (1994). As seen in Table 4-7, the soils onsite consist of sand and sandy loam. There would be no impact.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project would not include permanent work or living facilities and thus would not require the use of septic tanks or alternative wastewater disposal systems. There would be no impact.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than Significant Impact. Paleontological resources are fossilized remains of flora and fauna and associated deposits. Most fossils are found in sedimentary rock. Sedimentary rock is formed by dirt (sand, silt, or clay) and debris that settles to the bottom of an ocean or lake and compresses for such a long time that it becomes hard as a rock. CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature (CEQA Appendix G(v)(c)). If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) Section 15126.4(a)(1)). PRC Section 5097.5 (see above) also applies to paleontological resources.

The Project would require grading and excavation activities on a site that has been previously disturbed from earthwork. The Project would comply with California Public Resources Code Section 5097.5 which pertains to the protection of paleontological resources. With compliance with said regulation, impacts would be less than significant.

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4.8 GREENHOUSE GAS EMISSIONS

Table 4-13: Greenhouse Gas Emissions Impacts

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

4.8.1 BASELINE CONDITIONS

Commonly identified GHG emissions and sources include the following:

Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas. CO_2 is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH_4) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.

Ozone (O_3) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. O_3 is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth, and what the effects of clouds will be in determining the rate at which the mean temperature will increase. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, air pollution episodes, and the consequence of these effects on the economy.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. About three-quarters of human emissions of CO_2 to the global atmosphere during the past 20 years are due to fossil fuel burning. Atmospheric concentrations of CO_2, CH_4, and N_2O have increased by at least 40 percent, 150 percent, and 20 percent respectively since the year 1750.[11] GHG emissions are typically expressed in carbon dioxide-equivalents (CO_2e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 25 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2. In accordance with MCAPCD's the *County of Mariposa General Plan – Volume IV Environmental Impact Report*[12], proposed projects would be required to meet a CO2 emissions threshold of 500 tons per year. Projects exceeding this threshold would be deemed to have a significant impact on the environment.

4.8.2 IMPACT ANALYSIS

Project Related Emissions

Short-term construction emissions associated with the Project were calculated using CalEEMod, Version 2022.1.1.29. The emissions modeling includes emissions generated by off-road equipment, haul trucks, and worker commute trips. Emissions were quantified based on an anticipated construction schedule of approximately four months. Remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in Appendix A. Estimated construction-generated related emissions are summarized in Table 4-14. GHGs impact the environment over time as they increase and contribute to climate change.

[11] (California Air Resources Board, 2014)
[12] (County of Mariposa, 2006)

Table 4-14: Short Term Construction Related GHG Emissions

	Emissions (MT CO2e) in Tons per Year
Maximum Annual Construction CO2e Emissions	258
MCAPCD Threshold (tons per year)	500
Threshold Exceeded?	No

Construction related generation of GHGs would be a maximum of 258 Metric Tons of Carbon Dioxide Equivalent (MT CO2e) per year, while operational emissions would be negligible, if any, due to the nature of the proposed Project. The Project would not exceed MCAPCD's threshold for generation of GHG emissions.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. The Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. As shown in Table 4-14, the Project is not expected to result in the generation of GHG emissions that would exceed the MCAPCD's threshold for GHG emissions. Therefore, impacts would be less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The Project would be in compliance with all MCAPCD policies and regulations and would not exceed an applicable threshold for GHG emissions. Therefore, there would be no impacts.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Table 4-15: Hazards and Hazardous Materials Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, 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?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such 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?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☒	☐	☐

4.9.1 BASELINE CONDITIONS

4.9.1.1 HAZARDOUS MATERIALS

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese List data (DTSC, 2010). In addition to the EnviroStor database, the State Water Resources Control Board

(SWRCB) Geotracker database provides information on regulated hazardous waste facilities in California, including underground storage tank (UST) cases and non-UST cleanup programs, Spills-Leaks-Investigations-Cleanups (SLIC) sites, Department of Defense sites, and Land Disposal program. A search of the DTSC EnviroStor database and the SWRCB Geotracker performed on May 27, 2025, determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project area or immediate surrounding vicinity.[13] The nearest historical hazardous material spill site was located at the Mariposa Quick Stop (Shell) at 4989 Highway 140. The case was resolved and has been closed since June 10, 2014.[14]

4.9.1.2 AIRPORTS

The nearest active public airport is the Mariposa Yosemite Airport, approximately 4.5 miles northeast of the Project area.

4.9.1.3 EMERGENCY RESPONSE PLAN

The Mariposa County Office of Emergency Services (OES) is housed under the Mariposa County Sheriff's Office. OES coordinates planning and preparedness, response, and recovery efforts for disasters occurring within the County. The OES' website contains various information in regard to emergency response.[15]

4.9.1.4 SENSITIVE RECEPTORS

Sensitive receptors, consisting of residences and schools, are located on lots adjacent to the Project. The nearest is located less than 150 feet away of the Project area. The nearest school to the Project area is the Mariposa Elementary School located approximately 0.5 miles east.

4.9.2 IMPACT ANALYSIS

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Would the project 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?

a and b) Less than Significant Impact. Construction of the Project would potentially require the use of various types and quantities of hazardous materials. Hazardous materials that are typically used during construction include, but are not limited to, hydraulic oil, diesel fuel, grease, lubricants, solvents, paint, asphalt, and adhesives. Although equipment used during construction activities has the potential to contain various hazardous materials, these materials would be used in accordance with the manufacturers' specifications and all applicable regulations in order to reduce the potential for incidental release of pollutants or hazardous substances on-site. Applicable regulations include the California Department of Occupational Safety and Health Administration regulations regarding regular maintenance and inspection of equipment, spill prevention, and spill remediation. Furthermore, any potential accidental hazardous materials spills during construction are the responsibility of the contractor to remediate in accordance with industry Best Management Practices (BMP) and State and county regulations. With the implementation of said specifications, regulatory requirements, and BMPs, impacts related to construction would be less than significant.

[13] (California Department of Toxic Substances Control, 2024); (California State Waterboards, 2024)
[14] Ibid.
[15] Mariposa County Office of Emergency Services: Office of Emergency Services | Mariposa County, CA - Official Website

In terms of Project operations, there would be no routine storage or use of hazardous materials and therefore, there would be no impact. All in all, impacts would be less than significant.

c) Would the project 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 area is not located within a quarter mile of an existing or proposed school. As mentioned above, the nearest school to the Project area is located 0.5 miles away. Therefore, there would be no impact.

d) Would the project 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?

Less than Significant Impact. The Project does not involve land that is listed as an active hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by DTSC. Both the SWRCB's GeoTracker and DTSC's EnviroStor websites were queried on May 27, 2025 for contaminated groundwater or sites in the area with negative findings. Once the Project is fully constructed, there would be no need for the transport, use, or disposal of hazardous materials and the land area proposed for the Project has not been identified as an active hazardous waste generator or hazardous material spill site. Impacts would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 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 is not located within an adopted airport land use plan or within two miles of a public airport or public use airport. The nearest airport to the Project is the Mariposa-Yosemite Airport, approximately 4.5 miles northwest. There would be no impact.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project does not involve any physical barriers, nor will it interfere with any roadways in such a way that would impede emergency or hazards response; therefore, the Project would not interfere with implementation of an emergency response plan or evacuation plan. There would be no impact.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than Significant Impact. The Project would be located in an area of increased wildland fire risk. Implementation of mitigation measures WLD-1 and WLD-2 would lessen any potential significant impacts to a less than significant level. Wildland fire impacts and risks, as well as the two mitigation measures mentioned above, are discussed further in Section 4.20 Wildfire.

4.9.3 MITIGATION

See WLD-1 and WLD-2 in Section 4.20.3.

4.10 HYDROLOGY AND WATER QUALITY

Table 4-16: Hydrology and Water Quality Impacts

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

4.10.1 BASELINE CONDITIONS

Similar to the rest of California, Mariposa County experiences a Mediterranean type of climate with equally pronounced summers and winters. The majority of the precipitation is rainfall, though Mariposa does receive snowfall multiple times during the winter when temperatures are low enough. The average annual precipitation level reaches approximately 30 inches with most of the precipitation falling between November and April.[16] The major hydrological feature within Mariposa is Mariposa Creek, which runs adjacent to the proposed Project area. Mariposa Creek begins approximately three miles north of the Mariposa TPA within the mountain ridges of the Sierra Nevada mountains. Downstream, below the Mariposa TPA, various tributaries flow into Mariposa Creek, one being Stockton Creek. The Mariposa Public

[16] (County of Mariposa 1992)

Utility District (MPUD) owns and operates a 440-acre foot reservoir on Stockton Creek known as the Stockton Creek Reservoir.[17] MPUD also provides wastewater services to the residents and businesses in the Mariposa TPA.

4.10.2 IMPACT ANALYSIS

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. During construction of the proposed hillside trails, Project grading and potential vegetation removal would disturb soils in the Project area. Unless measures are taken to prevent erosion of disturbed soils, rain events could wash loose soil into the adjacent Mariposa Creek, causing sedimentation. Stormwater runoff could also carry pollutants like nutrients, heavy metals, pesticides and herbicides, toxic chemicals, oils and fuels, and lubricants into the creek. The primary stormwater pollutant at the construction site would be excess sediment. Excess sediment could be mobilized anywhere earthwork occurs.

As previously described in Section 4.7 Geology and Soils, the County would ensure the construction contractor employ the appropriate water quality and erosion control BMPs to minimize the potential for offsite erosion and sedimentation in accordance with the construction specifications and with the NPDES CGP for Storm Water Discharges associated with construction activity. These BMPs would be in accordance with Caltrans's Construction Site Best Management Practices Manual[18] and would ensure no water quality standards or waste discharge requirements would be violated. Impacts would be less than significant.

Operation of the proposed Project would involve continued recreational use of the adjacent creek corridor that would be connected to the proposed hillside trails. It would not introduce new uses that discharge additional water pollutants relative to existing conditions. Therefore, compliance with existing regulatory requirements would ensure that the Project does not violate water quality standards or waste discharge requirements and would not create substantial runoff water or otherwise degrade water quality. Impacts would be less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. The Project includes no use of groundwater and would not result in any impacts associated with the depletion of groundwater supply or recharge. Therefore, there would be no impact.

c) Would the project 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 substantial erosion or siltation on- or off-site;

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

[17] (Mariposa Public Utility District, 2023)
[18] Caltrans's Construction Site Best Management Practices Manual can be found here: Microsoft Word - CSBMP-May-2017-Final-122917 (ca.gov)

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows?

c-i – c-iv) Less than Significant Impact. Construction activities would involve excavation, filling and grading of soils, which would expose areas to potential erosion during construction. Grading activities would be performed in accordance with Mariposa County standards. BMPs, as mentioned earlier, would be implemented during construction to further reduce potential impacts of erosion or siltation on or off site. Areas disturbed during construction would be restored once construction commences. A SWPPP will be prepared to comply with the conditions of the NPDES general stormwater permit for construction activities.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

Less than Significant Impact. A portion of the Project area is located within a regulatory floodway (Mariposa Creek) (see Figure 4-3). Construction of the Project elements would not occur during times when the potential for flooding is high. This would prevent the potential release of pollutants into Mariposa Creek. During operation, the Project would not contain pollutants; therefore, no pollutants would be at risk of releasing into the creek during inundation periods. Impacts would be less than significant.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The Project would not affect the implementation of the water quality control plan or the groundwater sustainability plan as no new water sources or discharges would be developed as part of the Project. There would be no impact.

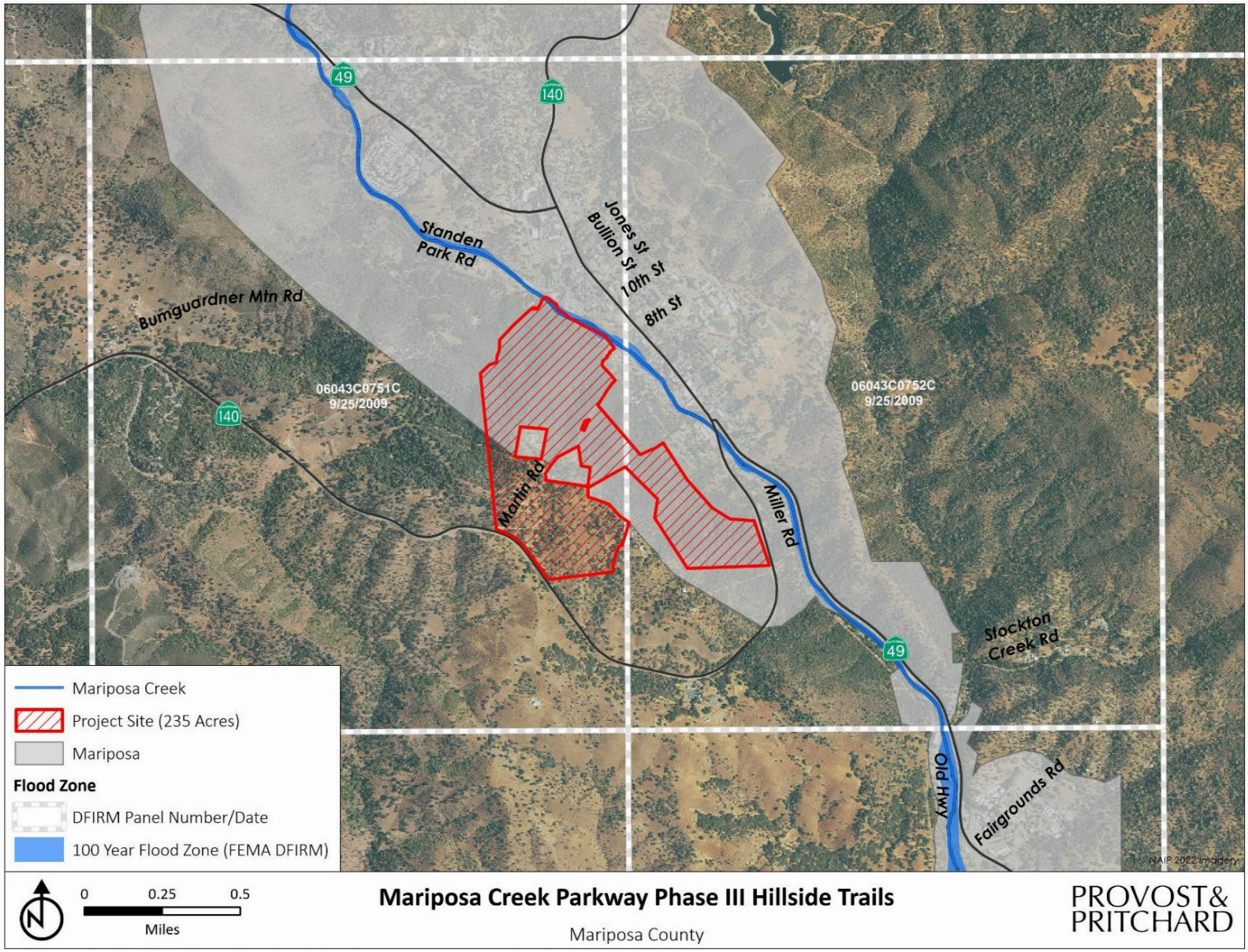


Figure 4-3: FEMA Flood Map

4.11 LAND USE AND PLANNING

Table 4-17: Land Use and Planning Impacts

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

4.11.1 BASELINE CONDITIONS

The Project is located within Mariposa County, which is known for its rural and natural character. The land use authority for the Project area is the County of Mariposa. The Project area spans multiple parcels of land and contains multiple land use and zoning designations (see Table 2-1 in Chapter 2).

4.11.2 IMPACT ANALYSIS

a) Would the project physically divide an established community?

No Impact. The Project would add a recreational benefit to the community. The Project is located within the community of Mariposa; however, the Project would construct a trail system that would connect existing trails in the area. No aspect of the proposed Project would physically cause an obstruction within Mariposa. Therefore, there would be no impact

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The Project would require a zone amendment to change all the Project parcels' and zoning designations to Public Quasi-Public Zone. The Public Quasi Public zone district includes recreation areas and parkways as permitted uses. With implementation of the zone amendment, the Project would be consistent with the applicable State and local goals and policies. Impacts would be less than significant.

4.12 MINERAL RESOURCES

Table 4-18: Mineral Resources Impacts

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

4.12.1 BASELINE CONDITIONS

Mariposa County is situated astride the southern extreme of the mineralized fault belt running through the Central Sierra Mountains, which is commonly referred to as the "Mother Lode." While it is generally recognized that the richest portion of the Mother Lode Fault System is north of Mariposa County, the County has a historic record of precious metal mining production.

Mariposa County has one active slate quarry — Yosemite Slate Quarry, located off of Highway 140 on Agua Fria Road approximately 2.5 miles west of the Project area. With the exception of sand and gravel extraction and processing, most mines in the County are now closed or only intermittently active.[19]

4.12.2 IMPACT ANALYSIS

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Would the project 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?

a and b) No Impact. The Project area is not identified as containing any mineral resources. As a result, the Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, there would be no impact.

[19] (Mariposa County Panning Department, 2006)

4.13 NOISE

Table 4-19: Noise Impacts

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

4.13.1 BASELINE CONDITIONS

4.13.1.1 TERMINOLOGY

Noise can be defined as unwanted and objectionable sound. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. The method commonly used to quantify environmental sounds consists of evaluating all frequencies of a sound in accordance with a filter that reflects the fact that human hearing is less sensitive at very low and very high frequencies compared to mid-range frequencies. This is called "A" weighting, and the dB level measurement is called the A-weighted sound level (dBA). It is expressed on a logarithmic (power of 10) scale using a frequency weighted pattern that duplicates the human ear's sensitivity to sound. A 70-dBA sound level is approximately twice as loud as a 60-dBA sound level and four times as loud as a 50-dBA sound level.

Sound intensity is normally measured through the A-weighted sound level, or dBA. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for many various sound level metrics, including the day/night sound level and the Community Noise Equivalent Level, both of which represent how humans are more sensitive to sound at night. In addition, the equivalent continuous sound level (Leq) is the average sound energy of time-varying noise over a sample period and the (Lmax) is the maximum instantaneous noise level occurring over a sample period.

4.13.1.2 LOCAL NOISE REGULATIONS

The Mariposa County General Plan does not specifically limit hours during which construction may occur; however, it is common practice to limit hours of construction activity to minimize construction noise impacts in residential areas during the early morning and late evening hours, and on weekends and holidays. Although not specifically stated in the County's General Plan Noise Element, it is also a standard requirement of many jurisdictions that all construction equipment be properly maintained and muffled to minimize noise generation at the source.

Some guidance on construction-related noise is provided by Section 14-8.02 of the Caltrans Standard Specifications document which suggests that construction equipment not exceed 86 dB Lmax at a distance of 50 feet from job site activities from 9 p.m. and 6 a.m.[20]

Mariposa County does not have any established performance standards regarding ground borne vibration levels from construction activities. However, the Mariposa County General Plan Noise Element does include Implementation Measure 15.1a (3) which requires the County to implement standards that will reduce vibration from construction activities to a level that is less than perceptible at adjacent property lines. Therefore, for purposes of this analysis, the "severe" impact criterion of 0.4 inch per second peak particle velocity (PPV) for vibration is utilized from the Caltrans 2020 Transportation and Construction Vibration Guidance Manual.[21]

4.13.1.3 EXISTING NOISE SETTING

Land uses surrounding the Project area consist of scattered low density residential uses, commercial buildings, and open space uses including Mariposa Creek. The existing noise environment in the immediate Project area is dominated by songbirds, residential maintenance equipment, and sporadic vehicle traffic along SR 140/49. Some land uses are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved for those uses. Residences, schools, day cares, rest homes, hospitals, and churches are generally more sensitive to noise than commercial and industrial land uses. The scattered residences in the Project area are the primary sensitive receptors.

4.13.1.4 TYPICAL CONSTRUCTION NOISE LEVELS

Noise levels from point sources such as equipment at construction sites typically attenuate at a rate of 6 dBA per doubling of distance. Therefore, only areas within several hundred feet of construction sites would typically be exposed to perceptible construction noise levels. As noted above, the Mariposa County does not establish numeric standards for construction noise. However, construction noise that substantially exceeds existing ambient noise levels could disturb sensitive receptors, such as residences and schools.

Table 4-20: Typical Construction Noise Levels

Equipment	50 feet from Source (dBA L_{eq})	100 feet from Source (dBA L_{eq})	200 feet from Source (dBA L_{eq})	300 feet from Source (dBA L_{eq})
Air Compressor	80	74	68	64
Backhoe	80	74	68	64
Concrete Mixer	85	79	73	69
Grader	85	79	73	69
Jack Hammer	88	82	76	72
Loader	80	74	68	64
Paver	85	79	73	69
Roller	85	79	73	69
Saw	76	70	64	60
Scraper	85	79	73	69
Truck	84	78	72	68

Source: Noise level at 50 feet from (John A. Volpe National Transportation Systems Center 2018)
Note: Noise Levels at 100 feet, 200 feet, and 300 feet were extrapolated using a 6 dBA attenuation rate per doubling of distance. Each noise level assumes the piece of equipment is operating at full power for the expected duration to complete the construction activity. The duration varies widely between each piece of equipment. Noise levels also depend on the model and year of the equipment used.

[20] Caltrans Standard Specification document can be found here: Standard Specifications 2018.
[21] (California Department of Transportation 2020)

4.13.2 IMPACT ANALYSIS

a) Would the project result in 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 Impact with Mitigation Incorporated. Construction noise levels at and near the Project construction areas would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. Noise at the construction site would be intermittent and its intensity would vary. The degree of construction noise impacts may vary for different areas of the Project and also vary depending on the construction activities. During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction and some of the sensitive receptors surrounding the Project area may be temporarily affected. As mentioned above, most of the construction equipment, other than the jack hammer, would not be expected to exceed Caltrans Standards of 86 dB Lmax at a distance of 50 feet from construction site activities. To ensure these Project-related increases in ambient noise would not exceed applicable noise and land use standards, the noise reducing BMPs pursuant to Mitigation Measures NOI-1, NOI-2, and NOI-3 will be implemented. With the inclusion of said mitigation, impacts would be less than significant.

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. Construction activities such as excavation and trail grading and paving would temporarily increase ground borne vibration and/or ground borne noise levels in the vicinity of the Project area. The nearest vibration-sensitive land use from the Project are adjacent residential properties, located approximately 50 to 300 feet from the boundary of the Project construction footprint. An on-site source of vibration during Project construction would potentially be from a vibratory roller or paver, which would be used for pavement compaction for the proposed trail. A vibratory roller or paver would create approximately 0.210 inches per second PPV at a distance of 25 feet.[22] Using the Caltrans criterion of 0.4 inches per second Peak Particle Velocity (PPV) at 25 feet, the approximately 0.210 inches per second PPV vibration impact generated at 25 feet would be less than what is considered a "severe" impact. Therefore, although vibration may be perceptible by nearby residences (the nearest of which would be approximately 50 feet from the closest operation of a vibratory roller or paver), temporary impacts associated (and other potential equipment) 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 Mariposa-Yosemite Airport is located approximately 4.5 miles northwest of the Project area. According to the Mariposa-Yosemite Airport Comprehensive Land Use Plan, the Project area is not located in close enough proximity to be affected by airport noise.[23] Therefore, there would be no impact.

[22] (California Department of Transportation 2020)
[23] (Aries Consultant Ltd. 1995)

4.13.3 MITIGATION

The County shall ensure the construction contractor implement the following construction noise reducing measures:

NOI-1 The construction contractor shall ensure that all noise producing construction activities, including warming-up or servicing equipment and any preparation for construction, shall not commence prior to the hours of 7:00am Monday through Friday, and 8:00am on Saturdays. All construction activities shall cease by sunset Monday through Saturday. No construction shall occur on Sundays. Any deviation from the construction hours shall require Planning Department consideration and approval. The construction contractor shall locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise sensitive receptors nearest the project site during construction. This measure will be implemented by the Mariposa County Planning Department through the construction permitting process.

NOI-2 The construction contractor shall ensure that all equipment will have sound control devices that are no less effective than those provided on the original equipment. Further, pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof. In lieu of or in the absence of manufacturers' recommendations, the Director of Public Works shall have the authority to prescribe such means of accomplishing maximum noise attenuation as deemed to be in the public interest, considering the available technology and economic feasibility. This measure will be implemented by the Mariposa County Planning Department through the construction permitting process.

NOI-3 The County shall ensure by inclusion in any work agreement with contractors that equipment and trucks used for construction of the Project utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).

NOI-4 The County shall ensure by inclusion in any work agreement with contractors that impact equipment (e.g., jack hammers, etc.) used for construction of the Project be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.

4.14 POPULATION AND HOUSING

Table 4-21: Population and Housing Impacts

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

4.14.1 BASELINE CONDITIONS

According to the U.S. Census Bureau, as of April 1, 2020, the estimated population for Mariposa County was 17,131.[24] The County has seen a decrease of approximately 6.1% since the last census was conducted in 2010. The County is characterized as natural and scenic and is sparsely populated due to its mountainous topography resulting in limited development. The Project area is located along the hillside near Mariposa Creek and the existing Mariposa Creek Parkway within the Town of Mariposa. There are various residences scattered near the Project area.

4.14.2 IMPACT ANALYSIS

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

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

a and b) Less than Significant Impact. The Project would not involve the construction of infrastructure that could induce substantial population growth, such as new or increased capacity sewer or water lines, or the construction or extension of streets and roads for the purpose of supporting permanent inhabitants. The Project does not propose the construction of new homes or business. The proposed hillside trails, as well as the proposed amenity improvements, would serve both the residents in the Mariposa area and non-local visitors. The proposed hillside trails would not expand the capacity of the motor vehicle system and therefore would not induce population growth. In addition, the Project would not require displacement of housing or people. Any residences in the vicinity of the Project would not be impacted by the Project. Impacts would be less than significant to population and housing.

[24] (United States Census Bureau 2022)

4.15 PUBLIC SERVICES

Table 4-22: Public Services

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☐	☒

4.15.1 BASELINE CONDITIONS

Fire Protection: The Mariposa County Fire Department would serve the Project area, with Mariposa Fire Station 22 being the closest fire station. Due to the Project's large footprint, the closest distance to the fire station is 0.6 miles, while the furthest distance is 1.4 miles.

Police Protection: The Mariposa County Sheriff Department would serve the Project area. Due to the Project's large footprint, the Mariposa County Sheriff's Office is located as close as 0.3 miles away to as far as one mile away.

Schools: Mariposa Elementary School is the closest school to the Project site, at a distance of approximately 0.35 miles east of the Project.

Parks: The Project is located adjacent to the Mariposa Creek Parkway and the Mariposa County Park.

Landfills: The nearest landfill to the Project is the Mariposa Landfill, Composting, and Recycling Center, located approximately two miles northwest.

4.15.2 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:

i. Fire Protection:

ii. Police Protection:

a-i – a-ii) Less than Significant Impact. The Project would maintain public access from SR 140 at a minimum of three locations: 8th Street,at the County Park via County Park Road, and Martin Rd. Due to the Project's proximity to fire and police stations, response times in the event of an emergency would not be expected to be significant. Even with the varying topography of the site which could increase response time, emergency access would still be maintained. Furthermore, the Project would not add residential, commercial, or other structural development that could substantially increase demand for police or fire services. Therefore, the Project would have a less than significant impact related to fire and police protection facilities.

iii. Schools:

No Impact. The Project includes the construction of a trail system and ancillary amenities along the hillside adjacent to the Mariposa Creek Parkway. The Project would not include residences or places of employment that would increase the population of school-age children in Mariposa County. Due to the fact that the Project would not increase demand for school facilities, no impact would occur.

iv. Parks:

Less than Significant Impact. The Project would construct trails along the hillside adjacent to the Mariposa Creek Parkway. The proposed trails would consist of paths, landscaping, and several recreational facilities. These proposed renovations and the trail extension itself are not expected to substantially affect the level of public use at the nearby County Park. Furthermore, the Project would not add residences or places of employment that would increase the service population for parks in Mariposa County. Therefore, the Project would not result in the need for new or physically altered parks.

Although the Project would not add or expand parkland, the proposed trail and trail amenities would serve as recreational facilities for Mariposa residents. As discussed further in Section 4.16 Recreation, the environmental effects of constructing the proposed recreational facilities are one component of the overall Project, and as such, are part of the whole of the action that in analyzed in this IS/MND, and there would be no additional impacts. Impacts would be less than significant.

v. Other public facilities:

No Impact. The Project would not cause an increase in Mariposa County's population. Therefore, it would not increase demand for libraries or other governmental facilities. There would be no impact.

4.16 RECREATION

Table 4-23: Recreation Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐

4.16.1 BASELINE CONDITIONS

The County of Mariposa maintains a park system which includes eight parks. These park sites allow residents and tourists access to recreational activities such as swimming, fishing, picnicking, and hiking. Other public and private entities provide local recreational opportunities in Mariposa County too. These entities include Mariposa Unified School District, the Fair Board, and Yosemite National Park. The Project area is located adjacent to the Mariposa County Park and the Mariposa Creek Parkway. Plans to extend the Mariposa Creek Parkway have been made public within the Mariposa Creek Parkway Master Plan, adopted December 2019.

Mariposa County's historic reliance on Yosemite National Park as an economic driver is becoming increasingly threatened by natural disasters that impact park operations.

Yosemite is over-burdened by throngs of tourists that seek alternative means of enjoying the Park. The Town of Mariposa plans to become the Base Camp for larger adventures, with longer trails and bigger loops that tie into a regional trail network that connects Mariposa with the Merced River Trail and Yosemite National Park.

4.16.2 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 develop additional trails along the hillside adjacent to the existing Mariposa Creek Parkway trail. Proposed amenities such as shaded benches, pet facilities, outdoor classrooms, and conservation zones (see Chapter 2 Project Description for other amenities included) would increase the trail's attractiveness to Mariposa's residents and visitors. However, it is not anticipated that the Project would cause an increase in trail use to the extent that would substantially alter public use of neighborhood parks. The Project would not involve construction of residential units or other development that increases the service population for local parks. In addition, the Project would add recreational resources to the Mariposa Creek Parkway, helping to meet countywide demand without overwhelming existing parks. Therefore, it would not significantly accelerate or cause the physical deterioration of existing parks, requiring repair or expansion. Impacts would be less than significant.

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. As mentioned throughout this document, the Project includes the construction of a hillside trail system adjacent to the existing Mariposa Creek Parkway.

The physical and environmental impacts of this Project are outlined throughout this IS/MND. The primary source of environmental impacts would occur during the construction phase of the Project. Impacts are discussed in greater detail within their respective Impact Analysis sections that include mitigation measures to reduce impacts to less significant levels.

The trail Project is considered a recreational facility. The construction and operation of the new facilities would expand the recreational amenities within the County and town of Mariposa. The Project would not result in any new impacts beyond those evaluated within this document. The overall implementation of the Project would be mitigated to a less than significant level in accordance with the requirements of CEQA. Mitigation measures can be found in Chapter 5 Mitigation, Monitoring, and Reporting Program.

4.17 TRANSPORTATION

Table 4-24: Transportation Impacts

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

4.17.1 BASELINE CONDITIONS

The Project is located approximately 600 feet west of SR 140. SR 140 is the primary thoroughfare in Mariposa. Various local roads intersect the highway and are used as access roads to the Mariposa Creek Parkway. Currently, access to the parkway is achieved by taking either Joe Howard Street or 8th Street.

4.17.2 IMPACT ANALYSIS

a) Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. The Project would enhance the existing trail system in Mariposa by providing additional trail miles. The hillside trails would connect to the existing Mariposa Creek Parkway trail system, ultimately creating one large local system of trails adjacent to Mariposa and Mariposa Creek. Regionally, it would become part of several regional bicycle routes extending into the national forests and Yosemite National Park. By providing various trail amenities such as outdoor classrooms, conservation zones, and bike trails, the Project would increase the use of the trail system as a multi-modal use. The Project would provide access for hikers, runners, and bicyclists. While the Project would increase the number of vehicles traveling to and from the Project area, significant permanent traffic activity is not anticipated. The Project would also include parking lots to accommodate trail users who are traveling to the site in vehicles. Parking would include the necessary number of ADA spaces, as required by local and state regulations. The existing County Park parking lot is also anticipated to accommodate Project trail users.

Regarding the overall circulation system, the Project would be consistent with the County-adopted Mariposa TPA Town Plan. No aspect of the Project would conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

Less than Significant Impact. A significant project impact would be one that conflicts with or is inconsistent with CEQA Guidelines §15064.3. This section states that vehicles miles traveled (VMT) is the most appropriate measure of transportation impacts. VMT is the product of a number of trips and the length of those trips. An analysis of a project's VMT assists in determining the project's contribution to greenhouse gas emissions and the effect on the State's goals for reducing emissions. This section of CEQA Guidelines states that "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Section 15064.3(b)(1) states that for land use projects vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease VMT in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

The State of California Governor's Office of Planning and Research (OPR) published a Technical Advisory (TA) on Evaluating Transportation Impacts in CEQA (December 2018) to provide advice and recommendations, which agencies and other entities may use at their discretion. The TA acknowledges that lead agencies should set criteria and thresholds for VMT and transportation impacts. However, it provides guidance to residential, office and retail uses, citing these as the most common land uses. Beyond these three land uses, there is no guidance provided for any other land use type. The TA also notes that land uses may have a less than significant impact if they are located within a low VMT area or in close proximity to a transit route, and suggests that screening maps be used for this determination. TA Section E(1) – Screening Thresholds for Land Use Projects contains a subsection titled Screening Thresholds for Small Projects. This subsection states the following:

> *Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant impact.*

As seen in Appendix A, the Project is estimated to generate a maximum of 20 vehicle trips per day during construction, which is less than the 110 trips threshold noted above. Furthermore, during operation, the Project is estimated to generate approximately 45 vehicle trips per day on weekends and 9 vehicle trips per day on weekdays. Based upon these factors, the Project's VMT is considered less than significant.

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

No Impact. The Project would not add sharp curves, new intersections, or incompatible uses. By adding lighting to the Project area, the Project would improve visibility and reduce potential hazards for trail users. Therefore, no impact related to roadway hazards would occur. There would be no impact.

d) Would the project result in inadequate emergency access?

Less than Significant Impact. The Project would provide an extension of an existing trail that contains both paved and soft paths. The existing trailhead would be open, providing access to the trail at all times. Although the trail is not anticipated to be utilized by motor vehicles, it would be accessible for emergency access in the event of an emergency. No Project feature would impede existing emergency access to the trail corridor. The Project would not substantially increase traffic delay on nearby roadways. Therefore, it would not cause delays in emergency access on roadways. The impact on emergency access would be less than significant.

4.18 TRIBAL CULTURAL RESOURCES

Table 4-25: Tribal Cultural Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a 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, or in the local register of historical resources as defined in Public Resources Code section 5020.1(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.	☐	☒	☐	☐

4.18.1 BASELINE CONDITIONS

Mariposa is located within the territory of the Southern Sierra Miwok (alternatively Me-Wuk or Miwuk). The Sierra Miwok, members of the Penutian language group, occupied the territory between the Mokelumne and Fresno rivers, as well as the full width of the west slope of the Sierra Nevada, from the edge of the Central Valley to the Sierra crest.

The influx of outsiders to the central Sierra region during the Gold Rush period resulted in a major disruption for the Miwoks and their way of life. Within a decade, introduced diseases, environmental damage, and cultural conflicts with the outsiders had decimated much of the population. Despite this calamity, some tribal members managed to survive and have continued their cultural traditions (See Appendix C).

4.18.1.1 PUBLIC RESOURCES CODE SECTION 21080.3.1, ET SEQ. (CODIFICATION OF AB 52, 2013-14)

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14) requires that a lead agency, within 14 days of determining that it would undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead

agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement would be made.

The County of Mariposa has received written correspondence from the North Fork Mono Tribe, the North Fork Rancheria of Mono, the Picayune Rancheria of Chukchansi, and the Southern Sierra Miwuk Nation pursuant to AB 52 requesting notification of proposed projects.

In addition, a search of the SLF by the NAHC was completed for the Project. The results of the search indicated that no known sacred sites or tribal cultural resources were located within the Project area. On July 31, 2024, Mariposa County sent outreach letters pursuant to AB 52 via certified mail to the tribes listed on the NAHC contact list in an effort to obtain additional information on Tribal Cultural Resources. The list of the 12 tribes that were sent consultation letters is provided in Table 4-26 below. The Southern Sierra Miwuk Nation (SSMN) has knowledge of tribal cultural resources within portions of the Project area and requested to review the Cultural Report which was sent to them June 5, 2025. In summary, the SSMN had concerns regarding three sensitive cultural resources within the Project area; however, additional research and review of the current design plans confirm that all three cultural sites are not within the project improvement areas.

On July 29, 2025, SSMN concurred with the recommendations made in the Cultural Report by ASM Affiliates.

- *Since the location of site P-22-001393 could not be accessed due to vegetation overgrowth to confirm its presence or absence, it is recommended that the recorded site location be avoided and preserved in place.*
- *If avoidance is not possible, it is recommended that a qualified archaeologist and SSMN Tribal Monitor, monitor vegetation clearing in the area and update the site if it is identified. If the site cannot be avoided, it is recommended the site be subject to a formal evaluation for eligibility to the California Register of Historical Resources (CRHR).*
- *It is recommended that MARIPOSA-SITE-1 be avoided and preserved in place. If avoidance by project design is not possible, it is recommended that the site be subject to a formal evaluation for eligibility to the California Register of Historical Resources (CRHR). If construction is to occur, SSMN recommends a Tribal Monitor be on-site.*
- *MARIPOSA-SITE-2 is recommended as not eligible for inclusion in the CRHR due to a lack of integrity and research potential. Any development or use of the site locations will not have an adverse effect on significant or unique historical resources. If construction is to occur, SSMN recommends a Tribal Monitor be on-site.*
- *With the avoidance of sites P-22-001393 and MARIPOSA-SITE-1, any proposed future use or development within the study area does not have the potential to result in adverse impacts to unique or significant historical resources. A determination of no significant impacts for cultural resources is therefore recommended. It is further recommended that, in the unlikely event that cultural resources are encountered during any construction or use of the study area, a qualified archaeologist be contacted to assess the discovery.*

If artifact discovery occurs, artifacts are to remain secured on-site, until repatriation can occur at a location, determined by the Tribe, within the Project area. See CUL-1 and CUL-2 below.

Table 4-26: Tribal Outreach Pursuant to AB 52

Tribe	Name of Tribal Contact
Chicken Ranch	Lloyd Matheson
Nashville Enterprise Miwok-Maidu-Nishinam	Cosme Valdez
North Fork Rancheria of Mono Indians	Elaine Fink
Picayune Rancheria of the Chukchansi Indians	Heather Airey
Picayune Rancheria of the Chukchansi Indians	Claudia Gonzales
Southern Sierra Miwuk Nation	Sandra Chapman
Tule River Indian Tribe	Joey Garfield
Tule River Indian Tribe	Tribal Archaeologist
Tule River Indian Tribe	Kerri Vera
Tuolumne Band of Me-Wuk Indians	Andrea Reich
Tuolumne Band of Me-Wuk Indians	Stanley Cox
Wuksachi Indian Tribe/ Eshom Valley Band	Kenneth Woodrow

4.18.2 IMPACT ASESSMENT

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, or in the local register of historical resources as defined in Public Resources Code section 5020.1(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.

a-i – a-ii) Less than Significant Impact with Mitigation Incorporated. A search of the NAHC Sacred Lands File was completed for the Project APE. Results of this file search were negative, and no tribal cultural resources were identified in the Project APE. A records search was also conducted at the SSJVIC, California State University, Bakersfield. The search results determined that tribal cultural resources were not discovered. The three cultural resources identified by the cultural report within the Project APE will be completely avoided as they are not located within the Project improvement areas for recreational trail design construction and components. The SSMN tribe concurred that if the sites can be completely avoided and preserved in lace that no further mitigation is required. Mitigation measures **CUL-1** and **CUL-2,** described in **Section 4.5.3** are recommended in the event cultural materials or human remains are unearthed during excavation or construction.

4.18.3 MITIGATION

See **CUL-1** and **CUL-2** in Section 4.5.3.

4.19 UTILITIES AND SERVICE SYSTEMS

Table 4-27: Utilities and Service Systems Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the 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?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

4.19.1 BASELINE CONDITIONS

Wastewater collection and potable water within most of the County is provided primarily by on-site means or small, private communal systems. A portion of the Project is within the boundaries of the MPUD. MPUD provides water and wastewater services through a community system. The Mariposa County Department of Public Works provides solid waste services for lands within the County, including the Project area. Electrical and telecommunications services are limited throughout the County.

4.19.2 IMPACT ANALYSIS

a) Would the project 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. A restroom would be constructed along the trail. This restroom would connect to an on-site septic system that would also be built along with the restroom facility. Consistent with requirements of the Mariposa County Environmental Health Unit, the septic system would be designed in accordance with the soil characteristics and topography of the area in order to manage any wastewater produced, utilizing a septic leach field to allow the wastewater to be distributed into the surrounding soil. The system would be located a safe distance from drinking water sources to avoid potential contamination. It would also be installed well above the groundwater table to ensure that no contamination threats exist. Wastewater production as a result of the restroom would be negligible due

to the limited and periodic use of the septic system by trail users. While there would need to be construction of a wastewater facility (i.e., the septic tank system), adherence to applicable regulations and industry BMPs for installation would ensure that impacts remain less than significant.

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

Less than Significant Impact. The Project would not require substantial water. Project operations would be passive in nature and would not use any water. During construction, water may be used for dust control purposes; however, construction would be temporary. Therefore, impacts would be less than significant.

c) Would the project 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?

No Impact. As mentioned, the Project would include a restroom and on-site septic system that would also be built along with the restroom facility. The Project's septic system would not connect to MPUD's system and therefore would not result in any impacts to the system. There would be no impact.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

d and e) Less than Significant Impact. During construction, waste would be limited to debris from construction products. Post-construction, it is expected that recreational users would generate a minor amount of additional solid waste. Solid waste bins would be installed along the trails. Regular solid waste removal from the Project area would be added to Mariposa County's regular maintenance schedule. Due to the minor amount of solid waste anticipated to be generated, the Project would result in a less than significant impact.

4.20 WILDFIRE

Table 4-28: Wildfire Impacts

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrollable spread of 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?	☐	☒	☐	☐

4.20.1 BASELINE CONDITIONS

The Project area is served by both the Mariposa County Fire Department and the California Department of Forestry and Fire Protection (CAL FIRE) for its fire protection needs. The Project area also receives fire protection from CAL FIRE due to its designation as a State Responsibility Area (SRA).[25] CAL FIRE has the primary financial responsibility for the prevention and suppression of wildland fires within lands that have been determined to be an SRA. SRAs are categorized into three fire hazard levels: moderate, high, and very high. According to CAL FIRE, the Project area is not located in a very high fire hazard severity zone, but it is located in high and moderate fire hazard severity zones.[26] According to CAL FIRE, Mariposa County has a rural and natural setting, with mountainous and forested features that are suitable for wildfires. "In many areas, particularly the settled areas of the county, this natural regime has been significantly altered by human and forest health impacts, such as insect outbreaks and drought-induced tree mortality contributing to more aggressive and harder to control wildfires near human development."[27]

4.20.2 IMPACT ANALYSIS

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and

[25] (California Department of Forestry and Fire Protection 2022)
[26] (ArcGIS n.d.)
[27] (WRT et al. 2019)

thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?

a – d) Less than Significant Impact with Mitigation Incorporated. Although the Project is not located in a very high fire hazard severity zone, the Project area and its surroundings contain lands that are classified as high fire hazard severity zone. The surrounding vegetation, in close proximity to commercial and residential buildings, provides a fuel source for wildland fires. Due to the location of the Project, wildfire mitigation will be provided in an abundance of caution. Any potential impacts associated with construction and implementation of the new facilities would be considered less than significant with the implementation of WLD-1 and WLD-2 mitigation measures described below.

4.20.3 MITIGATION MEASURES

WLD-1 (Defensible Space). Pre-wildfire mitigation measures focus on the maintenance of defensible space and fire-focused landscaping for the life of the project, and may include:

a) Highly flammable vegetation near the Project will be maintained to reduce fire fuel, as appropriate.

b) Dispose of debris, such as dry debris, leaves, and dead limbs near and within the Project.

c) Design defensible spaces with fire breaks around the Project, as appropriate.

WLD-2 (Water Source). Adequate on-site water sources will be made available during high fire risk construction activities and will include, but not limited to, water truck, water backpacks, and/or fire extinguishers.

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

Table 4-29: CEQA Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

4.21.1 STATEMENT OF FINDINGS

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 Incorporated. The analysis conducted in this IS/MND results in a determination that the Project, with incorporation of mitigation measures, would have a less than significant effect on the environment. The potential for impacts to aesthetics, biological resources, cultural resources, noise, tribal cultural resources, and wildfire from the construction and operation of the Project would be less than significant with the incorporation of the mitigation measures discussed in Chapter 5 Mitigation, Monitoring, and Reporting Program. Accordingly, the Project would involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or example of a major period 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 considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact with Mitigation Incorporated. CEQA Guidelines Section 15064(i) States that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the

effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The Project includes the construction of a trail system and ancillary amenities along the hillside adjacent to the Mariposa Creek Parkway. No additional vehicular roads or habitable structures would be constructed as a result of the Project. The Project is not expected to result in direct or indirect population growth. Therefore, implementation of the Project would not result in significant cumulative impacts and all potential impacts would be reduced to less than significant through the implementation of mitigation measures and basic regulatory requirements incorporated into future Project design.

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 includes the construction of a trail system and ancillary amenities along the hillside adjacent to the Mariposa Creek Parkway. The Project in and of itself would not create a significant hazard to the public or the environment. Construction related impacts could occur temporarily as a result of Project construction. However, implementation of basic regulatory requirements identified in this IS/MND would ensure that impacts are less than significant. Therefore, the Project would not have any direct or indirect adverse impacts on humans. This impact would be less than significant.

5 MITIGATION, MONITORING, AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Project in Mariposa County. The MMRP table lists mitigation measures recommended in the IS/MND for the Project and identifies monitoring and reporting requirements.

Table 5-1: Mitigation, Monitoring, and Reporting Program presents the mitigation measures identified for the Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of Table 5-1: Mitigation, Monitoring, and Reporting Program identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the Lead and Responsible Agencies to ensure that individual mitigation measures have been complied with and monitored.

Table 5-1: Mitigation, Monitoring, and Reporting Program

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Aesthetics						
AES-1	All outdoor lighting shall adhere to International Dark Sky Association standards, including the requirement that all outdoor lighting shall be hooded or screened as to direct the source of light downward and focus onto the property from which it originates and shall not negatively impact adjacent properties or directly reflect upon any adjacent properties. A lighting plan shall be submitted to Mariposa Planning prior to the issuance of grading or construction permits for the project.	During construction activities	Once, near project completion	Mariposa County Planning Department		
Biological Resources						
General Project-Related Impacts						
BIO-1	**(*WEAP Training*):** Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations	Prior to the start of any construction activities	As needed for any new construction personnel during construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the Project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them. These signed forms shall be provided to the Mariposa County Planning Department prior to initiation of construction activities.					
BIO-2	**(*BMPs*):** The Project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species: • Vehicles will observe a 15-mph speed limit while on unpaved access routes. • All open trenches, holes, sumps, and other excavations greater than 6-inches with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped/ • Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits or relevant experience) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a state or	During Construction Activities	Daily	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or state take permit. • The presence of any special status species will be reported to the Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.					
Project-Related Impacts to Special Status Plant Species						
BIO-3	The presence of any special status species will be reported to the Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS. These signed forms shall be provided to the Mariposa County Planning Department prior to initiation of construction activities.					
BIO-4	**(*Pre-Construction Survey*):** Prior to Project activities occurring onsite, a qualified botanist/biologist will conduct focused botanical surveys during the appropriate blooming seasons. At a minimum three (3) surveys will be conducted, each at least one (1) month apart, across the blooming periods for beaked clarkia (April – May), big-scale balsamroot (March – July), Congdon's lomatium (March – June), Congdon's woolly sunflower (March – June), grassland suncup (April – June), Madera leptosiphon (April – May), Mariposa clarkia (May – June), Mariposa cryptantha (April – June), Mariposa daisy (June – August), Mariposa lupine (April – May), Mariposa pussypaws (April – May), Parry's horkelia (April – September), shaggyhair lupine (April – May), slender-stalked monkeyflower (April	Prior to construction activities	Once, as determined by qualified biologist during construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	– May), and yellow-lip pansy monkeyflower (April – July) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.					
BIO-5	**(*Avoidance*):** If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area so as not to disturb the plants or its root system. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Prior to construction activities	Once, as determined by qualified biologist during construction activities	Mariposa County Planning Department		
BIO-6	**(*Formal Consultation*):** If rare plant individuals or populations are detected within Project work areas during the focused botanical surveys, and the plants cannot be avoided, the Project proponent will initiate consultation with CNPS (for CNPS-ranked species), CDFW (for California proposed, threatened, or endangered species), and/or USFWS (for threatened or endangered species) to determine next steps for salvage and relocation. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Prior to construction activities	Once, as determined by qualified biologist during construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds						
BIO-7	**(*Avoidance*):** The Project's construction activities will occur, if feasible, between August 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.	August 16 to January 31	Once, as determined by qualified biologist during construction activities	Mariposa County Planning Department		
BIO-8	**(*Pre-construction Surveys*):** If activities must occur within the nesting bird season (February 1 to August 15), a qualified biologist (someone able to identify these species) will conduct a pre-construction survey for active nests within seven (7) calendar days prior to the start of construction. It will be completed within the site, and up to 100 feet outside of the site for nesting migratory birds and up to 500 feet outside of the site for nesting raptors. Raptor nests are considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
BIO-9	***(Avoidance Buffers)*:** On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	provided to the Mariposa County Planning Department prior to commencement of any construction activities.					
Project-Related Mortality and/or Disturbance to California Red-Legged Frog						
BIO-10	***(Pre-construction Take Avoidance Surveys)*:** A qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction take avoidance survey for CRLF within seven (7) days of construction in accordance with the Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog (USFWS 2005) or current guidance for CRLF to determine if CRLF are within or adjacent (within 100 feet) to the creek habitat. This survey will be completed when adult frogs are most likely to be detected at night between January 1 and June 30. If construction activities will begin outside of this timeframe two surveys will be required, one between January 1 and June 30 and the second survey within seven (7) days prior to construction activities within or adjacent (within 100 feet) of the creek habitat. If no CRLFs are found during the pre-construction survey(s) work may commence without further surveys. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Within seven (7) days of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
BIO-11	**(*Monitor*):** If CRLF are observed during the surveys or during construction, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within or adjacent (within 100 feet) of the creek habitat. The results of any surveys and mitigation measures employed to reduce impacts on species to less than	Upon discovery of CRLF	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.					
BIO-12	**(*FYLF Take Authorization*):** If avoidance is not feasible the Project will consult with the USFWS to acquire take permits for CRLF prior to any Project activities. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	During construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
Project-Related Mortality and/or Disturbance to Crotch's Bumble Bee						
BIO-13	**(*Flying Bumble Bee and Nest Surveys*):** A qualified biologist (someone who is familiar with and can identify bumble bees) will conduct three flying bumble bee and nest surveys during the peak flying periods (April, May to June, and July) prior to initial ground disturbing activities within or adjacent (within 100 feet) of the creek habitat. The biologist will walk throughout the creek habitat onsite and up to 100 feet outside of the creek habitat during the optimal time of the day to inspect for bumble bees and any nests. If an individual is observed, it will be followed until it can be determined if a nest is present within the survey boundary. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
BIO-14	***(Identification and Protection Plan)*:** Bumble bee individuals need to be captured to be identified. If a bumble bee nest is observed, no Project activities will occur within 50 feet of the nest until a plan to identify the species using the nest and protect nesting and overwintering Crotch's bumble bee has been submitted to CDFW and approved in writing	During construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	by CDFW. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.					
Project-Related Mortality and/or Disturbance to Monarch Butterfly						
BIO-15	**(*Avoidance*):** Vegetation removal will not occur during the monarch breeding season (February 1 to August 31.	During construction activities	During construction activities	Mariposa County Planning Department		
BIO-16	**(*Pre-construction Surveys*):** If vegetation removal will occur during the breeding season (February 1 to August 31) a pre-construction survey of the BSA will be conducted by a qualified biologist (someone who can identify the species and is familiar with the species' host plants) within 15 days prior to construction activities to determine if milkweeds (*Asclepias* spp.) plants are located within the site. If no milkweed plants are observed, no further mitigation is required. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	During construction activities	During construction activities	Mariposa County Planning Department		
BIO-17	**(*Buffers*):** If milkweeds are observed within the BSA during the breeding season (February 1 to August 31), an avoidance buffer will be placed around the area as to not to disturb the plant or its root system. The buffer will be left in place until a qualified biologist has determined the buffers are no longer warranted. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	During construction activities	During construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
BIO-18	**(*Monarch Egg and Larvae Survey*):** If milkweeds are observed within the BSA during the breeding season (February 1 to August 31) and cannot be avoided, a qualified biologist will conduct a monarch egg and larvae survey to look for eggs and larvae on milkweeds within seven (7) days prior to their removal. If no eggs or larvae are observed the milkweed plants can be removed under the supervision of a qualified biologist and will be replanted at a 3:1 ratio. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	During construction activities	During construction activities	Mariposa County Planning Department		
BIO-19	**(*Consultation with USFWS if Listed*):** In the event a milkweed plant with monarch eggs or larvae is detected during the pre-construction survey and cannot be avoided and this species is listed under the ESA prior to this observation, consultation with USFWS will be completed to avoid take. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	During the pre-construction survey	Once	Mariposa County Planning Department		
Project-Related Mortality and/or Disturbance of Maternity Roosting Bats and Special Status Bats						
BIO-20	**(*Pre-Construction Survey*):** A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction survey for cavities and if needed, and emergence survey, within 7 days or less prior to construction if construction activities fall between March 1 and September 30 (bat maternity season) and/or November 1 through February 28 (overwintering season). This survey would help identify current bat	Within seven (7) days of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	roosting locations in trees or cavities within or near the Project site prior to the start of construction.					
BIO-21	**(*Establish Buffers*):** On discovery of any bat roosts near work areas a qualified biologist will determine appropriate construction setback distances (buffer zones) based on the biology of the species, conditions of the roost(s), and the level of Project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Upon discovery of bat roosts	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
BIO-22	**(*Avoidance*):** Project activities are not to occur within 100 feet of the identified maternity bat roost between sunset and sunrise during maternity season from March 1 through September 30 and the special status species overwintering bat roost from November 1 through February 28. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or adjacent to the roost.	During construction activities	During construction activities	Mariposa County Planning Department		
BIO-23	**(*Disturbance to Trees*):** If a tree or trees must be removed a qualified biologist will inspect the tree prior to removal to verify that the tree is not active roosting habitat. Once the tree is deemed clear of bats, the tree will be removed within two days. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa	During construction activities	During construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	County Planning Department prior to commencement of any construction activities.					
Project-Related Mortality and/or Disturbance to Foothill Yellow-Legged Frog						
BIO-24	**(*Pre-construction Take Avoidance Survey*):** A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (California Department of Fish and Wildlife 2018), or current guidance for FYLF to determine if FYLF are within or adjacent (within 100 feet) of the creek habitat. If no FYLFs are found during the pre-construction survey and no surface water is present in the creeks, work may commence without further surveys.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
BIO-25	***(FYLF Consultation and Avoidance)*:** If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Upon discovery of FYLF	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
BIO-26	**(*Monitor*):** If FYLF have been observed during preconstruction surveys or at any time during construction and ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction	Upon discovery of FYLF	Once, as determined by qualified biologist prior to	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within FYLF habitat. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.		construction activities			
BIO-27	**(*FYLF Take Authorization*):** If avoidance is not feasible the Project will consult with the USFWS and CDFW to acquire take permits for FYLF prior to any Project activities. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	During construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
Project-Related Mortality and/or Disturbance to Hardhead						
BIO-28	**(*Avoidance*):** If possible, construction activities will not occur in or within 50 feet of Mariposa Creek or the unnamed creek when water is present.	During construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
BIO-29	**(*Pre-construction Survey*):** If construction activities must occur in or within 50 feet of the waterways when water is present a pre-construction survey will be conducted by a qualified biologist (someone who is familiar with and can identify fish species) to look for hardhead and other special status fish species that may be present in Mariposa Creek or the unnamed creek. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	provided to the Mariposa County Planning Department prior to commencement of any construction activities.					
BIO-30	**(*Formal Consultation*):** If hardhead or other special status fish species are observed within Mariposa Creek or the unnamed creek and cannot be avoided the Project proponent will initiate consultation with the National Marine Fisheries Service and/or CDFW to determine any additional mitigation and minimization measures to avoid impacts to special status fish within the creeks. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Upon discovery of hardhead	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		
Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle						
BIO-31	**(*Pre-construction Survey and Avoidance Buffers*):** Within seven (7) days prior to the start of construction, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction survey for northwestern pond turtle within the creek habitat and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion* (United States Geological Survey 2006), or current guidance. If no northwestern pond turtles are observed during the pre-construction survey, then construction activities may begin. If the surveys results in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own or a qualified biologist (must possess appropriate collecting/handling permits or relevant	Within seven (7) days prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	experience) will stop work and relocate the individual. The qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s). The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.					
BIO-32	**(*Monitor*):** If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities until the individual(s) have left the site. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	During construction activities	Daily, during construction activities	Mariposa County Planning Department		
BIO-33	**(*Formal Consultation*):** Should northwestern pond turtles get listed by the ESA in this area and the Project/qualified biologist needs to move an individual, consultation for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Prior to the start of construction activities	Once, Prior to ground disturbing activities and the start of construction	Mariposa County Planning Department		
Project-Related Impacts to Riparian Habitat and Natural Communities of Special Concern						
BIO-34	**(*Analysis for Revegetation*):** If trees are to be removed during Project activities a qualified biologist will complete an analysis on the number of trees and impacts to the habitat to determine if	During construction activities	During construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	a habitat restoration and revegetation plan (HRRP) will be needed.					
BIO-35	**(*HRRP*):** If determined by the qualified biologist's analysis an HRRP is required, one will be developed for the Project. Upon completion of the Project, all vegetation impacted by permanent and temporary impacts, including trails, staging areas, temporary roads, and borrow sites, will be recontoured if necessary and revegetated to promote restoration of the area to pre-Project conditions. The HRRP will detail the process or processes to be implemented to restore the target areas and replant vegetation removed during the Project and will include the following Project-specific information, at a minimum: • summary of habitat impacts and proposed habitat restoration actions; • location of the restoration sites and existing site conditions; • restoration design, including a proposed restoration site schedule and descriptions of existing and proposed soils and hydrology; • site preparation requirements (including soil amendments, if required); • invasive species eradication plan if applicable, planting plan, and maintenance plan; • monitoring measures, with performance and success criteria; • monitoring methods, duration, and schedule; and • contingency measures and remedial actions. The results of any surveys and mitigation measures employed to reduce impacts on species to less than	Prior to the start of construction activities	Once, Prior to ground disturbing activities and the start of construction	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.					
Project-Related Impacts to Regulated Waters, Wetlands, and Water Quality						
BIO-36	**(*Permits*):** If the Project intends to impact potentially jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with state and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation. The results of any surveys and mitigation measures employed to reduce impacts on species to less than significant levels shall be provided to the Mariposa County Planning Department prior to commencement of any construction activities.	Prior to the start of construction activities	Once, Prior to ground disturbing activities and the start of construction	Mariposa County Planning Department		
Cultural Resources						
CUL-1	(Archaeological Remains): Should archaeological remains or artifacts be unearthed during any stage of project activities, work in the area of discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist.	During construction activities upon discovery of archaeological remains in the work areas.	Daily, upon discovery of archaeological remains in the work areas	Mariposa County Planning Department		
CUL-2	(Human Remains): In the event human remains, artifacts, or potentially significant cultural resources are discovered during ground disturbance on the project site, a Native American monitor shall be on-site for the duration of ground disturbance. During any construction activity that involves ground disturbance, if any signs of prehistoric, historic, archaeological, paleontological resources are evident, all work activity within fifty feet of the find shall stop and the Mariposa County Planning Department shall be notified immediately. No work	During construction activities upon discovery of human remains in the work areas.	Daily, upon discovery of human remains in the work areas.	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	shall be done within fifty feet of the find until Planning has identified appropriate measures to protect the find and those measures have been implemented by the project proponent. Protection measures for the site may include, but not be limited to, requiring the project proponent to hire a qualified archaeologist who shall conduct necessary inspections and research, and who may supervise all further ground disturbance activities and make any such recommendations as necessary to ensure compliance with applicable regulations. In addition to the Planning Department, the Mariposa County Coroner and the Native American Heritage Commission shall be notified should human remains be discovered. If the remains are determined by the Native American Heritage Commission to be Native American, the NAHC guidelines shall be adhered to in treatment and disposition of the remains. Representatives of the Most Likely Descendant shall be requested to be on-site during disturbance and/or removal of human remains.					
			Noise			
NOI-1	The construction contractor shall ensure that all noise producing construction activities, including warming-up or servicing equipment and any preparation for construction, shall not commence prior to the hours of 7:00am Monday through Friday, and 8:00am on Saturdays. All construction activities shall cease by sunset Monday through Saturday. No construction shall occur on Sundays. Any deviation from the construction hours shall require Planning Department consideration and approval. The construction contractor shall locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise sensitive receptors nearest the project site during construction.	During construction activities	Daily, during construction activities	Mariposa County Planning Department		

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
NOI-2	The construction contractor shall ensure that all equipment will have sound control devices that are no less effective than those provided on the original equipment. Further, pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof. In lieu of or in the absence of manufacturers' recommendations, the Director of Public Works shall have the authority to prescribe such means of accomplishing maximum noise attenuation as deemed to be in the public interest, considering the available technology and economic feasibility.	During construction activities	Daily, during construction activities	Mariposa County Planning Department		
NOI-3	The County shall ensure by inclusion in any work agreement with contractors that equipment and trucks used for construction of the Project utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).	During construction activities	Daily, during construction activities	Mariposa County Planning Department		
NOI-4	The County shall ensure by inclusion in any work agreement with contractors that impact equipment (e.g., jack hammers, etc.) used for construction of the Project be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.	During construction activities	Daily, during construction activities	Mariposa County Planning Department		
Tribal Cultural Resources						
See **CUL-1** and **CUL-2** in Section 4.5.3.						
Wildfire						

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
WLD-1	(Defensible Space). Pre-wildfire mitigation measures focus on the maintenance of defensible space and fire-focused landscaping for the life of the project, and may include: a. Highly flammable vegetation near the Project will be maintained to reduce fire fuel, as appropriate. b. Dispose of debris, such as dry debris, leaves, and dead limbs near and within the Project. c. Design defensible spaces with fire breaks around the Project, as appropriate.	During construction activities	Daily, during construction activities	Mariposa County Planning Department		
WLD-2	(Water Source). Adequate on-site water sources will be made available during high fire risk construction activities and will include, but not limited to, water truck, water backpacks, and/or fire extinguishers	During construction activities	Daily, during construction activities	Mariposa County Planning Department		

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1.1. Basic Project Information

Data Field	Value
Project Name	Mariposa Creek Parkway Phase III Hillside Trails
Construction Start Date	5/4/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	18.2
Location	37.481298887482765, -119.9709736101359
County	Mariposa
City	Unincorporated
Air District	Mariposa County APCD
Air Basin	Mountain Counties
TAZ	3020
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	17.9	Acre	17.9	0.00	0.00	—	—	—

Other Non-Asphalt Surfaces	15.0	1000sqft	0.34	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.89	3.28	29.3	30.2	0.06	1.24	7.80	9.05	1.14	3.97	5.12	—	6,783	6,783	0.28	0.06	0.72	6,808
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.92	0.77	6.71	7.05	0.01	0.28	1.15	1.43	0.26	0.50	0.76	—	1,552	1,552	0.06	0.01	0.07	1,558
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.17	0.14	1.22	1.29	< 0.005	0.05	0.21	0.26	0.05	0.09	0.14	—	257	257	0.01	< 0.005	0.01	258

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.89	3.28	29.3	30.2	0.06	1.24	7.80	9.05	1.14	3.97	5.12	—	6,783	6,783	0.28	0.06	0.72	6,808

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.92	0.77	6.71	7.05	0.01	0.28	1.15	1.43	0.26	0.50	0.76	—	1,552	1,552	0.06	0.01	0.07	1,558
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.17	0.14	1.22	1.29	< 0.005	0.05	0.21	0.26	0.05	0.09	0.14	—	257	257	0.01	< 0.005	0.01	258

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.23	0.19	1.76	1.74	< 0.005	0.07	—	0.07	0.07	—	0.07	—	319	319	0.01	< 0.005	—	320
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.32	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.9	52.9	< 0.005	< 0.005	—	53.0
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.09	1.42	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	161	161	0.01	0.01	0.63	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.03	9.03	< 0.005	< 0.005	0.02	9.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.55	4.92	4.99	0.01	0.20	—	0.20	0.19	—	0.19	—	1,193	1,193	0.05	0.01	—	1,197
Dust From Material Movement	—	—	—	—	—	—	0.65	0.65	—	0.26	0.26	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.90	0.91	< 0.005	0.04	—	0.04	0.03	—	0.03	—	198	198	0.01	< 0.005	—	198
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.10	1.63	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	184	184	0.01	0.01	0.72	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.25	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.0	31.0	< 0.005	< 0.005	0.06	31.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	5/4/2026	6/2/2026	5.00	22.0	—
Grading	Grading	6/3/2026	9/2/2026	5.00	66.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.2	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.01	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.2	LDA,LDT1,LDT2
Grading	Vendor	—	9.01	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	33.0	0.00	—

Grading	—	—	198	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	17.9	0%
Other Non-Asphalt Surfaces	0.34	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	31.3	annual days of extreme heat
Extreme Precipitation	11.4	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	28.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	75.1
AQ-PM	36.6
AQ-DPM	0.81
Drinking Water	62.0
Lead Risk Housing	25.6
Pesticides	2.14
Toxic Releases	3.04
Traffic	0.34
Effect Indicators	—
CleanUp Sites	37.6
Groundwater	80.6
Haz Waste Facilities/Generators	50.1
Impaired Water Bodies	33.2
Solid Waste	98.5
Sensitive Population	—
Asthma	57.8
Cardio-vascular	95.1
Low Birth Weights	50.5
Socioeconomic Factor Indicators	—
Education	36.6
Housing	64.8
Linguistic	13.3
Poverty	74.3
Unemployment	83.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	38.79122289
Employed	49.83959964
Median HI	20.18478121
Education	—
Bachelor's or higher	41.92223791
High school enrollment	2.527909663
Preschool enrollment	7.686385218
Transportation	—
Auto Access	48.80020531
Active commuting	51.18696266
Social	—
2-parent households	11.84396253
Voting	93.5711536
Neighborhood	—
Alcohol availability	74.13063005
Park access	19.3763634
Retail density	2.643397921
Supermarket access	37.0973951
Tree canopy	97.20261773
Housing	—
Homeownership	55.61401258
Housing habitability	64.7760811
Low-inc homeowner severe housing cost burden	61.76055434
Low-inc renter severe housing cost burden	30.70704478

Uncrowded housing	76.50455537
Health Outcomes	—
Insured adults	38.36776594
Arthritis	0.0
Asthma ER Admissions	64.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	78.1
Cognitively Disabled	80.8
Physically Disabled	15.4
Heart Attack ER Admissions	34.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	60.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	15.4
SLR Inundation Area	0.0

Children	64.0
Elderly	2.4
English Speaking	62.4
Foreign-born	6.8
Outdoor Workers	42.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	95.0
Traffic Density	1.1
Traffic Access	0.0
Other Indices	—
Hardship	71.5
Other Decision Support	—
2016 Voting	84.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	56.0
Healthy Places Index Score for Project Location (b)	29.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	No buildings, demolition, or paving. Based on anticipated construction schedule.

Appendix B – Biological Evaluation

MARIPOSA COUNTY PLANNING DEPARTMENT

MARIPOSA HILLSIDE TRAILS PROJECT BIOLOGICAL EVALUATION

MARIPOSA COUNTY
MAY 2025

PREPARED FOR:
Mariposa County Planning Department
Mariposa County

PREPARED BY:
PROVOST & PRITCHARD CONSULTING GROUP
455 W. FIR AVE, CLOVIS, CALIFORNIA 93612

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ACRONYMS AND ABBREVIATIONS

BMP ..... Best Management Practices
CRLF ..... California red-legged frog
CDFW..... California Department of Fish and Wildlife
CDP… ..... Census-Designated Place
CEQA ..... California Environmental Quality Act
CNDDB..... California Natural Diversity Database
CNPS..... California Native Plant Society
County..... Mariposa County
EPA ..... Environmental Protection Agency
FYLF ..... Foothill Yellow-legged Frogs
°F..... degrees Fahrenheit
HCP ..... Habitat Conservation Plan
HRRP..... Habitat Restoration and Revegetation Plan
IPaC ..... United States Fish and Wildlife Service's Information for Planning and Consultation system
MBTA..... Migratory Bird Treaty Act
NCCP..... Natural Community Conservation Plan
NEPA..... National Environmental Policy Act
NPDES..... National Pollutant Discharge Elimination System
NRCS..... Natural Resources Conservation Service
Project..... Mariposa Creek Parkway Phase III: Hillside Trails Project
Provost & Pritchard..... Provost & Pritchard Consulting Group
RWQCB..... Regional Water Quality Control Board
SWPPP..... Storm Water Pollution Prevention Plan
USACE..... United States Army Corps of Engineers
USC ..... United States Code
USFWS..... United States Fish and Wildlife Service
USGS..... United States Geological Survey

1 INTRODUCTION

This Biological Evaluation, prepared by Provost & Pritchard Consulting Group (Provost & Pritchard) in compliance with the California Environmental Quality Act (CEQA) includes descriptions of the biological resources present or with potential to occur within the Mariposa Creek Parkway Phase III: Hillside Trails Project (or "Project"), potential Project-related impacts to those resources, and mitigation measures to reduce these impacts to a less-than-significant level under CEQA.

1.1 PROJECT DESCRIPTION

The Project site (or "site") is located in the Sierra Nevada Mountain Range northeast of the City of Merced and south/southwest of the unincorporated community and census-designated place (CDP) of Mariposa in the middle portion of Mariposa County, California (see Figure 1).

The Hillside Trails Project proposes to construct approximately 12.3 miles of nature trails branching off the planned Phase III section of the Mariposa Creek Parkway Trail. The total Project site consists of approximately 235 acres (see Figure 3). While included in this report, not all 235 acres will be impacted by the Project. Trail widths would vary from three to eight feet. The intent of the proposed Project is to increase recreational opportunities in the area and encourage the use of the new designated trails. The new trails would be divided into four different segments based on their location and intended purpose.

1.2 REPORT OBJECTIVES

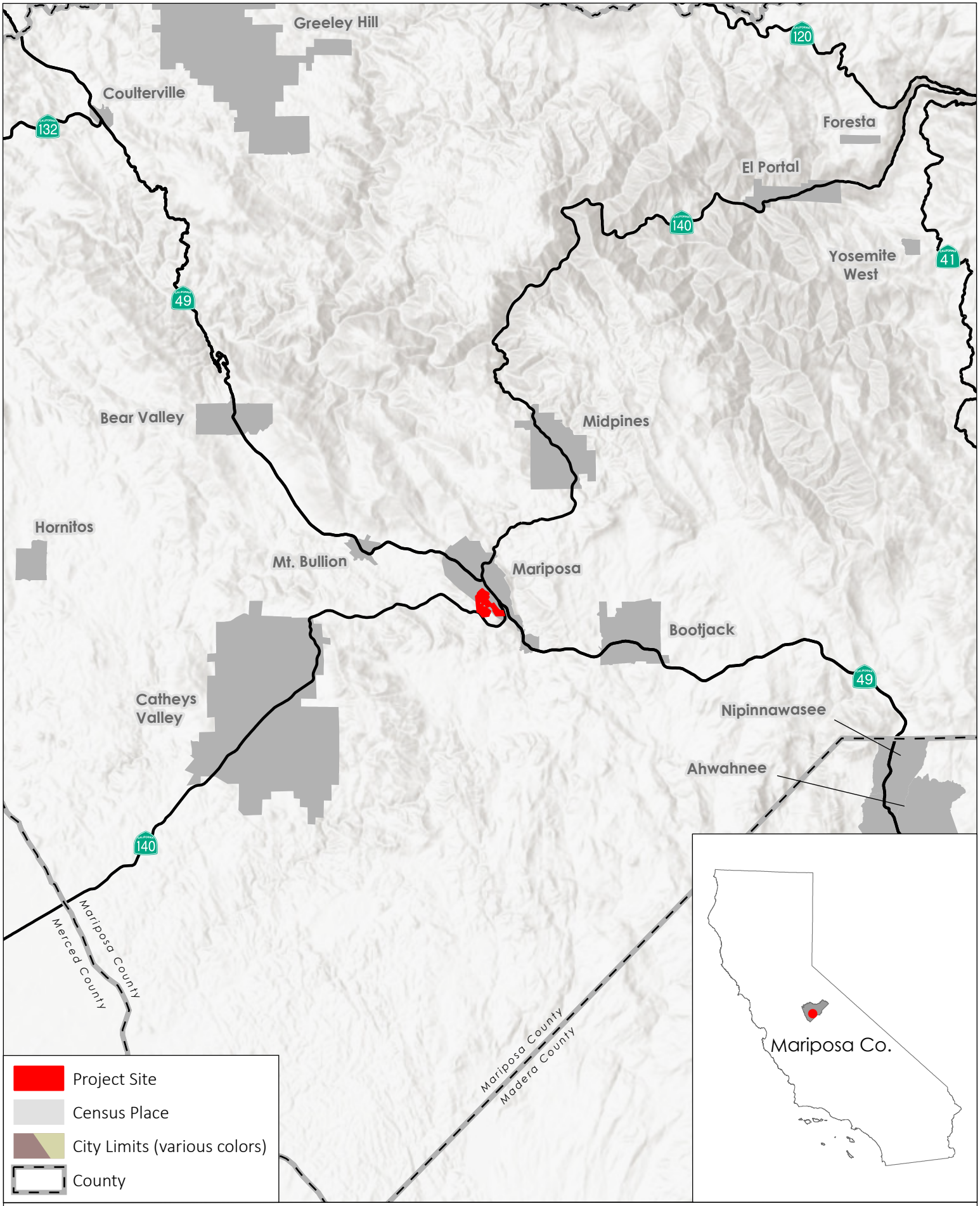
Construction activities such as those proposed by the Project could potentially change biological resources or habitats that are critical for sensitive plant and wildlife species. In cases such as these, development may be regulated by State or federal agencies, and/or addressed by local regulatory agencies.

This report addresses issues related to the following:

- The presence of sensitive biological resources within the site, or those with the potential to occur within the site.
- The federal, State, and local regulations regarding these resources.
- Mitigation measures that may be required to reduce the magnitude of anticipated impacts and/or comply with permit requirements of State and federal resource agencies.

Therefore, the objectives of this report are to:

- Summarize all site - specific information related to existing biological resources.
- Make reasonable inferences about the biological resources that could occur on the site based on habitat suitability and the proximity of the site to a species' known range.
- Summarize all state and federal natural resource protection laws that may be relevant to implementation of the project.
- Identify and discuss project impacts to biological resources likely to occur onsite within the context of CEQA and/or state or federal laws.
- Identify and prescribe a set of avoidance and minimization measures that would reduce impacts to a less-than-significant level (as identified by CEQA) and are generally consistent with recommendations of the resource agencies for affected biological resources.

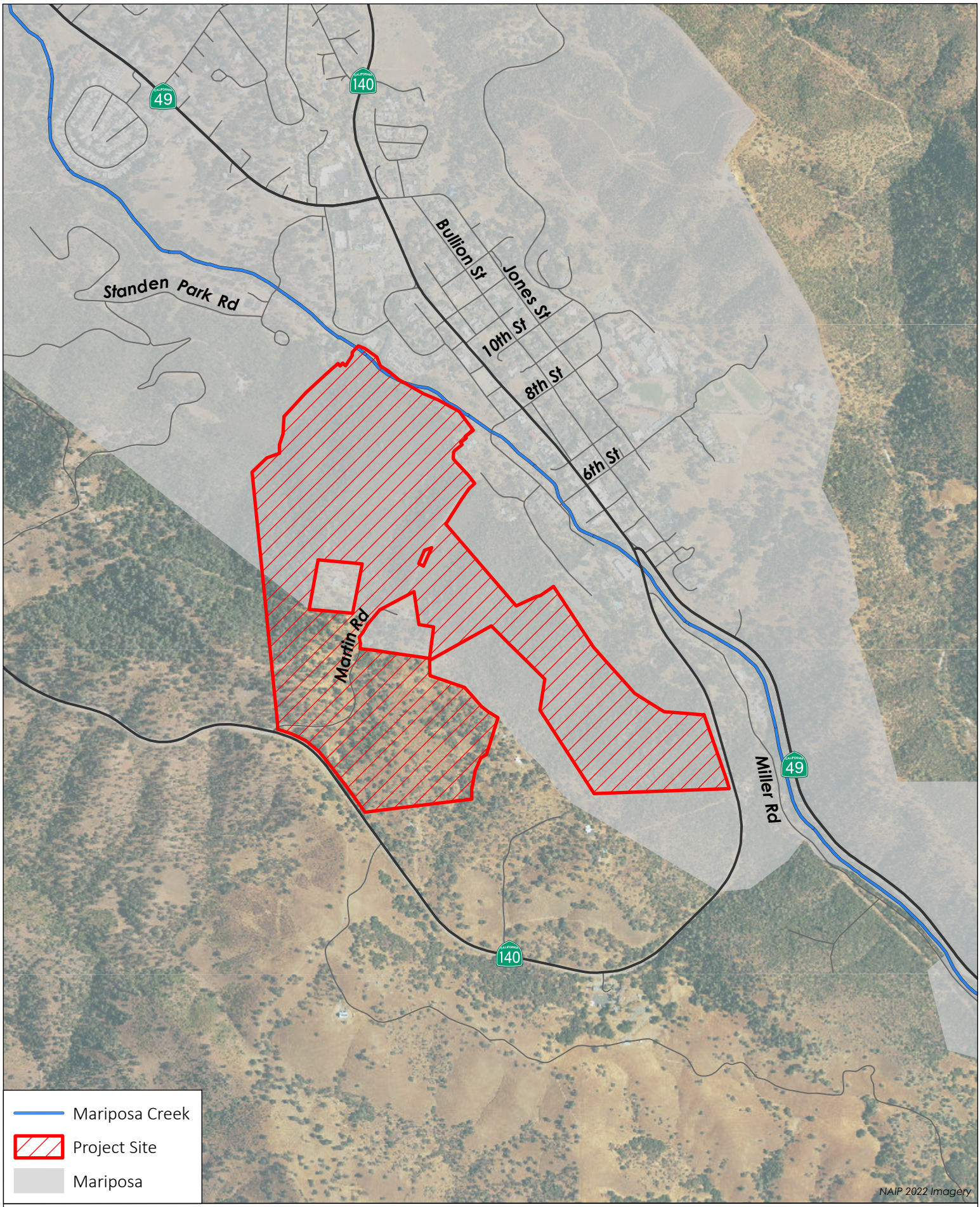


Regional Vicinity Map

Mariposa Hillside Trails Project

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Fig. 1 Page 1-2



0 500 1,000

Feet

Aerial Map

Mariposa Hillside Trails Project

PROVOST& PRITCHARD

Fig. 2 Page 1-3

1.3 STUDY METHODOLOGY

A reconnaissance-level field survey of the site was conducted over two days on January 30 and 31, 2025, by Provost & Pritchard biologist, Shaylea Stark. The survey consisted of walking and driving throughout the Project site while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Habitats were also assessed to help with determining if they could be suitable for various rare or protected plant and animal species. Representative photographs of the site were taken and are presented in Appendix A.

Ms. Stark then utilized the results of the field survey to analyze potential Project-related impacts to biological resources based on the resources known to occur or with the potential to occur within the site. Sources of information used in preparation of this analysis included: CDFW's California Natural Diversity Database (CNDDB; see Appendix B for the species list) and California Wildlife Habitat Relationships (CWHR) database; California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; Jepson Herbarium's online database (i.e., Jepson eFlora); United States Fish and Wildlife Service's (USFWS) Environmental Conservation Online System, Information for Planning and Consultation (IPaC; see Appendix C for the species list) system, and National Wetlands Inventory; iNaturalist; NatureServe Explorer's online database; United States Department of Agriculture Natural Resources Conservation Service's (NRCS) Web Soil Survey (see Appendix D for the Web Soil Survey Report); California Herps website; and various manuals, reports, and references related to plants and animals of the Sierra Nevada region.

The field survey did not include focused surveys for special status species. The field survey conducted included the appropriate level of detail to assess the significance of potential impacts to sensitive biological resources resulting from implementing the Project. Furthermore, the field survey was sufficient to generally describe aquatic features of the Project site that could be claimed as jurisdictional by federal and/or State agencies, such as the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and the State Water Resources Control Board. If Project activities resulted in impacts to aquatic resources and aquatic habitats, this report would be sufficient to support required permit applications, if needed, for the Project.

2 EXISTING CONDITIONS

2.1 REGIONAL SETTINGS

2.1.1 TOPOGRAPHY

The site is located within the *Mariposa* U.S. Geological Survey (USGS) 7.5-minute quadrangle within the southwest portion of Section 23, a small portion on the east side of Section 22, and a small portion on the north side of Section 26, Township 05 South, Range 18 East. The topography of the site consists of rolling hills and mountains with elevations ranging from approximately 1,895 to 2,625 feet above mean sea level (see Figure 2).

2.1.2 CLIMATE

Like most of California, the site experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. In the summer, average high temperatures range between 85- and 88-degrees Fahrenheit (°F), but do not often exceed 96 °F, and the humidity is generally low. Winter temperatures are often below 50 °F during the day and rarely exceed 55 °F. On average, the CDP of Mariposa Valley receives approximately 30 inches of precipitation in the form of rain and snow yearly, most of which occurs between October and May (Weatherspark 2025), and the site would be expected to receive similar amounts of precipitation.

2.1.3 HYDROLOGY

The nearest surface waters to the Project site are Mariposa Creek and an unnamed creek. Mariposa Creek is located along the north/northeast portion of the site and flows southwest, and the unnamed creek is located along the south portion of the site and appears to flow southwest.

Stormwater or snowmelt runoff from upland areas flows into the unnamed creek which then flows into Buckeye Creek, Agua Fria Creek, which then flows into Mariposa Creek south of the Project site. Mariposa Creek then flows into Deadman creek, bear creek, the San Joaquin river, the Suisan Bay, the San Francisco Bay, and eventually the Pacific Ocean.

2.1.4 SOILS

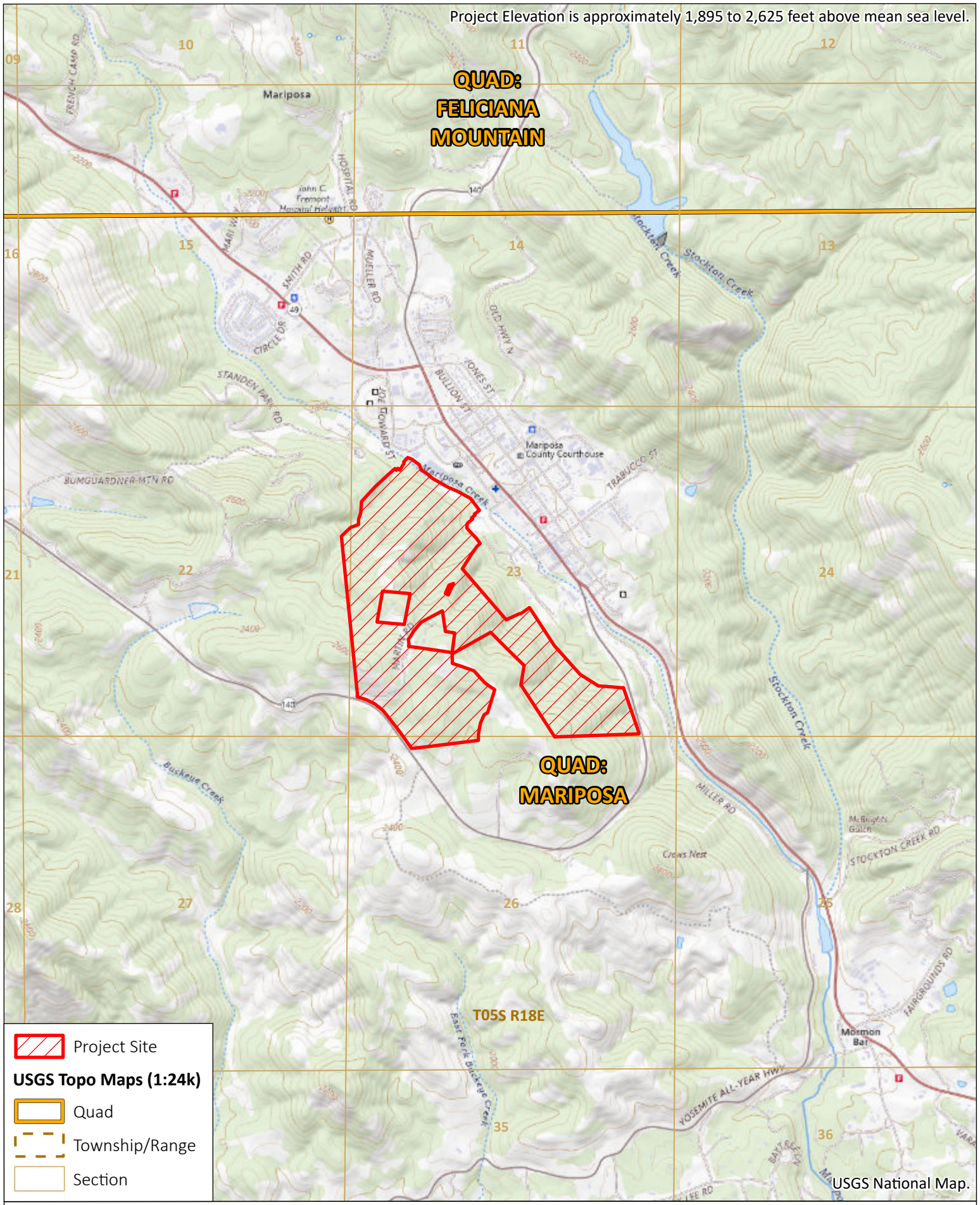
Five soil mapping units representing four soil types were identified within the site and are listed in Table 1 (see Appendix D for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. These soils are primarily used for livestock grazing, wildlife habitat, recreation, watershed, and home site development.

Table 1: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Loafercreek-Gopheridge	Complex, 15 to 30 percent slopes	1.3%	Nonhydric	Well drained	Low to high	High
	Complex, 30 to 60 percent slopes	14.8%	Nonhydric	Well drained	Low to high	High
Gardellones-Gopheridge	Motherlode complex, 30 to 60 percent slopes	65.3%	Nonhydric	Well drained	Low to moderately high	High

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Trabuco-Jasperpeak	Rock outcrop complex, 8 to 30 percent slopes	15.3%	Nonhydric	Well drained	Low to moderately high	Medium to rapid
Riverwash and Tailings	-	3.3%	Partially hydric	-	-	-

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. Hydric soil ratings are derived from specific soil properties as well as climate, parent material, vegetation, landform type, and biological activity of a certain location. One of the major soil mapping units is partially hydric and makes up 3.3% of the site and is located along Mariposa Creek. The remainder of the soil mapping units within the site are nonhydric.



0 750 1,500
Feet

Topographic Map

Mariposa Hillside Trails Project

PROVOST& PRITCHARD

Fig. 3 Page 2-3

2.2 BIOTIC HABITATS

Four biotic habitats were observed within the site and included oak woodland, mixed oak/pine forest, chaparral, and creek habitat (see Figure 4). Birds observed throughout all habitats included bushtit (*Psaltriparus minimus*), northern flicker (*Colaptes auratus*), house finch (*Haemorhous mexicanus*), oak titmouse (*Baeolophus inornatus*), ruby-crowned kinglet (*Regulus calendula*), spotted towhee (*Pipilo maculatus*), Nuttall's woodpecker (*Dryobates nuttallii*), California scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), lesser goldfinch (*Spinus psaltria*), phainopepla (*Phainopepla nitens*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), wrentit (*Chamaea fasciata*), California towhee (*Melozone crissalis*), white-breasted nuthatch (*Sitta carolinensis*), acorn woodpecker (*Melanerpes formicivorus*), and yellow-rumped warbler (*Setophaga coronata*). These habitats and their constituent plant and animal species are described in more detail in the following sections.

2.2.1 OAK WOODLAND

This habitat within the site is dominated by widely spaced interior live oak (*Quercus wislizeni*), blue oak (*Quercus douglasii*), patches of Pacific poison oak (*Toxicodendron diversilobum*), and non-native annual grasses. Vegetation throughout this habitat included common evening primrose (*Oenothera biennis*), gray pine (*Pinus sabiniana*), common vetch (*Vicia sativa*), mistletoe (*Viscum album*), bristly dogtail grass (*Cynosurus echinatus*), and common hedge parsley (*Torilis arvensis*). Wavyleaf soap plant (*Chlorogalum pomeridianum*) was located within the oak woodland near small depressions in the hillside. Arizona cypress (*Cupressus arizonica*) and deodar cedar (*Cedrus deodara*) were planted within the site near private properties.

The survey resulted in the observation of Botta's pocket gopher (*Thomomys bottae*), and Pacific tree frogs (*Pseudacris regilla*) were heard calling within this habitat.

A large portion of oak woodland habitat within the site was highly disturbed adjacent to Martin Road due to vegetation clearing. The remainder of this habitat provides expansive high-quality habitat to a variety of wildlife, year-round. The site likely serves mule deer (*Odocoileus hemionus*), foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

2.2.2 MIXED OAK/PINE FOREST

This habitat within the site is dominated by an overstory of gray pine, interior live oak, and patches of Pacific poison oak. Vegetation located in the understory included California cudweed (*Pseudognaphalium californicum*), Pacific snakeroot (*Sanicula crassicaulis*), mushroom (*Suillaceae* sp.), goldback fern (*Pentagramma triangularis*), white horehound (*Marrubium vulgare*), white leaf manzanita (*Arctostaphylos viscida*), toyon (*Heteromeles arbutifolia*), California buckeye (*Aesculus californica*), buckbrush ceanothus (*Ceanothus cuneatu*), mountain sweet cicely (*Osmorhiza berteroi*), hollyleaf redberry (*Rhamnus ilicifolia*), birchleaf mountain mahogany (*Cercocarpus montanus*), western buttercup (*Ranunculus occidentalis*), gooseberry (*Phyllanthus emblica*), Oregon grape (*Berberis aquifolium*), sticky cinquefoil (*Drymocallis glandulosa*), and two incense cedars (*Calocedrus decurrens*) were located along the trail opposite Mariposa Creek.

The survey resulted in the observation of western gray squirrel (*Sciurus griseus*), and Pacific tree frogs were heard calling within this habitat.

The mixed oak/pine forest habitat within the site provides expansive high-quality habitat to a variety of wildlife, year-round. The site likely serves mule deer and foraging birds during the day, as well as owls, bats, coyotes, and other nocturnal animals at night.

2.2.3 CHAPARRAL

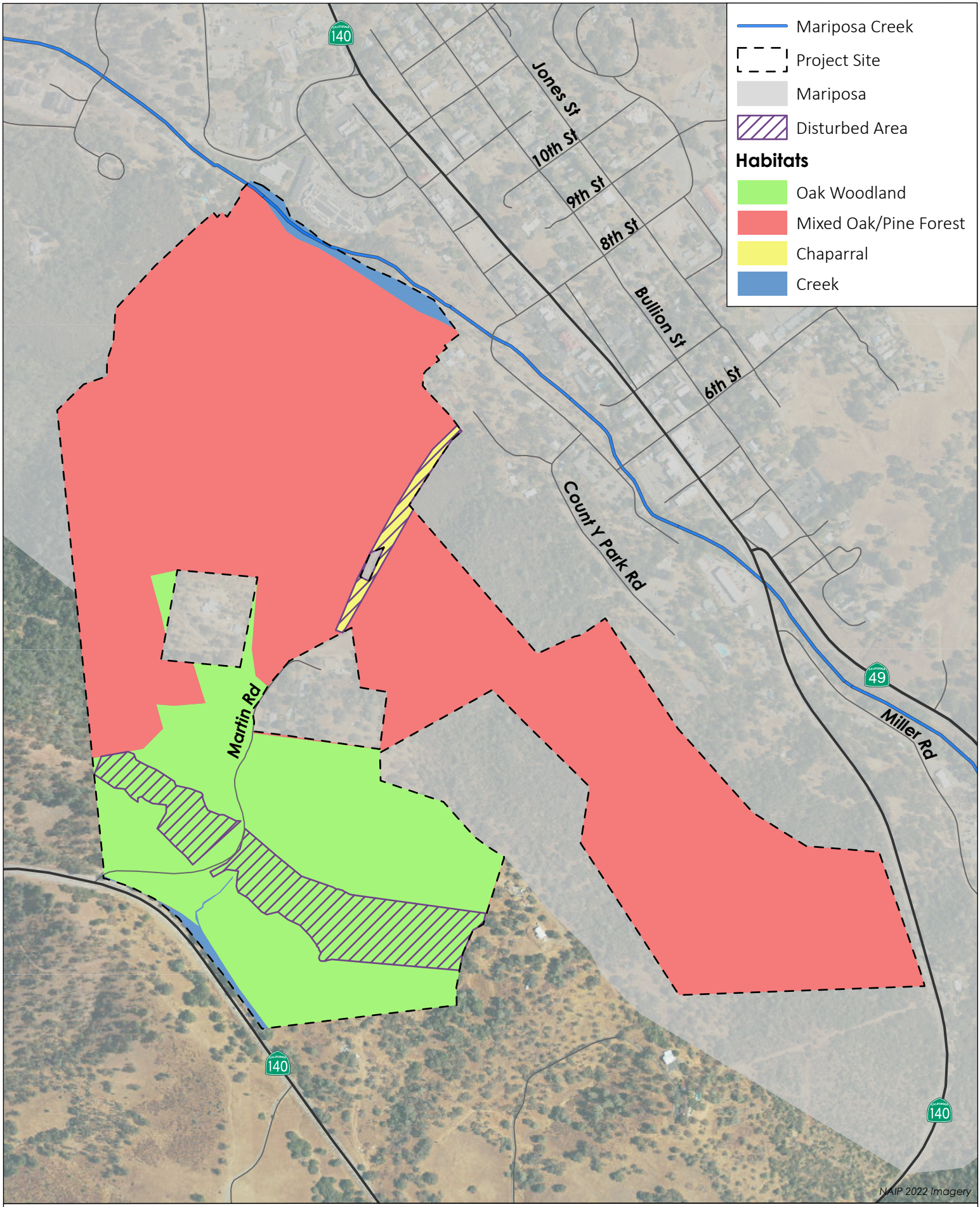
This habitat within the site is dominated by white leaf manzanita, chamise (*Adenostoma fasciculatum*), and deerweed (*Acmispon glaber*). Other vegetation located within this habitat included toyons, interior live oaks, Pacific poison oak, California buckeye, filiform rockjasmine (*Androsace filiformi*), yerba santa (*Eriodictyon californicum*), common hedge parsley (*Torilis arvensis*), Himalayan blackberry (*Rubus armeniacus*), mushroom sp., flaxleaf fleabane (*Conyza bonariensis*), pipestem clematis (*Clematis lasiantha*), sticky cinquefoil, California cudweed, willows (Salix spp.), golden-fleece (*Ericameria arborescens*), and bigflower agoseris (*Agoseris grandiflora*). No wildlife species exclusive to this habitat were observed during the survey.

The chaparral habitat within the site is highly disturbed along the powerlines due to vegetation clearing. The Project site outside of the cleared area provides expansive high-quality habitat to a variety of wildlife, year-round. The site likely serves mule deer, foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

2.2.4 CREEK

This habitat occurs along Mariposa Creek and an unnamed stream which both contained water at the time of the survey. Mariposa Creek is located along the north/northeast portion of the site and the unnamed creek is located along the south portion of the site. Both waterways contained sand-gravel-boulder bottoms and slow-moving water.

Naturally occurring vegetation within this habitat included white alder (*Alnus rhombifolia*), curly dock (*Rumex crispus*), willows, valley oak trees (*Quercus lobata*), miner's-lettuce (*Claytonia perfoliate*), ribwort plantain (*Plantago lanceolata*), Himalayan blackberry, watercress (*Nasturtium officinale*), tall flatsedge (*Cyperus eragrostis*), and one grey pine tree adjacent to Mariposa Creek. Restoration plantings were located within this habitat and included silver lupine (*Lupinus albifrons*), American alumroot (*Heuchera americana*), western redbud (*Cercis occidentalis*), California bay laurel (*Umbellularia californica*), and California wildrose (*Rosa californica*). No wildlife species exclusive to this habitat were observed during the survey.



Habitats Map

Mariposa Hillside Trails Project

PROVOST& PRITCHARD

Fig. 4 Page 2-6

2.3 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW has classified and mapped all natural communities in California. Just as the special status plant and animal species (see Section 2.6), these natural communities of special concern can be found within the CNDDB. There are no recorded observations of a natural community of special concern mapped within the site and no natural communities of special concern were observed during the field survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. Mariposa Creek and the unnamed stream contained riparian habitat and were located within the site but would not be impacted during the Project.

2.4 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of "critical habitat" when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to the IPaC, designated critical habitat is absent from the site and vicinity.

2.5 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

The oak woodland and mixed oak/pine forest habitats of the site and surrounding areas consisted of expansive open grassland and forests where species could move through. Numerous game trails were observed during the field survey in these habitats. Mariposa Creek and the unnamed stream within the site could act as a corridor for aquatic and terrestrial wildlife though these waterways and would not be impacted during the Project.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. Large trees with natural cavities were located within and adjacent to the site and could function as native wildlife nursery sites for bats. Mariposa Creek and the unnamed stream could be used by amphibian species as wildlife nursery sites though these waterways would not be impacted during the Project.

2.6 SPECIAL STATUS PLANTS AND ANIMALS

California contains several rare plant and animal species. In this context, "rare" is defined as a species known to have low populations or limited distributions. Conversion of habitats to accommodate human population growth in turn reduces the already-limited suitable habitat for rare species. This results in rare and sensitive species becoming increasingly more vulnerable to extirpation. State and federal regulations have provided the CDFW and USFWS with mechanisms for conserving and protecting the diversity of plant and animal species native to California. Numerous native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Other formal designations include "candidate" for listing or "species of special concern" by CDFW. The CNPS has its list of native plants considered rare, threatened, or endangered. Collectively these animals and plants are referred to as "special status species."

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Mariposa* USGS 7.5-minute quadrangle that contains the site, and for the eight surrounding USGS quadrangles: *Bear Valley, Ben Hur, Buckingham Mountain, Catheys Valley, Feliciana Mountain, Horsecamp Mountain, Illinois Hill,* and *Stumpfield Mountain*. A query of the IPaC was also completed for the site. These species, and their potential to occur within the site, are listed in Table 2 and Table 3, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 3. Species lists obtained from CNDDB and IPaC are available in Appendix B and Appendix C, respectively. All relevant sources of information, as discussed in the Study Methodology section of this report, as well as field observations, were used to determine if any special status species have the potential to occur within the site.

Table 2: List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Beaked clarkia (*Clarkia rostrata*)	CNPS 1B	Found in woodlands and valley foothill grasslands on the west slope of the Sierra Nevada range, around 1,650 feet in elevation. Blooms April – May.	**Possible.** The oak woodland habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles northwest of the site in 1985.
Big-scale balsamroot (*Balsamorhiza macrolepis*)	CNPS 1B	Found in open, grassy, or rocky slopes within chaparral, grassland, and cismontane woodland habitats at elevations less than 5,000 feet. Blooms March – July.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 3.5 miles southeast of the site in 1886.
Congdon's lomatium (*Lomatium congdonii*)	CNPS 1B	Occurs in cismontane woodland and chapparal habitats. Especially in serpentine soils with serpentine chaparral plants and grey pines. Grows at elevations between 1,100 and 2,100 feet. Blooms March – June.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1903.
Congdon's woolly sunflower (*Eriophyllum congdonii*)	CNPS 1B	Found in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grasslands. Occurs in cracks in rock outcroppings, and on talus; sometimes with blue oaks, and California buckeye. Found at elevations between 1,640 and 6,230 feet. Blooms March – June.	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 9 miles northeast of the site in 1999.
Grassland suncup (*Camissonia lacustris*)	CNPS 1B	Occurs in valley and foothill grasslands, cismontane woodland, lower montane coniferous forest, and chaparral, often on gravelly, serpentine, and granitic soils at elevations between 590 and 4,000 feet. Blooms April – June.	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 10 miles southeast of the site in 1963.

Species	Status*	Habitat	Occurrence within the Site
Koch's cord moss (*Entosthodon kochii*)	CNPS 1B	Occurs in cismontane woodland. Often found growing on soil on riverbanks at elevations between 600 and 1,200 feet.	**Absent.** The site is outside of the elevational range for this species.
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found within openings of foothill woodland, often yellow-pine forest, and chaparral at elevations between 1,000 and 4,300 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1896.
Mariposa clarkia (*Clarkia biloba* ssp. *australis*)	CNPS 1B	Found in chaparral and cismontane woodland and several sites occur in the foothill woodland/riparian ecotone. Often occurs on serpentine soil at elevations between 980 and 1,800 feet. Blooms May – June.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 1 mile northwest of the site in 2009.
Mariposa cryptantha (*Cryptantha mariposae*)	CNPS 1B	Usually occurs in chaparral communities. Can be found on rocky, semi barren ridges, dry slopes, and serpentine outcrops at elevations between 650 and 2,200 feet. Blooms April – June.	**Possible.** The chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 1 mile northwest of the site in 1994.
Mariposa daisy (*Erigeron mariposanus*)	CNPS 1A	Found in cismontane woodland. One known site. Occurs at elevations between 1,970 and 2,625 feet. Blooms June – August.	**Possible.** The oak woodland habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1900.
Mariposa lupine (*Lupinus citrinus* var. *deflexus*)	CNPS 1B	Found in chaparral and cismontane woodland. Occurs on decomposed granitic sand on hilltops and hillsides on the western slope of the Sierra Nevada, mostly in areas with southern exposure. Found at elevations between 1,310 and 1,970 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles east of the site in 2008.
Mariposa pussypaws (*Calyptridium pulchellum*)	FT, CNPS 1B	Found in cismontane woodland and chaparral. Occurs on granite domes and is restricted to exposed sites at elevations between 1,300 and 3,600 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 3 miles south of the site in 2011.
Parry's horkelia (*Horkelia parryi*)	CNPS 1B	Found in chaparral and cismontane woodland. Occurs in openings in chaparral or woodland; especially known from the Ione formation in Amador County. Found at elevations between 275 and	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 8 miles northeast of the site in 2013.

Species	Status*	Habitat	Occurrence within the Site
		3,655 feet. Blooms April – September.	
Pleasant Valley mariposa-lily (*Calochortus clavatus* var. *avius*)	CNPS 1B	Found in the lower montane coniferous forests of the Sierra Nevada range, often in rocky areas at elevations between 2,900 and 5,900 feet. Blooms May – July.	**Absent.** The site is outside of the elevational range for this species.
Recurved larkspur (*Delphinium recurvatum*)	CNPS 1B	Occurs in chenopod scrub, cismontane woodland, and grassland habitats on poorly drained, fine, alkaline soils; often in valley saltbush or valley chenopod scrub communities at elevations between 100 and 2,600 feet. Blooms March – June.	**Unlikely.** The soils onsite are unsuitable for this species. The nearest recorded observation of this species within the vicinity was approximately 16 miles southeast of the site in 1979.
Shaggyhair lupine (*Lupinus spectabilis*)	CNPS 1B	Found in chaparral and cismontane woodland habitats. Associated with open rocky slopes of serpentine and grey pine woodland. Occurs at elevations between 850 and 2,700 feet. Blooms April – May.	**Possible.** The oak woodland and chaparral habitat onsite was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 1 mile northwest of the site in 1994.
Slender-stalked monkeyflower (*Erythranthe gracilipes*)	CNPS 1B	Found in disturbed areas, such as road shoulders and burns. Can also be found in the cracks of large granitic rocks in chaparral habitats. Grows at elevations between 1,600 and 4,300 feet. Blooms April – May.	**Possible.** The chaparral habitat of the site was suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 0.5 miles southeast of the site in 1897.
Slender-stemmed monkeyflower (*Erythranthe filicaulis*)	CNPS 1B	Found in cismontane woodland, lower and upper montane coniferous forests, and meadows and seeps. Often within the transition zone of the Sierra Nevada on moist granitic sand and meadow edges and in vernally mesic sites. Occurs at elevations between 3,935 and 5,740 feet. Blooms May – July.	**Absent.** The site is outside of the elevational range for this species.
Yellow-lip pansy monkeyflower (*Diplacus pulchellus*)	FT, CSSC	Found in yellow pine forest, meadows, and wetland-riparian habitats. Often in vernally wet depressions or seepage areas at elevations between 1,970 and 6,560 feet. Blooms April – July.	**Possible.** The creek habitat and portions of the oak woodland habitat within the site were suitable for this species. The nearest recorded observation of this species within the vicinity was approximately 4.5 miles southeast of the site in 1958.
Yosemite onion (*Allium yosemitense*)	CNPS 1B	Found in broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest. Occurs in	**Absent.** The site is outside of the elevational range for this species.

Species	Status*	Habitat	Occurrence within the Site
		pockets of wet soil or in wet cracks of metamorphic rock, and on slopes and walls. Found at elevations between 2,625 and 7,220 feet. Blooms May – June.	

Table 3: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Bald eagle (*Haliaeetus leucocephalus*)	CE, CFP	Resides in old growth forests as well as lower montane coniferous forests. Can also be found in open uplands in the winter. Nests are generally found in large trees within a mile of water. Nests and winters along ocean shores, lake margins, and rivers.	**Unlikely.** While this species could forage or fly over the site, no waterbodies are within the site, and it is unlikely this species would nest within the site. The nearest recorded observation of this species within the vicinity was approximately 15 miles south of the site in 2007.
California condor (*Gymnogyps californianus*)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but have also been recorded nesting in giant sequoias in Tulare County. Requires vast expanses of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages for carrion up to 100 miles from their roost/nest sites.	**Unlikely.** While this species could forage or fly over the site, no cliffs are within the site, and it is unlikely this species would nest within the site. There are no recorded observations of this species on CNDDB within the regional vicinity of the Project.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Inhabits perennial rivers, creeks, and stock ponds with vegetative cover within the Coast Range and northern foothills of the Sierra Nevada.	**Possible.** Waterways within the site could support this species. There are no recorded observations of this species on CNDDB within the regional vicinity of the Project.
California tiger salamander – central California DPS (*Ambystoma californiense*)	FT, CT	Requires vernal pools or seasonal ponds for breeding and small mammal burrows for aestivation. Generally found in grassland and oak savannah plant communities in central California from sea level to 1,500 feet in elevation. Can migrate up to 1.3 miles to breed.	**Absent.** The site is outside of the elevational range for this species.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or	**Possible.** The site contained suitable habitat that would provide foraging habitat for this species and contained dead trees and small mammal burrows where this species could nest and overwinter. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles southwest of the site in 2020.

Species	Status*	Habitat	Occurrence within the Site
		cavities in dead trees. This species overwinters under leaf litter or soft soil.	
Foothill yellow-legged frog – south Sierra Distinct Population Segment (*Rana boylii*)	FE, CE	Frequents rocky streams and rivers with rocky substrate and open, sunny banks in forests, chaparral, and woodlands. Occasionally found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	**Possible.** Waterways within the site could support this species. The nearest recorded observation of this species within the vicinity was around the unincorporated community of Mariposa in 1899.
Fisher- Southern Sierra Nevada-ESU (*Pekania pannanti*)	FE, CT	Can be found in intermediate to large-tree stages of coniferous forests with high percent canopy closure, generally within the low-medium elevational areas of the southern Sierra Nevada.	**Absent.** The site is outside of the elevational range for this species.
Hardhead (*Mylopharodon conocephalus*)	CSSC	Occurs in low- to mid-elevation streams in the Sacramento-San Joaquin drainage. Clear, deep pools with sand-gravel-boulder bottoms and slow-moving water are required. This species is often sympatric with Sacramento pikeminnow and Sacramento sucker. Hardhead are typically absent from streams occupied by sunfishes and from heavily altered habitats.	**Possible.** Waterways within the site could support this species. The nearest recorded observation of this species within the vicinity was approximately 0.5 mile southeast of the site in Stockton Creek in 2017.
Limestone salamander (*Hydromantes brunus*)	CFP, CT	Found in limestone outcrops in the foothill pine-chaparral belt along the Merced River and its tributaries, from 800-2600 feet in elevation. California buckeye is an indicator of optimal habitat. Seeks cover in limestone caverns, talus, rock fissures, and surface objects.	**Absent.** The site is outside of the known range for this species.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Possible.** The site contained suitable foraging habitat for this species. Monarchs could travel through the site during the breeding season. While they could travel through the site, roosting habitat was absent. The nearest observation on iNaturalist occurred within Mariposa.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites	**Possible.** Waterways within the site could support this species. The nearest recorded observation of this species within the vicinity was around the unincorporated

Species	Status*	Habitat	Occurrence within the Site
		and sandy banks or grassy open fields to deposit eggs.	community of Mariposa on an unknow date.
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Possible.** The site provides suitable foraging and roosting habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 8 miles north of the site in 1997.
Sierra Nevada yellow-legged frog (*Rana sierrae*)	FT, CE	Prefer lakes, ponds, marshes, meadows, and streams at elevations ranging from 4,500 to 12,000 feet. They are always encountered within a few feet of water.	**Absent.** The site is outside of the elevational range for this species.
Spotted bat (*Euderma maculatum*)	CSSC	Roosts in cliffs, rock crevices, and caves. Often forages over water and along washes. This species feeds almost exclusively on moths.	**Unlikely.** While this species could forage or fly over the site, no cliffs are within the site, and it is unlikely this species would roost within the site. The nearest recorded observation of this species within the vicinity was approximately 8 miles north of the site in 1996.
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC	Occurs in a variety of habitats, but prefers cool, dark roost sites, and is often found in caves and mines. They roost in the open, hanging from walls and ceilings. Western populations typically forage on moths in areas of dense foliage.	**Unlikely.** While this species could forage or fly over the site, no cliffs or caves are within the site, and it is unlikely this species would roost within the site. The nearest recorded observation of this species within the vicinity was approximately 4.5 miles northwest of the site in 1956.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent.** The site is outside of the known range for this species.
Western spadefoot (*Spea hammondii*)	FPT, CSSC	The majority of the time this species is terrestrial and occurs in small mammal burrows and soil cracks, sometimes in the bottom of dried pools. Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river	**Absent.** The site is outside of the known range for this species.

Species	Status*	Habitat	Occurrence within the Site
		floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal or seasonal pools, that hold water for a minimum of three weeks, are necessary for breeding.	

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CFP	California Fully Protected
		CSSC	California Species of Special Concern

CNPS LISTING

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

3 IMPACTS AND MITIGATION

3.1 SIGNIFICANCE CRITERIA

3.1.1 CEQA

General plans, area plans, and specific projects are subject to the provisions of CEQA. The purpose of CEQA is to assess the impacts of proposed projects on the environment prior to project implementation. Impacts to biological resources are just one type of environmental impact assessed under CEQA and vary from project to project in terms of scope and magnitude. Projects requiring removal of vegetation may result in the mortality or displacement of animals associated with this vegetation. Animals adapted to humans, roads, buildings, and pets may replace those species formerly occurring on a site. Plants and animals that are rare may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. Such impacts may be considered either "significant" or "less than significant" under CEQA. According to *CEQA Statute and Guidelines* (AEP 2023), "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- 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 CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a "mandatory finding of significance" if the project has 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, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 MARIPOSA COUNTY GENERAL PLAN

The Mariposa County General Plan contains the following goals and policies related to the project:

3.2.1.1.1 CONSERVATION AND OPEN SPACE

Goal 11-1: Conserve the natural and scenic resources, and open space lands to protect and enhance the County's quality of life and character ensuring a viable economy.

Policy 11-1a: Conserve natural and scenic resources through County programs and development standards.

Policy 11-1b: Collaborate with other public and private agencies for conservation management plans and programs.

Implementation Measure 11-1b (1): The County should participate in conservation management planning with Federal and State and other public and private agencies.

Goal 11-2: Protect and manage the use of Mariposa County's limited water resources.

Policy 11-2b: Preserve surface and sub-surface water quality

Implementation Measure 11-2b (1): Review development designs to ensure compliance with Federal and State water quality regulations and to ensure that the project does not discharge contaminated water.

Policy 11-2d: Conserve water sources for water-dependent species and the continuity of riparian communities.

Implementation Measure 11-2d (1): Implement requirements for minimum building and grading setback lines from waters of the State (i.e., perennial streams and environmentally significant wetlands), that are adequate to protect stream, riparian, and wetland resource values.

Goal 11-4: Conserve and enhance the ecosystems, plant communities, wildlife habitats, and the inherent diversity of both plant and animal species for the recreational, commercial, aesthetic, and basic ecosystems needs.

Policy 11-4a: Conserve the diversity of native ecosystems, plant communities, wildlife habitat, and plant and animal species in the County.

Implementation Measure 11-4a (1): The County will implement a Mariposa County Environmental Conservation Program. The Program shall include development standards and programs conserving, protecting, and mitigating the impacts on:

- significant and sensitive habitat including wildlife migration corridors,
- breeding and nesting areas (as seasonally appropriate);
- known occurrences of special status animal species;
- riparian habitat around bodies of water and along watercourses and seasonal drainages;

- known occurrences of special status plant species, and
- significant and sensitive plant communities.

Implementation Measure 11-4a (2): Site development and grading review should minimize the removal of native trees and groves of trees.

Implementation Measure 11-4a (3): The County shall develop and enforce standards that reduce or eradicate invasive species affecting the agricultural and natural ecosystems.

Implementation Measure 11-4a (4): The County shall publish landscaping guidelines for the use of site-appropriate native plant species.

Implementation Measure 11-4a (5): The County shall utilize collaborative planning efforts to coordinate local efforts to eradicate invasive plant species.

Implementation Measure 11-4a (6): The County shall require site surveys in compliance with Federal and State regulations as part of environmental review to determine:

- The presence or absence of endangered species and their habitat;
- The presence or absence of threatened or rare wildlife and plant species and their habitat;
- The presence or absence of breeding raptors and migratory birds;
- The presence or absence of sensitive native plant communities;
- The presence or absence of native wildlife migration or travel corridors; and
- The presence or absence of jurisdictional wetland or other waters of the U.S.

Implementation Measure 11-4a (7): The County shall record the data collected from the required site surveys to create a comprehensive map of environmental resources in Mariposa County. The map shall include but not be limited to vegetation communities with associated habitats for sensitive wildlife species.

Implementation Measure 11-4a (8): During project review and environmental analysis, the County shall comply with federal and State regulations to require measures that:

- Protect endangered species and their habitat; County of Mariposa General Plan – Volume I Countywide General Plan Page 11-11
- Protect threatened or rare wildlife and plant species and their habitats;
- Protect breeding raptors and migratory birds;
- Protect and avoid, to the extent feasible, sensitive native plant communities;
- Protect and avoid, to the extent feasible, native wildlife migration or travel corridors; and
- Protect and avoid, to the extent feasible, jurisdictional wetland or other waters of the U.S.

3.2.2 THREATENED AND ENDANGERED SPECIES

Permits may be required from CDFW and/or USFWS if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the California Endangered Species Act (CESA) and/or Endangered Species Act (ESA), respectively. Take is defined by CESA as, "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). Take is more broadly defined by the ESA to include "harm" (16 USC, Section 1532(19),

50 CFR, Section 17.3). CDFW and USFWS are responsible agencies under CEQA and NEPA. Both agencies review CEQA and NEPA documents in order to determine the adequacy of the treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.3 DESIGNATED CRITICAL HABITAT

When species are listed as threatened or endangered, the USFWS often designates areas of "critical habitat" as defined by section 3(5)(A) of the ESA. Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation with the federal government. Designations only affect federal agency actions or federally funded or permitted activities. Critical habitat does not prevent activities that occur within the designated area. Only activities that involve a federal permit, license, or funding and are likely to destroy or adversely modify critical habitat will be affected.

3.2.4 MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it covers almost all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game birds covered by the MBTA (Section 3513), as well as any other native non-game birds (Section 3800).

3.2.5 BIRDS OF PREY

Birds of prey are protected in California under provisions of California Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs, or take feathers or nests, without a permit issued by the U.S. Secretary of the Interior.

3.2.6 NESTING BIRDS

In California, protection is afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of "take" by the CDFW.

3.2.7 WETLANDS AND OTHER "JURISDICTIONAL WATERS"

Aquatic resources, including wetlands, streams, rivers, and lakes, are among the important biological resources that are protected by local, state, and federal laws and regulations. Activities that impact these "jurisdictional waters" may be regulated and require permits which aim to avoid or minimize adverse impacts to "jurisdictional waters" to the greatest extent possible. The definition of a jurisdictional water may vary depending on the regulatory agency, and the limits of jurisdiction for each agency are described below.

The USACE, pursuant to Section 404 of the Clean Water Act (CWA), upholds a set of guidelines to regulate activities that could result in the discharge of pollutants into "waters of the United States" ("WOTUS"). The legal definition of WOTUS has significantly evolved since the passage of the CWA in 1972 as a result of administrative rulings and litigation involving federal jurisdiction over water resources. Thus, the reach and extent of USACE and United States Environmental Protection Agency (EPA) jurisdiction over aquatic features has continually been subject to revision.

The current administrative definition of WOTUS is described in the Biden Administration's 2023 "Conforming Rule." The extent of jurisdiction has been defined in the Code of Federal Regulations (CFR) but is also subject to interpretation by the federal courts. Jurisdictional waters generally include the following categories defined by section 328.3, subdivision (a) of title 33 of the CFR:

1) *Traditional Navigable Waters, the territorial seas, or interstate waters (not including interstate wetlands);*
2) *Impoundments of waters of the United States;*
3) *Tributaries of:*
    a. *Traditional Navigable Waters, territorial seas, or interstate waters (not including interstate wetlands); or*
    b. *Impoundments of water of the United States when the tributaries meet the relatively permanent standard.*
4) *Wetlands:*
    a. *Adjacent to Traditional Navigable Waters, the territorial seas, or interstate waters;*
    b. *Adjacent to and with a continuous surface connection to relatively permanent impoundments of waters of the United States*
    c. *Adjacent to and with a continuous surface connection to relatively permanent jurisdictional tributaries.*
5) *Intrastate lakes and ponds not identified in items 1 through 4 of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items 1 or 3 above.*

Exclusions under the new definition include the following:

1) *Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;*
2) *Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA;*
3) *Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;*
4) *Artificially irrigated areas that would revert to dry land if the irrigation ceased;*
5) *Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;*
6) *Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;*
7) *Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and*
8) *Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.*

The Department of the Army, acting through the USACE, regulates the filling or excavation of jurisdictional waters and is authorized to issue permits for activities within WOTUS under the authority of Section 404 of the CWA. The extent of jurisdiction is defined by an "ordinary high-water mark" on opposing channel banks.

The State of California also asserts jurisdiction over drainages, wetlands, and other aquatic features. The limits of State jurisdiction differ from those of the EPA and USACE, often being more inclusive of water resources. The California Department of Fish and Wildlife has jurisdiction over the bed and bank of rivers, natural drainages, streams, and lakes and regulates alteration to these features pursuant to the provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities to alter these features would require a Lake or Streambed Alteration Agreement from CDFW, which could include mitigation measures for aquatic and biological resources that could be affected by Project activities.

The State Water Resources Control Board, under the Porter-Cologne Water Quality Control Act of 1969, holds regulatory authority over activities affecting water quality of all surface water and groundwater in California, collectively known as "waters of the state." Discharges into waters of the state that are also WOTUS require a CWA Section 401 Water Quality Certification from the appropriate regional office as a prerequisite to obtaining certain federal permits, such as a CWA Section 404 permit. Discharges into all Waters of the State, even those that are not also WOTUS, require waste discharge requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one acre or more of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a WOTUS may require an NPDES permit.

3.3 POTENTIALLY SIGNIFICANT PROJECT-RELATED IMPACTS AND MITIGATION

Species protected by California Fish and Game Code, CDFW, USFWS, or CEQA that have the potential to be impacted by Project activities include: beaked clarkia, big-scale balsamroot, Congdon's lomatium, Congdon's woolly sunflower, grassland suncup, Madera leptosiphon, Mariposa clarkia, Mariposa cryptantha, Mariposa daisy, Mariposa lupine, Mariposa pussypaws, Parry's horkelia, shaggyhair lupine, slender-stalked monkeyflower, yellow-lip pansy monkeyflower, California red-legged frog, Crotch's bumble bee, foothill yellow-legged frog, hardhead, monarch butterfly, northwestern pond turtle, and pallid bat. Other sensitive resources that have the potential to be impacted by the Project include nesting migratory birds, jurisdictional waters, wildlife movement corridors, and native wildlife nursery sites. Corresponding mitigation measures can be found below.

3.3.1 GENERAL PROJECT-RELATED IMPACTS

The Project has the potential to impact a number of sensitive resources, as described in more detail in the following sections. Impacts to these resources would be a violation of state and federal laws or considered a potentially significant impact under CEQA. Implementation of the following measures will help reduce potential impacts to these resources to a less than significant level under CEQA and will help with complying with state and federal laws protecting these resources:

> Mitigation Measure BIO-1a (*WEAP Training*): Prior to initiating construction activities (including staging and mobilization), all personnel associated with Project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist (someone familiar with the identification and habitats of these species), to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable

environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the Project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them.

Mitigation Measure BIO-1b (*BMPs*): The Project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes.
- All open trenches, holes, sumps, and other excavations greater than 6-inches with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped.
- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits or relevant experience) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the Project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited without the necessary federal or state take permit(s).
- The presence of any special status species will be reported to the Project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

3.3.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES

The following special status plant species were identified to potentially occur within or adjacent to the site: beaked clarkia, big-scale balsamroot, Congdon's lomatium, Congdon's woolly sunflower, grassland suncup, Madera leptosiphon, Mariposa clarkia, Mariposa cryptantha, Mariposa daisy, Mariposa lupine, Mariposa pussypaws, Parry's horkelia, shaggyhair lupine, slender-stalked monkeyflower, and yellow-lip pansy monkeyflower. Beaked clarkia and Mariposa daisy may occur within the oak woodland habitat of the site. Mariposa cryptantha and slender-stalked monkeyflower may occur within the chaparral habitat of the site. Yellow-lip pansy monkeyflower may occur within the creek habitat of the site. Big-scale balsamroot, Congdon's lomatium, Madera leptosiphon, Mariposa clarkia, Mariposa lupine, Mariposa pussypaws, Parry's horkelia, and shaggyhair lupine may occur within the oak woodland and chaparral habitats of the site. Congdon's woolly sunflower and grassland suncup may occur within all habitats of the site.

The survey of the site was conducted outside the blooming season for these plants. Projects that adversely affect special status plants or result in the mortality of special status plants would be considered a significant impact under CEQA and may be a violation of state and/or federal laws.

Implementation of the following measures will reduce potential impacts to special status plants to a less than significant level under CEQA will help the Project comply with state and federal laws protecting these plant species.

Mitigation Measure BIO-2a (*Pre-Construction Survey*): Prior to Project activities occurring onsite, a qualified botanist/biologist will conduct focused botanical surveys during the appropriate blooming seasons. At a minimum three (3) surveys will be conducted, each at least one (1) month apart,

across the blooming periods for beaked clarkia (April – May), big-scale balsamroot (March – July), Congdon's lomatium (March – June), Congdon's woolly sunflower (March – June), grassland suncup (April – June), Madera leptosiphon (April – May), Mariposa clarkia (May – June), Mariposa cryptantha (April – June), Mariposa daisy (June – August), Mariposa lupine (April – May), Mariposa pussypaws (April – May), Parry's horkelia (April – September), shaggyhair lupine (April – May), slender-stalked monkeyflower (April – May), and yellow-lip pansy monkeyflower (April – July) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site.

Mitigation Measure BIO-2b (*Avoidance*): If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area so as not to disturb the plants or its root system.

Mitigation Measure BIO-2c (*Formal Consultation*): If rare plant individuals or populations are detected within Project work areas during the focused botanical surveys, and the plants cannot be avoided, the Project proponent will initiate consultation with CNPS (for CNPS-ranked species), CDFW (for California proposed, threatened, or endangered species), and/or USFWS (for threatened or endangered species) to determine next steps for salvage and relocation.

3.3.3 PROJECT-RELATED MORTALITY AND/OR NEST ABANDONMENT OF MIGRATORY BIRDS, RAPTORS, AND SPECIAL STATUS BIRDS

The site and adjacent areas contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, and raptors. It is anticipated that during the nesting bird season, protected birds could nest on the ground or in shrubs and trees within, and adjacent to, the site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by Project-related activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by Project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of state and federal laws and considered a potentially significant impact under CEQA.

While foraging habitat for protected birds, such as California condor and bald eagle, is present on the site, suitable foraging habitat is located adjacent to the site and within the vicinity of the site. Loss of the foraging habitat from implementation of the Project is not considered a significant impact.

Implementation of the following measures will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and will help the Project comply with state and federal laws protecting these avian species.

Mitigation Measure BIO-3a (*Avoidance*): The Project's construction activities will occur, if feasible, between August 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

Mitigation Measure BIO-3b (*Pre-construction Surveys*): If activities must occur within the nesting bird season (February 1 to August 15), a qualified biologist (someone able to identify these species) will conduct a pre-construction survey for active nests within seven (7) calendar days prior to the start of construction. It will be completed within the site, and up to 100 feet outside of the site for nesting migratory birds and up to 500 feet outside of the site for nesting raptors. Raptor nests are

considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required.

Mitigation Measure BIO-3c (*Avoidance Buffers*): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of Project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

3.3.4 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO CALIFORNIA RED-LEGGED FROG

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site. These waterways provide suitable aquatic habitat, and the oak woodland and mixed oak/pine forest habitats provide suitable upland habitat for California red-legged frog (CRLF). CRLF within the site during construction have the potential to be injured or killed by Project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and a violation of federal law protecting this species.

Implementation of the following measures will reduce potential impacts to CRLF to a less than significant level under CEQA and will help the Project comply with state and federal laws protecting these bird species.

Mitigation Measure BIO-4a (*Pre-construction Take Avoidance Surveys*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction take avoidance survey for CRLF within seven (7) days of construction in accordance with the *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog* (USFWS 2005) or current guidance for CRLF to determine if CRLF are within or adjacent (within 100 feet) to the creek habitat. This survey will be completed when adult frogs are most likely to be detected at night between January 1 and June 30. If construction activities will begin outside of this timeframe two surveys will be required, one between January 1 and June 30 and the second survey within seven (7) days prior to construction activities within or adjacent (within 100 feet) of the creek habitat. If no CRLFs are found during the pre-construction survey(s) work may commence without further surveys.

Mitigation Measure BIO-4b (*Monitor*): If CRLF are observed during the surveys or during construction, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within or adjacent (within 100 feet) of the creek habitat.

Recommendation BIO-4c (*FYLF Take Authorization*): If avoidance is not feasible the Project will consult with the USFWS to acquire take permits for CRLF prior to any Project activities.

3.3.5 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO CROTCH'S BUMBLE BEE

Habitats within the site and surrounding area were determined to be suitable for foraging, nesting, and overwintering Crotch's bumble bee. Queens are actively flying for only two months from March until May and reach maximum flying activity in April. Males are generally present and flying from May to September with peak flying activity occurring in July. Workers of this species are present and flying from April to August, with peak flying activity occurring between May and June. There is abundant foraging habitat adjacent to the APE that could be used, and implementation of the Project would not significantly reduce potential foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of foraging habitat. Construction activities occurring within nesting or overwintering habitat could result in injury,

mortality, displacement, disturbance, or inhibit the movement of this species, and would be considered a significant impact under CEQA and a violation of CESA.

Implementation of the following measures will reduce potential impacts to nesting and overwintering Crotch's bumble bee to a less than significant level under CEQA will help the Project comply with state laws protecting this species.

> Mitigation Measure BIO-5a (*Flying Bumble Bee and Nest Surveys*): A qualified biologist (someone who is familiar with and can identify bumble bees) will conduct three flying bumble bee and nest surveys during the peak flying periods (April, May to June, and July) prior to initial ground disturbing activities within or adjacent (within 100 feet) of the creek habitat. The biologist will walk throughout the creek habitat onsite and up to 100 feet outside of the creek habitat during the optimal time of the day to inspect for bumble bees and any nests. If an individual is observed, it will be followed until it can be determined if a nest is present within the survey boundary.
>
> Mitigation Measure BIO-5b (*Identification and Protection Plan*): Bumble bee individuals need to be captured to be identified. If a bumble bee nest is observed, no Project activities will occur within 50 feet of the nest until a plan to identify the species using the nest and protect nesting and overwintering Crotch's bumble bee has been submitted to CDFW and approved in writing by CDFW.

3.3.6 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO MONARCH BUTTERFLY

Habitats within portions of the site are likely to be suitable for foraging monarch butterflies. Monarchs could travel through the site during the breeding season and potentially lay eggs on milkweeds. While monarchs could travel through the site, roosting habitat was absent. There is abundant foraging habitat adjacent to the site that could be used, and implementation of the Project is unlikely to significantly reduce potential foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of foraging habitat. Construction activities during the breeding season could result in injury, mortality, displacement, or disturbance and would be considered a significant impact under CEQA.

Implementation of the following measures will reduce potential impacts to monarch eggs and larvae to a less than significant level under CEQA and will help the Project comply with federal laws protecting this species.

> Mitigation Measure BIO-6a (*Avoidance*): Vegetation removal will not occur during the monarch breeding season (February 1 to August 31).
>
> Mitigation Measure BIO-6b (*Pre-construction Surveys*): If vegetation removal will occur during the breeding season (February 1 to August 31) a pre-construction survey of the BSA will be conducted by a qualified biologist (someone who can identify the species and is familiar with the species' host plants) within 15 days prior to construction activities to determine if milkweeds (*Asclepias* spp.) plants are located within the site. If no milkweed plants are observed, no further mitigation is required.
>
> Mitigation Measure BIO-6c (*Buffers*): If milkweeds are observed within the BSA during the breeding season (February 1 to August 31), an avoidance buffer will be placed around the area as to not to disturb the plant or its root system. The buffer will be left in place until a qualified biologist has determined the buffers are no longer warranted.

Mitigation Measure BIO-6d (*Monarch Egg and Larvae Survey*): If milkweeds are observed within the BSA during the breeding season (February 1 to August 31) and cannot be avoided, a qualified biologist will conduct a monarch egg and larvae survey to look for eggs and larvae on milkweeds within seven (7) days prior to their removal. If no eggs or larvae are observed the milkweed plants can be removed under the supervision of a qualified biologist and will be replanted at a 3:1 ratio.

Mitigation Measure BIO-6e (*Consultation with USFWS if Listed*): In the event a milkweed plant with monarch eggs or larvae is detected during the pre-construction survey and cannot be avoided and this species is listed under the ESA prior to this observation, consultation with USFWS will be completed to avoid take.

3.3.7 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE OF MATERNITY ROOSTING BATS AND SPECIAL STATUS BATS

Trees with natural cavities occurred within the site and may support tree-roosting species of bats such as pallid bats. Roosting habitat becomes especially sensitive to bat populations during the maternity season (March 1 to September 30) when pups are maturing and during the overwintering season (November 1 through February 28). Projects that impact maternity roosting bats or hibernating roosting special status bats would be considered a significant impact under CEQA.

Implementation of the following measures will reduce potential impacts to roosting maternity bats and roosting special status bats to a less than significant level under CEQA.

Mitigation Measure BIO-7a (*Pre-Construction Survey*): A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction survey for cavities and if needed, and emergence survey, within 7 days or less prior to construction if construction activities fall between March 1 and September 30 (bat maternity season) and/or November 1 through February 28 (overwintering season). This survey would help identify current bat roosting locations in trees or cavities within or near the Project site prior to the start of construction.

Mitigation Measure BIO-7b (*Establish Buffers*): On discovery of any bat roosts near work areas a qualified biologist will determine appropriate construction setback distances (buffer zones) based on the biology of the species, conditions of the roost(s), and the level of Project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction.

Mitigation Measure BIO-7c (*Avoidance*): Project activities are not to occur within 100 feet of the identified maternity bat roost between sunset and sunrise during maternity season from March 1 through September 30 and the special status species overwintering bat roost from November 1 through February 28. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or adjacent to the roost.

Mitigation Measure BIO-7d (*Disturbance to Trees*): If a tree or trees must be removed a qualified biologist will inspect the tree prior to removal to verify that the tree is not active roosting habitat. Once the tree is deemed clear of bats, the tree will be removed within two days.

3.3.8 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO FOOTHILL YELLOW-LEGGED FROG

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site. These waterways provide suitable aquatic habitat, and the oak woodland and mixed oak/pine forest habitats provide suitable upland habitat for foothill yellow-legged frogs (FYLF). FYLF within the site during construction have the potential to be injured or killed by Project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and a violation of federal law protecting this species.

Implementation of the following measures will reduce potential impacts to FYLF to a less than significant level and help the Project comply with federal and state laws that protect this species.

> Mitigation Measure BIO-8a (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (California Department of Fish and Wildlife 2018), or current guidance for FYLF to determine if FYLF are within or adjacent (within 100 feet) of the creek habitat. If no FYLFs are found during the pre-construction survey and no surface water is present in the creeks, work may commence without further surveys.
>
> Mitigation Measure BIO-8b (*FYLF Consultation and Avoidance*): If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF.
>
> Mitigation Measure BIO-8c (*Monitor*): If FYLF have been observed during preconstruction surveys or at any time during construction and ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within FYLF habitat.
>
> Recommendation BIO-8d (*FYLF Take Authorization*): If avoidance is not feasible the Project will consult with the USFWS and CDFW to acquire take permits for FYLF prior to any Project activities.

3.3.9 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO HARDHEAD

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site through no Project activities are proposed within the creek habitat. These waterways provide suitable aquatic habitat for hardhead. Hardhead present within the creek during construction have the potential to be injured or killed by Project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and a violation of federal law protecting this species.

Implementation of the following measures will reduce potential impacts to the hardhead to a less than significant level under CEQA and will ensure compliance with state laws protecting this species.

Mitigation Measure BIO-9a (*Avoidance*): If possible, construction activities will not occur in or within 50 feet of Mariposa Creek or the unnamed creek when water is present.

Mitigation Measure BIO-9b (*Pre-construction Survey*): If construction activities must occur in or within 50 feet of the waterways when water is present a pre-construction survey will be conducted by a qualified biologist (someone who is familiar with and can identify fish species) to look for hardhead and other special status fish species that may be present in Mariposa Creek or the unnamed creek.

Mitigation Measure BIO-9c (*Formal Consultation*): If hardhead or other special status fish species are observed within Mariposa Creek or the unnamed creek and cannot be avoided the Project proponent will initiate consultation with the National Marine Fisheries Service and/or CDFW to determine any additional mitigation and minimization measures to avoid impacts to special status fish within the creeks.

3.3.10 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO NORTHWESTERN POND TURTLE

The site contains Mariposa Creek along the north/northeast portion of the site and an unnamed creek along the south portion of the site. The creek habitat could be used by northwestern pond turtle for dispersal and basking. The oak woodland habitat of the site could be used by northwestern pond turtle for nesting and foraging. Upland areas would be permanently impacted through no Project activities are proposed within the creek habitat. Noise, vegetation removal, movement of workers, construction, and ground disturbance as a result of Project activities have the potential to significantly impact northwestern pond turtle. Potentially significant impacts associated with Project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA.

The following measures will be implemented prior to the start of construction and will reduce impacts to northwestern pond turtle to a less than significant level under CEQA:

Mitigation Measure BIO-10a (*Pre-construction Survey and Avoidance Buffers*): Within seven (7) days prior to the start of construction, a qualified biologist (someone familiar with the identification and habitat of this species) will conduct a pre-construction survey for northwestern pond turtle within the creek habitat and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion* (United States Geological Survey 2006), or current guidance. If no northwestern pond turtles are observed during the pre-construction survey, then construction activities may begin. If the surveys results in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own or a qualified biologist (must possess appropriate collecting/handling permits or relevant experience) will stop work and relocate the individual. The qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).

Mitigation Measure BIO-10b (*Monitor*): If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities until the individual(s) have left the site.

Mitigation Measure BIO-10c (*Formal Consultation*): Should northwestern pond turtles get listed by the ESA in this area and the Project/qualified biologist needs to move an individual, consultation

for protection plans and/or relocation plans with the appropriate agencies will be completed to avoid take.

3.3.11 PROJECT-RELATED IMPACTS TO REGULATED WATERS, WETLANDS, AND WATER QUALITY

The Project involves the construction of approximately 12.3 miles of nature trails. No work is currently proposed to occur within Mariposa Creek or the unnamed stream. If the Project were to impact these waterways Project-related impacts to some or all of these waters would be considered a potentially significant impact under CEQA. Impacts to waters of the U.S. are also subject to the permit requirements of Sections 401 and 404 of the Clean Water Act and impacts to waters of the state are subject to the permit requirements of Section 401 of the Clean Water Act and California Fish and Game Code. The placement of fill within any wetlands or other jurisdictional features will require a 401 Water Quality Certification from the RWQCB, 404 permit from the USACE, and a Lake or Streambed Alteration Agreement from CDFW.
There are no designated wild and scenic rivers within the site; therefore, the Project would not result in direct impacts to wild and scenic rivers.

If construction involves ground disturbance over an area greater than one acre, the Project would need to obtain a Construction General Permit under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan to ensure construction activities do not adversely affect water quality. This plan will need to be prepared in support of the Construction General Permit application.

Implementation of the following measures will reduce potential impacts to waters to a less than significant level under CEQA and will ensure compliance with state and federal laws protecting these waters.

> Mitigation Measure BIO-11a (*Permits*): If the Project intends to impact potentially jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with state and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation.

3.3.12 PROJECT-RELATED IMPACTS TO RIPARIAN HABITAT AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Riparian habitat is present along Mariposa Creek and the unnamed stream though impacts to these waterways and riparian habitat are not proposed during the Project. If the Project were to impact riparian habitat, impacts are addressed under mitigation measure BIO-11a. Although there are no recorded observations of a natural community of special concern mapped within the site and no natural communities of special concern were observed during the field survey, the Project could impact high quality habitat for wildlife species in the area.

> Mitigation Measure BIO-12a (*Analysis for Revegetation*): If trees are to be removed during Project activities a qualified biologist will complete an analysis on the number of trees and impacts to the habitat to determine if a habitat restoration and revegetation plan (HRRP) will be needed.

> Mitigation Measure BIO-12b (*HRRP*): If determined by the qualified biologist's analysis an HRRP is required, one will be developed for the Project. Upon completion of the Project, all vegetation impacted by permanent and temporary impacts, including trails, staging areas, temporary roads, and borrow sites, will be recontoured if necessary and revegetated to promote restoration of the area to pre-Project conditions. The HRRP will detail the process or processes to be implemented to restore the target areas and replant vegetation removed during the Project and will include the following Project-specific information, at a minimum:

- summary of habitat impacts and proposed habitat restoration actions;
- location of the restoration sites and existing site conditions;
- restoration design, including a proposed restoration site schedule and descriptions of existing and proposed soils and hydrology;
- site preparation requirements (including soil amendments, if required);
- invasive species eradication plan if applicable, planting plan, and maintenance plan;
- monitoring measures, with performance and success criteria;
- monitoring methods, duration, and schedule; and
- contingency measures and remedial actions.

3.3.13 PROJECT-RELATED IMPACTS TO WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

The oak woodland and mixed oak/pine forest habitats of the site and surrounding areas consisted of expansive open grassland and forests where species could move through. Numerous game trails were observed during the field survey in these habitats. Mariposa Creek and the unnamed stream within the site could act as a corridor for aquatic and terrestrial wildlife, but no impacts are proposed to these waterways and wildlife will be able to continue using these features while construction is occurring and would be able to continue utilizing them after construction activities are completed.

The site has suitable features that could be used as native wildlife nursery sites. Large trees with natural cavities were located within and adjacent to the site and could function as native wildlife nursery sites for bats. Mariposa Creek and the unnamed stream could be used by amphibian species as wildlife nursery sites, though no work is proposed within these waterways. Project-related impacts to any native wildlife nursery sites would be considered a significant impact under CEQA.

The potential impacts to species that could use the trees as a wildlife nursery site have been addressed in Mitigation Measures BIO-7a, and BIO-7d. If the Project were to impact the waterways, impacts to species that could use the waterways as a wildlife nursery site have been addressed in Mitigation Measures BIO-11a. Implementation of these will reduce potential impacts to native wildlife nursery sites to a less than significant level under CEQA. Implementation of the following mitigation measures would reduce potential impacts to wildlife movement corridors to less than significant.

> Mitigation Measure BIO-13a (*Operational Hours*): When possible, construction activities within 100-feet of Mariposa Creek and the unnamed stream should be limited to a half hour after sunrise through a half hour before sunset to reduce potential impacts to wildlife movement corridors.

3.4 LESS THAN SIGNIFICANT PROJECT-RELATED IMPACTS

3.4.1 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 20 regionally occurring special status plant species, five are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: Koch's cord moss, Pleasant Valley mariposa-lily, recurved larkspur, slender-stemmed monkeyflower, and Yosemite onion.

Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these five special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS ANIMAL SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 17 regionally occurring special status animal species, 10 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: Bald eagle, California condor, California tiger salamander, fisher, limestone salamander, Sierra Nevada yellow-legged frog, spotted bat, Townsend's big-eared bat, valley elderberry longhorn beetle, and western spadefoot.

Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these 10 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.3 PROJECT-RELATED IMPACTS TO CRITICAL HABITAT

Designated critical habitat is absent from the site and surrounding lands. Therefore, there would be no impact to critical habitat, and mitigation measures are not warranted.

3.4.4 LOCAL POLICIES OR HABITAT CONSERVATION PLANS

The Project appears to be consistent with the goals and policies of the Mariposa County General Plan. There are no known HCPs or NCCPs in the Project vicinity. Mitigation measures are not warranted.

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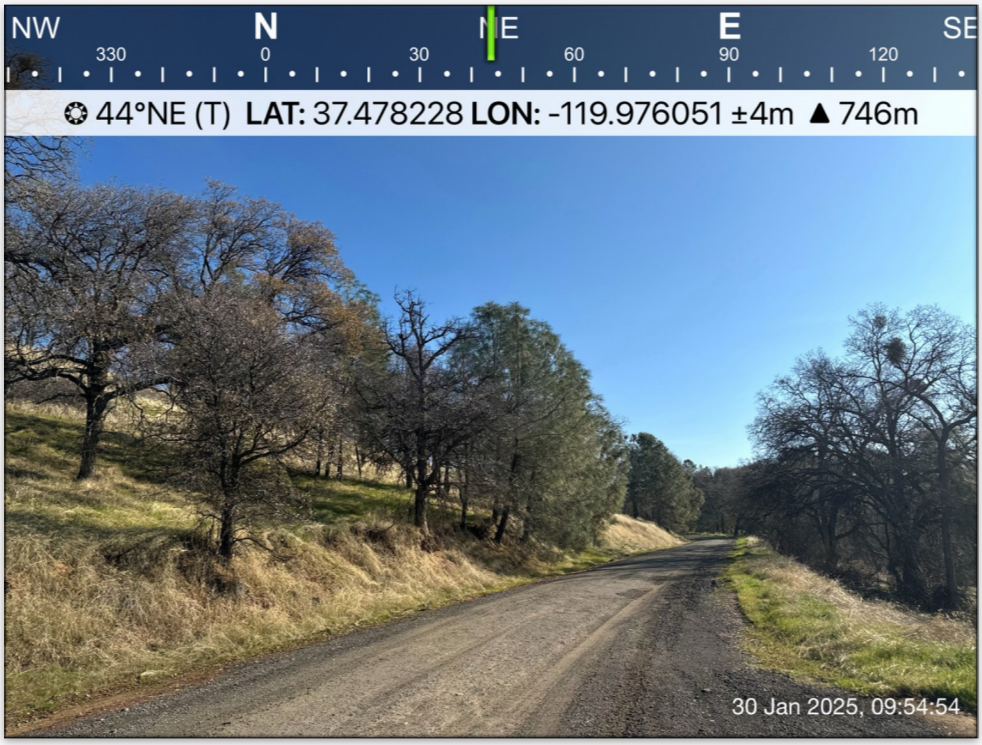
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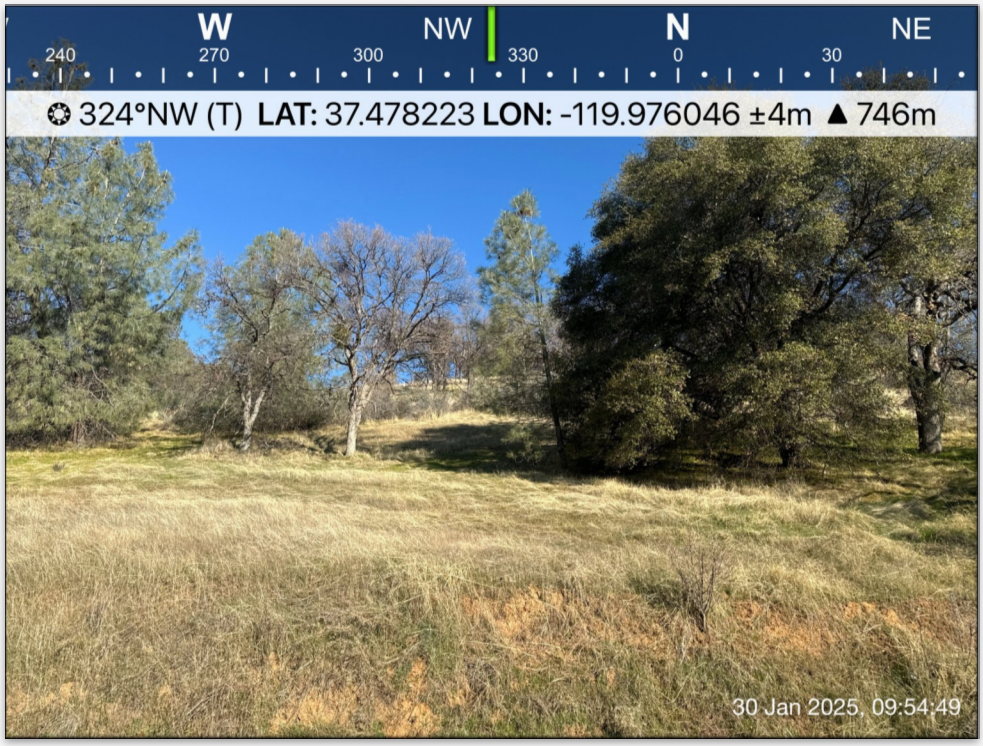
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APPENDIX A: REPRESENTATIVE PHOTOS OF THE PROJECT SITE



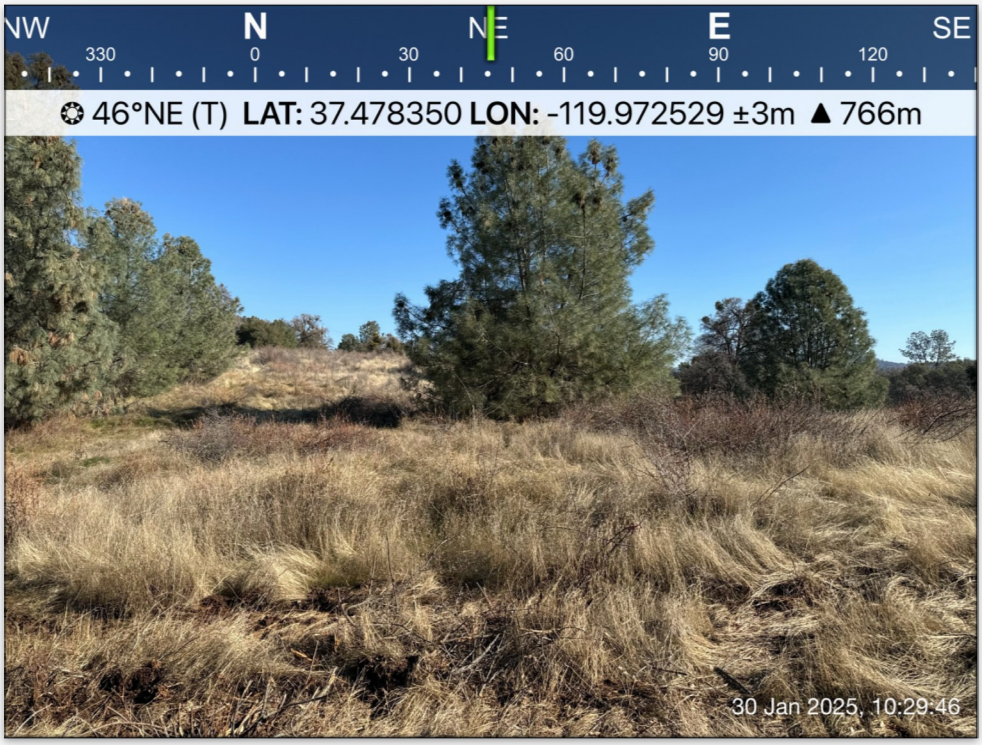
Photograph 1

Overview of the Martin Road which goes through a portion of the oak woodland habitat onsite.



Photograph 2

Overview of the oak woodland habitat onsite.



Photograph 3

Another overview of the oak woodland habitat onsite.



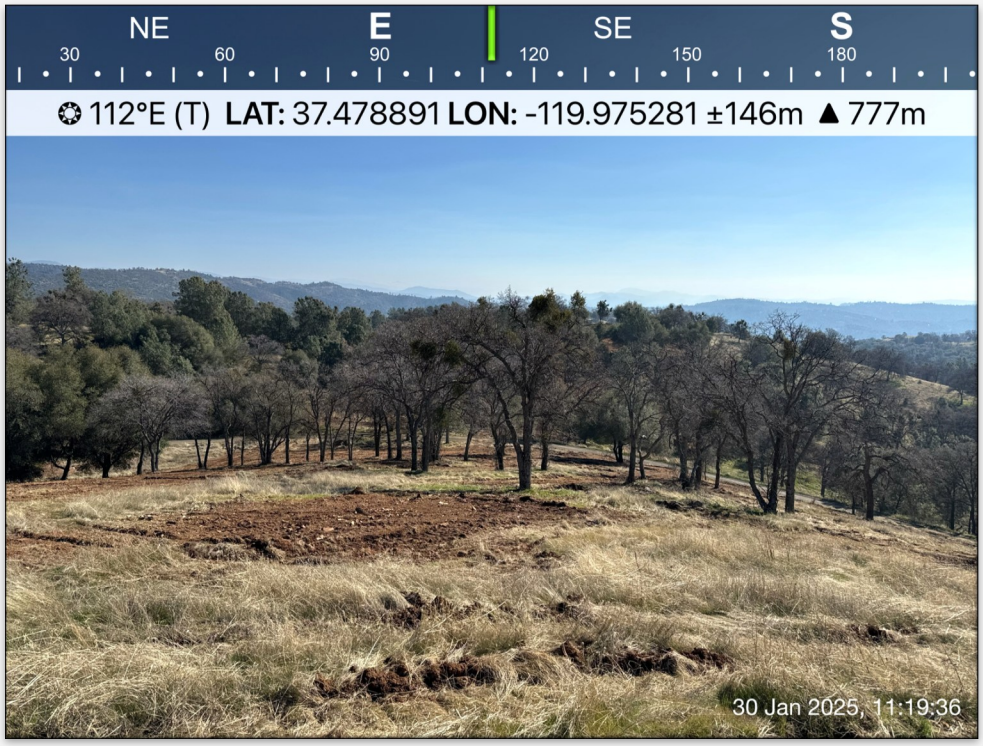
Photograph 4

Overview of the disturbed oak woodland habitat on-site.



Photograph 5

Another overview of the disturbed oak woodland habitat onsite.



Photograph 6

Another overview of the disturbed oak woodland habitat onsite.



Photograph 7

Example of a depression located in the disturbed oak woodland habitat onsite.



Photograph 8

Overview of the flattened barn located in the disturbed oak woodland habitat onsite.



Photograph 9

Overview of the mixed oak/ pine forest habitat onsite.



Photograph 10

Another overview of the mixed oak/pine forest habitat onsite.



Photograph 11

Another overview of the mixed oak/pine forest habitat onsite.



Photograph 12

Another overview of the mixed oak/pine forest habitat onsite.



Photograph 13

Another overview of the mixed oak/pine forest habitat onsite.



Photograph 14

Another overview of the mixed oak/pine forest habitat onsite.



Photograph 15

Overview of the mixed oak/ pine forest habitat onsite which ends at State Route 140.



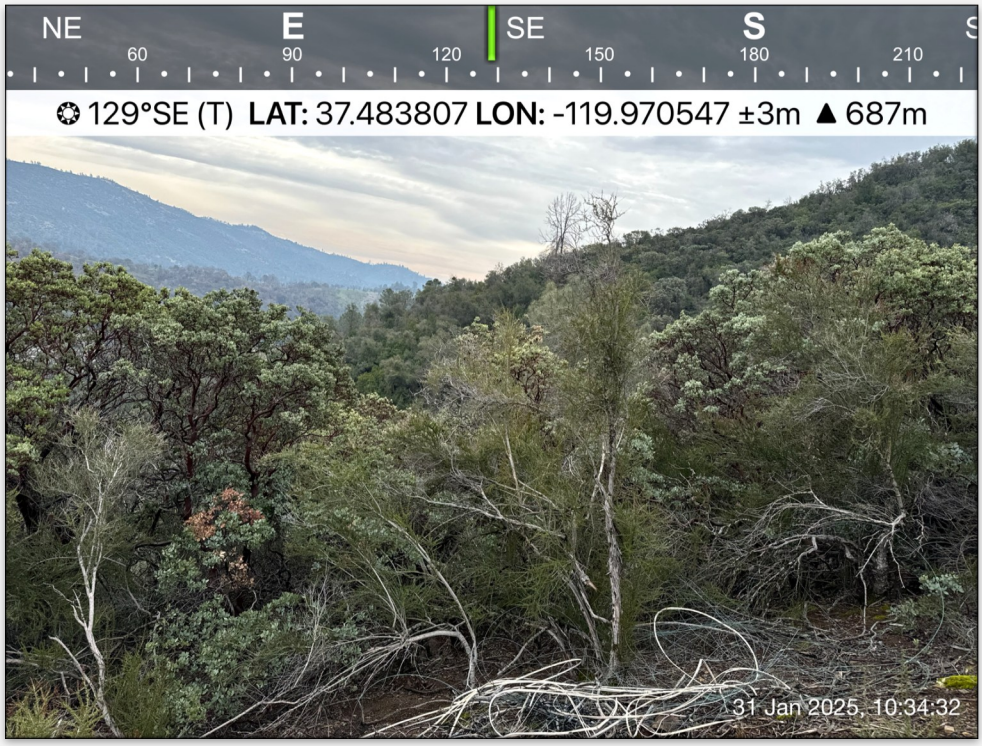
Photograph 16

Overview of the disturbed chaparral habitat onsite.



Photograph 17

Another overview of the disturbed chaparral habitat onsite.



Photograph 18

Another overview of the disturbed chaparral habitat onsite.



Photograph 19

Overview of Mariposa Creek within the creek habitat on-site.



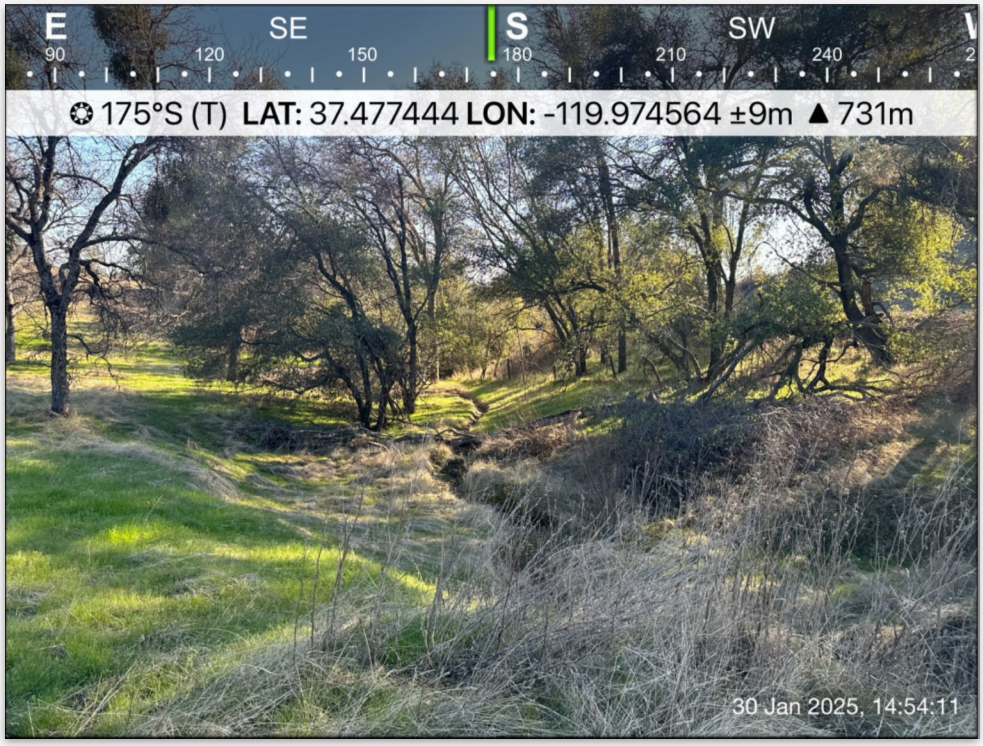
Photograph 20

Another overview of Mariposa Creek within the creek habitat onsite.



Photograph 21

Overview of the unnamed drainage/creek within the creek habitat onsite.



Photograph 22

Another overview of the unnamed drainage/creek within the creek habitat onsite.



Photograph 23

Surrounding land to the east of the site contained rural residential houses within oak woodland habitat.



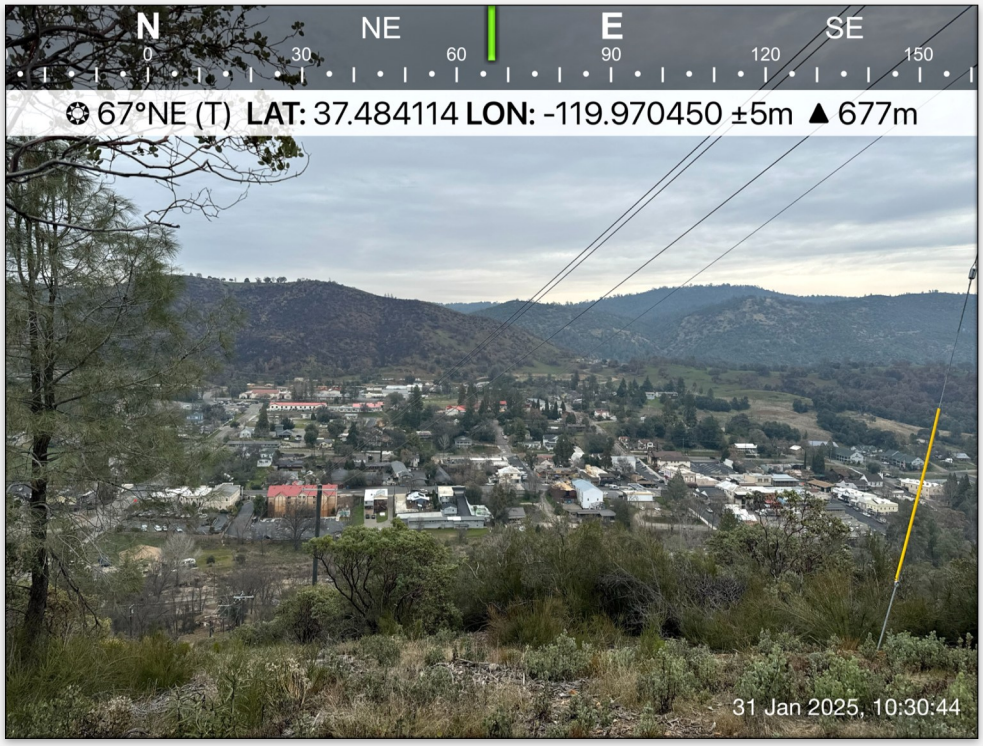
Photograph 24

Land surrounded by the site but not included in the site contained rural residential houses within oak woodland habitat.



Photograph 25

Surrounding land to the west of the site contained oak woodland habitat.



Photograph 26

Surrounding land to the north/ northeast of the site contained the CDP of Mariposa.

APPENDIX B: CNDDB 9-QUAD SPECIES LIST

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Bear Valley (3712051) OR Feliciana Mtn. (3711958) OR Buckingham Mtn. (3711957) OR Stumpfield Mtn. (3711947) OR Mariposa (3711948) OR Catheys Valley (3712041) OR Illinois Hill (3712031) OR Ben Hur (3711938) OR Horsecamp Mountain (3711937))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
amphibious caddisfly *Desmona bethula*	IITRI77010	None	None	G2G3	S2S3	
bald eagle *Haliaeetus leucocephalus*	ABNKC10010	Delisted	Endangered	G5	S3	FP
beaked clarkia *Clarkia rostrata*	PDONA050Y0	None	None	G2G3	S2S3	1B.3
big-scale balsamroot *Balsamorhiza macrolepis*	PDAST11061	None	None	G2	S2	1B.2
Boharts' blue butterfly *Philotiella speciosa bohartorum*	IILEPG3011	None	None	G3T1	S1	
California tiger salamander - central California DPS *Ambystoma californiense pop. 1*	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Central Valley Drainage Hardhead/Squawfish Stream *Central Valley Drainage Hardhead/Squawfish Stream*	CARA2443CA	None	None	GNR	SNR	
Congdon's lomatium *Lomatium congdonii*	PDAPI1B0B0	None	None	G2	S2	1B.2
Congdon's woolly sunflower *Eriophyllum congdonii*	PDAST3N030	None	Rare	G2	S2	1B.2
Crotch's bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
foothill yellow-legged frog - south Sierra DPS *Rana boylii pop. 5*	AAABH01055	Endangered	Endangered	G3T2	S2	
grassland suncup *Camissonia lacustris*	PDONA030W0	None	None	G2	S2	1B.2
hardhead *Mylopharodon conocephalus*	AFCJB25010	None	None	G3	S3	SSC
Koch's cord moss *Entosthodon kochii*	NBMUS2P050	None	None	G1	S1	1B.3
Leech's skyline diving beetle *Hydroporus leechi*	IICOL55040	None	None	G3	S2S3	
limestone salamander *Hydromantes brunus*	AAAAD09010	None	Threatened	G2G3	S2S3	FP
Madera leptosiphon *Leptosiphon serrulatus*	PDPLM09130	None	None	G3	S3	1B.2
Mariposa clarkia *Clarkia biloba ssp. australis*	PDONA05051	None	None	G4G5T3	S3	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Mariposa cryptantha *Cryptantha mariposae*	PDBOR0A1Q0	None	None	G2G3	S2S3	1B.3
Mariposa daisy *Erigeron mariposanus*	PDAST3M5L0	None	None	GX	SX	1A
Mariposa lupine *Lupinus citrinus var. deflexus*	PDFAB2B102	None	Threatened	G2T1T2	S1	1B.2
Mariposa pussypaws *Calyptridium pulchellum*	PDPOR09060	Threatened	None	G1	S1	1B.1
North American porcupine *Erethizon dorsatum*	AMAFJ01010	None	None	G5	S3	
northwestern pond turtle *Actinemys marmorata*	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
Parry's horkelia *Horkelia parryi*	PDROS0W0C0	None	None	G2	S2	1B.2
Pleasant Valley mariposa-lily *Calochortus clavatus var. avius*	PMLIL0D095	None	None	G4T2	S2	1B.2
recurved larkspur *Delphinium recurvatum*	PDRAN0B1J0	None	None	G2?	S2	1B.2
shaggyhair lupine *Lupinus spectabilis*	PDFAB2B3P0	None	None	G2	S2	1B.2
Sierra Nevada yellow-legged frog *Rana sierrae*	AAABH01340	Endangered	Threatened	G2	S2	WL
slender-stalked monkeyflower *Erythranthe gracilipes*	PDSCR1B1C0	None	None	G2	S2	1B.2
slender-stemmed monkeyflower *Erythranthe filicaulis*	PDPHR012H0	None	None	G2	S2	1B.2
spotted bat *Euderma maculatum*	AMACC07010	None	None	G4	S3	SSC
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G4	S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	
western spadefoot *Spea hammondii*	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
yellow-lip pansy monkeyflower *Diplacus pulchellus*	PDSCR1B280	None	None	G2	S2	1B.2
Yosemite onion *Allium yosemitense*	PMLIL022L0	None	Rare	G3	S3	1B.3
Yosemite sideband *Monadenia yosemitensis*	IMGASZ3010	None	None	G1	S1S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Yuma myotis	AMACC01020	None	None	G5	S4	
Myotis yumanensis						

Record Count: 40

APPENDIX C: IPAC SPECIES LIST

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: 05/22/2025 17:09:07 UTC
Project Code: 2025-0071379
Project Name: Mariposa Hillside Trails 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, 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 U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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 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 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:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

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 Code 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

Project Code: 2025-0071379
Project Name: Mariposa Hillside Trails Project
Project Type: Recreation - New Construction
Project Description: The Hillside Trails project proposes to construct approximately 12.3 miles of nature trails branching off the planned Phase III section of the Mariposa Creek Parkway Trail. The total project site consists of approximately 235 acres. Trail widths would vary from three to eight feet. The intent of the proposed project is to bring a balance of adventure and tranquility to the area. The new trails would be divided into four different segments based on their location and intended purpose.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.48300355000001,-119.97323279604596,14z



Counties: Mariposa County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 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 Fisheries[1], 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.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Fisher *Pekania pennanti* Population: SSN DPS There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3651	Endangered

BIRDS

NAME	STATUS
California Condor *Gymnogyps californianus* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened
Foothill Yellow-legged Frog *Rana boylii* Population: South Sierra Distinct Population Segment (South Sierra DPS) There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5133	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

FLOWERING PLANTS

NAME	STATUS
Mariposa Pussypaws *Calyptridium pulchellum*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2695

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Shaylea Stark
Address: 455 W Fir Ave
City: Clovis
State: CA
Zip: 93612
Email sstark@ppeng.com
Phone: 5594492700

APPENDIX D: NRCS WEB SOIL SURVEY REPORT

United States Department of Agriculture

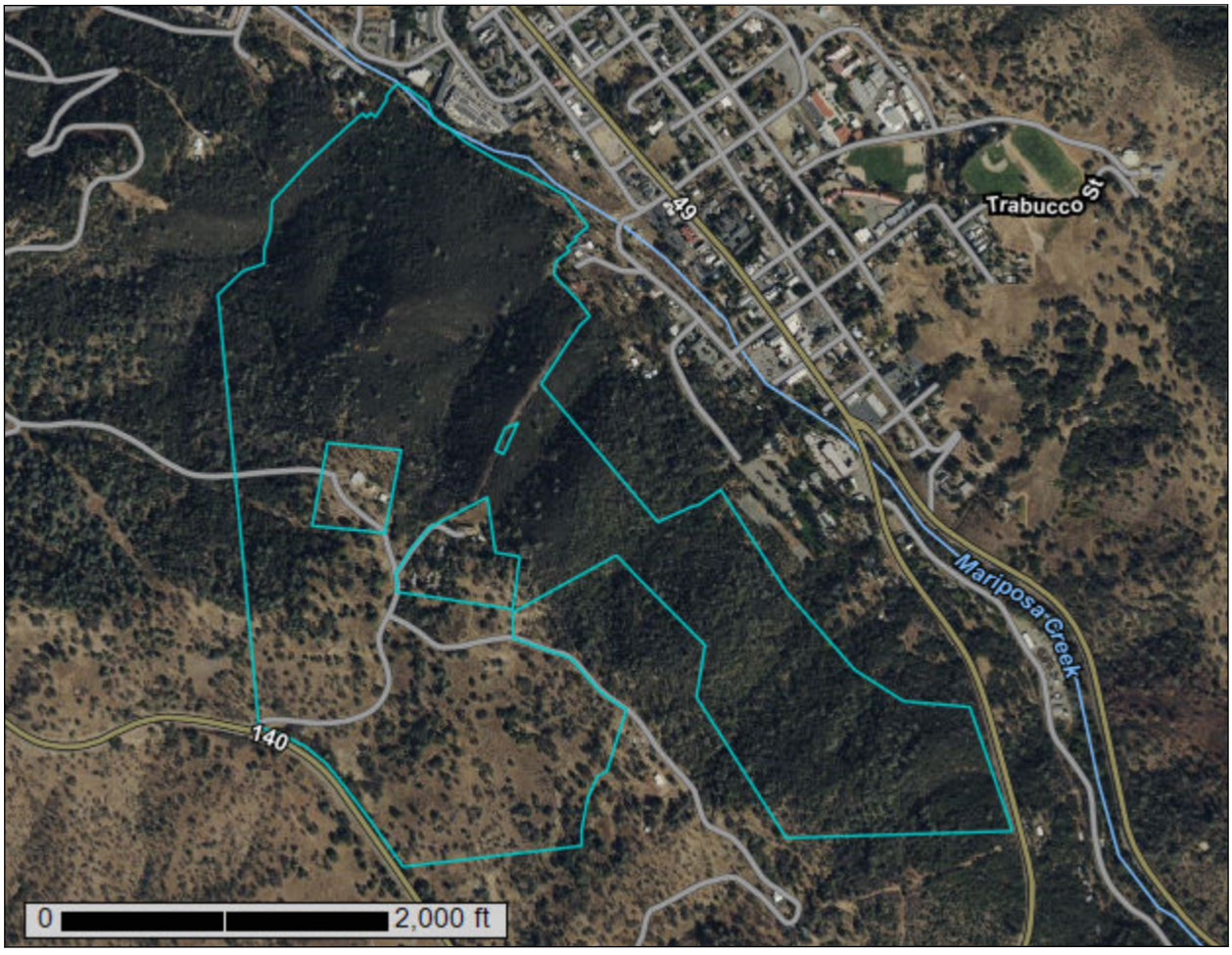
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Mariposa County Area, California

Mariposa Hillside Trails Project



March 19, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

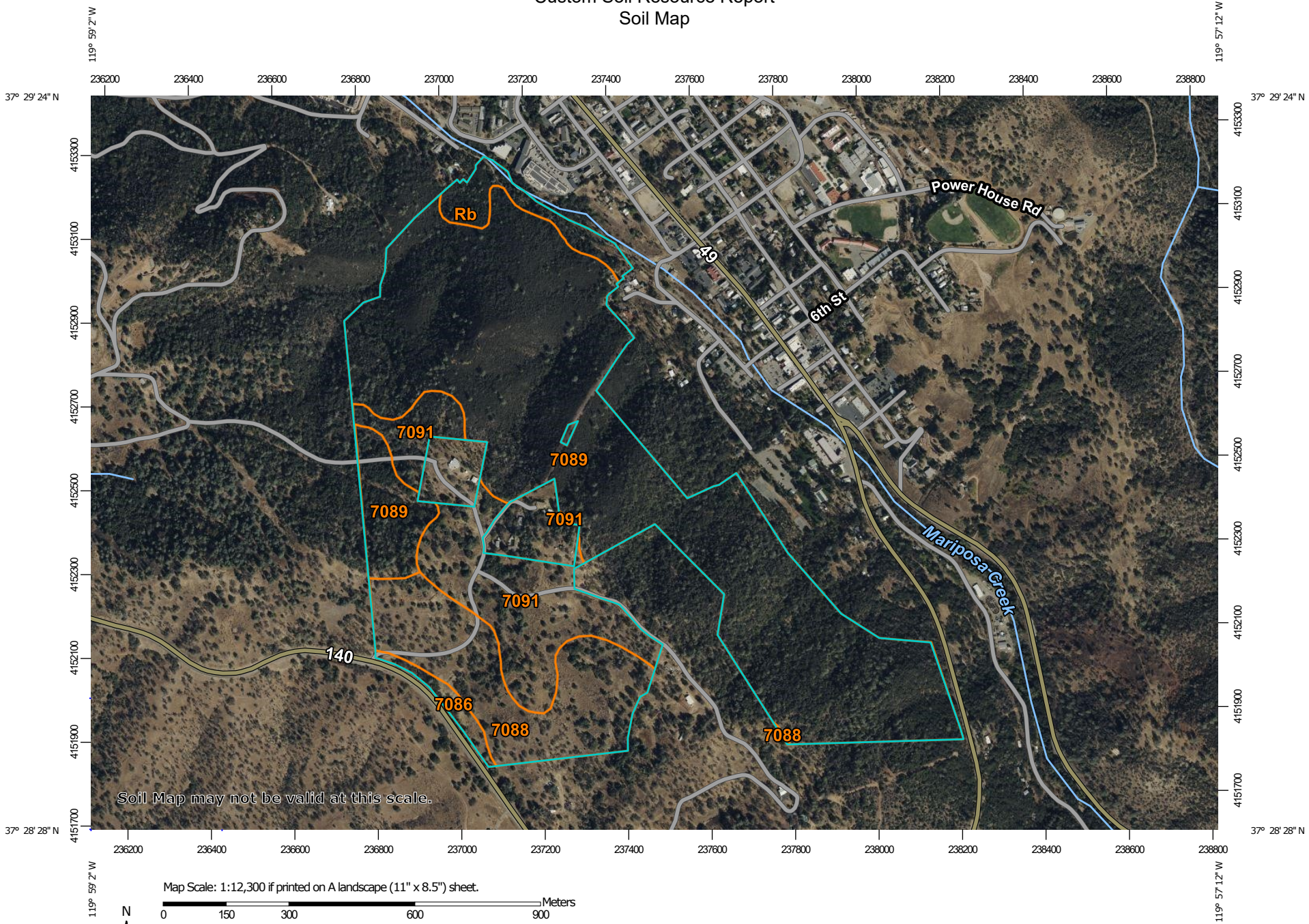
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:12,300 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mariposa County Area, California
Survey Area Data: Version 17, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 9, 2022—Oct 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7086	Loafercreek-Gopheridge complex, 15 to 30 percent slopes	3.0	1.3%
7088	Loafercreek-Gopheridge complex, 30 to 60 percent slopes	34.8	14.8%
7089	Gardellones-Gopheridge-Motherlode complex, 30 to 60 percent slopes	153.5	65.3%
7091	Trabuco-Jasperpeak-Rock outcrop complex, 8 to 30 percent slopes	36.1	15.3%
Rb	Riverwash and tailings	7.7	3.3%
Totals for Area of Interest		**235.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not

mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Mariposa County Area, California

7086—Loafercreek-Gopheridge complex, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2mx8f
Elevation: 850 to 2,300 feet
Mean annual precipitation: 24 to 34 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 215 to 320 days
Farmland classification: Not prime farmland

Map Unit Composition

Loafercreek and similar soils: 50 percent
Gopheridge and similar soils: 25 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Loafercreek

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

A - 0 to 1 inches: loam
Bt1 - 1 to 4 inches: loam
Bt2 - 4 to 13 inches: loam
Bt3 - 13 to 20 inches: loam
Cr - 20 to 30 inches: bedrock
R - 30 to 79 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: 20 to 39 inches to paralithic bedrock; 20 to 49 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F018XI201CA - Moderately Deep Thermic Foothills

Hydric soil rating: No

Description of Gopheridge

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

A - 0 to 3 inches: loam
BA - 3 to 7 inches: loam
Bt1 - 7 to 11 inches: very gravelly loam
Bt2 - 11 to 17 inches: very gravelly loam
Bt3 - 17 to 24 inches: very gravelly loam
R - 24 to 79 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: 20 to 39 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F018XI201CA - Moderately Deep Thermic Foothills
Hydric soil rating: No

Minor Components

Bonanza

Percent of map unit: 13 percent
Landform: Hills
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F018XI200CA - Low Elevation Foothills
Hydric soil rating: No

Motherlode

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope

Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F018XI202CA - Deep Thermic Steep Hillslopes
Hydric soil rating: No

Mined land

Percent of map unit: 1 percent
Landform: Hills
Down-slope shape: Concave, convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Rock outcrop, metavolcanic

Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

7088—Loafercreek-Gopheridge complex, 30 to 60 percent slopes

Map Unit Setting

National map unit symbol: 20mn5
Elevation: 850 to 2,430 feet
Mean annual precipitation: 23 to 34 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 205 to 320 days
Farmland classification: Not prime farmland

Map Unit Composition

Loafercreek and similar soils: 50 percent
Gopheridge and similar soils: 24 percent
Minor components: 26 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Loafercreek

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

Oi - 0 to 0 inches: slightly decomposed plant material
A - 0 to 3 inches: loam
Bw - 3 to 5 inches: loam
Bt1 - 5 to 8 inches: loam
Bt2 - 8 to 17 inches: very gravelly loam
Bt3 - 17 to 22 inches: stony sandy clay loam

Cr - 22 to 32 inches: bedrock
R - 32 to 79 inches: bedrock

Properties and qualities

Slope: 30 to 60 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: 20 to 39 inches to paralithic bedrock; 20 to 49 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F018XI201CA - Moderately Deep Thermic Foothills
Hydric soil rating: No

Description of Gopheridge

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

A - 0 to 2 inches: very gravelly loam
BA - 2 to 6 inches: very cobbly loam
Bt1 - 6 to 12 inches: very cobbly loam
Bt2 - 12 to 18 inches: extremely gravelly loam
Bt3 - 18 to 26 inches: extremely gravelly loam
R - 26 to 79 inches: bedrock

Properties and qualities

Slope: 30 to 60 percent
Surface area covered with cobbles, stones or boulders: 3.0 percent
Depth to restrictive feature: 20 to 39 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): 7e

Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F018XI201CA - Moderately Deep Thermic Foothills
Hydric soil rating: No

Minor Components

Motherlode
Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F018XI201CA - Moderately Deep Thermic Foothills
Hydric soil rating: No

Rock outcrop, metavolcanic
Percent of map unit: 5 percent
Landform: Hills
Hydric soil rating: No

Jasperpeak
Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F018XI200CA - Low Elevation Foothills
Hydric soil rating: No

Gardellones
Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F018XI202CA - Deep Thermic Steep Hillslopes
Hydric soil rating: No

Mined land
Percent of map unit: 1 percent
Landform: Hills
Down-slope shape: Concave, convex
Across-slope shape: Linear, convex
Hydric soil rating: No

7089—Gardellones-Gopheridge-Motherlode complex, 30 to 60 percent slopes

Map Unit Setting

National map unit symbol: 2n89g
Elevation: 980 to 2,440 feet
Mean annual precipitation: 25 to 34 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 210 to 315 days
Farmland classification: Not prime farmland

Map Unit Composition

Gardellones and similar soils: 68 percent
Gopheridge and similar soils: 15 percent
Motherlode and similar soils: 15 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gardellones

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

Oi - 0 to 0 inches: slightly decomposed plant material
A - 0 to 4 inches: loam
Bt1 - 4 to 20 inches: very stony loam
Bt2 - 20 to 35 inches: clay
Bt3 - 35 to 46 inches: clay
Crt - 46 to 55 inches: bedrock
R - 55 to 79 inches: bedrock

Properties and qualities

Slope: 30 to 60 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: 39 to 49 inches to paralithic bedrock; 39 to 79 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F018XI202CA - Deep Thermic Steep Hillslopes
Hydric soil rating: No

Description of Gopheridge

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

Oi - 0 to 0 inches: slightly decomposed plant material
A - 0 to 3 inches: loam
BA - 3 to 6 inches: loam
Bt1 - 6 to 12 inches: loam
Bt2 - 12 to 23 inches: extremely gravelly clay loam
R - 23 to 79 inches: bedrock

Properties and qualities

Slope: 30 to 60 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: 20 to 39 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): 8
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: F018XI201CA - Moderately Deep Thermic Foothills
Hydric soil rating: No

Description of Motherlode

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

A - 0 to 4 inches: loam
BA - 4 to 8 inches: loam
Bt1 - 8 to 20 inches: loam
Bt2 - 20 to 29 inches: very gravelly clay loam
Bt3 - 29 to 38 inches: gravelly loam
Bt4 - 38 to 48 inches: loam
BC - 48 to 56 inches: loam
R - 56 to 79 inches: bedrock

Properties and qualities

Slope: 30 to 60 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: 39 to 59 inches to paralithic bedrock; 39 to 59 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F018XI202CA - Deep Thermic Steep Hillslopes
Hydric soil rating: No

Minor Components

Rock outcrop, metavolcanic

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

7091—Trabuco-Jasperpeak-Rock outcrop complex, 8 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2z5lq
Elevation: 1,100 to 3,580 feet
Mean annual precipitation: 21 to 39 inches
Mean annual air temperature: 55 to 61 degrees F
Frost-free period: 190 to 315 days

Farmland classification: Not prime farmland

Map Unit Composition

Trabuco and similar soils: 55 percent
Jasperpeak and similar soils: 24 percent
Rock outcrop, metavolcanic: 11 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Trabuco

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Colluvium over residuum derived from metavolcanics

Typical profile

A - 0 to 5 inches: cobbly loam
BAt - 5 to 12 inches: cobbly clay loam
2Bt1 - 12 to 26 inches: gravelly clay
2Bt2 - 26 to 36 inches: clay
2BCt - 36 to 55 inches: clay loam
2Crt - 55 to 65 inches: bedrock

Properties and qualities

Slope: 8 to 30 percent
Surface area covered with cobbles, stones or boulders: 10.0 percent
Depth to restrictive feature: 6 to 18 inches to abrupt textural change; 39 to 59 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: F018XI205CA - Thermic Granitic Foothills
Hydric soil rating: No

Description of Jasperpeak

Setting

Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex

Parent material: Residuum weathered from metavolcanics

Typical profile

A - 0 to 3 inches: very gravelly sandy loam
2Bt - 3 to 12 inches: extremely gravelly loam
2Rt - 12 to 79 inches: bedrock

Properties and qualities

Slope: 8 to 30 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 0.7 inches)

Interpretive groups

Land capability classification (irrigated): 8
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: F018XI200CA - Low Elevation Foothills
Hydric soil rating: No

Description of Rock Outcrop, Metavolcanic

Setting

Landform: Hills
Landform position (three-dimensional): Crest

Interpretive groups

Land capability classification (irrigated): 8
Land capability classification (nonirrigated): 8

Minor Components

Loafercreek

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F018XI201CA - Moderately Deep Thermic Foothills
Hydric soil rating: No

Mined land

Percent of map unit: 3 percent
Landform: Hills

Rb—Riverwash and tailings

Map Unit Setting

National map unit symbol: hk2x
Elevation: 310 to 3,500 feet
Mean annual precipitation: 12 to 45 inches
Mean annual air temperature: 55 to 63 degrees F
Frost-free period: 150 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

Riverwash: 50 percent
Tailings: 49 percent
Minor components: 1 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverwash

Setting

Landform: Channels, flood plains
Parent material: Mixed alluvium

Typical profile

C - 0 to 6 inches: extremely gravelly sand
C - 6 to 60 inches: stratified gravelly sand to extremely gravelly coarse sand

Properties and qualities

Slope: 0 to 4 percent
Drainage class: Well drained
Runoff class: Very high
Depth to water table: About 0 to 24 inches
Frequency of flooding: Frequent

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Description of Tailings

Setting

Landform: Stream terraces
Parent material: Mixed alluvium

Typical profile

C - 0 to 60 inches: fragmental material

Properties and qualities

Slope: 0 to 5 percent
Drainage class: Well drained
Runoff class: Very high
Frequency of flooding: Rare

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Rock wasteland

Percent of map unit: 1 percent
Landform: Stream terraces
Hydric soil rating: No

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Appendix C – Class III Inventory/ Phase I Survey Report

PHASE I SURVEY
FOR THE MARIPOSA CREEK PARKWAY PHASE III HILLSIDE TRAILS PROJECT, MARIPOSA COUNTY, CALIFORNIA

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August 2024
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MANAGEMENT SUMMARY

This report documents the results of a Phase I survey for the Mariposa Creek Parkway Phase III Hillside Trails Project (Project). The Project is within Mariposa County, directly southwest of the city of Mariposa. This places the Project on the foothills of the Sierra Nevada range, as illustrated on the Mariposa USGS 7.5-minute topographic quadrangle. The proposed Project consists of approximately 12.3 miles (mi.) of nature trails branching off the planned Phase III section of the Mariposa Creek Parkway Trail. Elevations within the Project area, which contains steep slopes, range from 2,000 feet (ft.) above mean sea level (amsl) to 2,540 ft. amsl.

ASM Affiliates (ASM) conducted this study, with Director Peter A. Carey, MA, RPA, serving as principal investigator. Senior Archaeologist Dustin Merrick, MA, RPA, was a contributing author of this report. The study was undertaken to assist with compliance with the California Environmental Quality Act (CEQA).

To determine whether the Project site had been previously surveyed for cultural resources, and/or whether any such resources were known to exist within or near to it, staff of the Central California Information Center (CCIC) conducted an archival records search on March 14, 2024. According to the CCIC, three previous studies (MP-08710, MP-8988, MP-9258) have been conducted within the Project site, and 36 previous studies were identified within the 0.5-mi. buffer. Based on CCIC data, approximately 5 percent of the Project site has been previously surveyed. All of these studies are less than 10 years old. The CCIC results identified no previously recorded cultural resources within the Project site. A total of 80 previously recorded cultural resources were identified within the 0.5-mi. buffer, with the nearest located less than 0.1 mi. from the Project site.

Geoarchaeological review of the Project site indicates that the Project site is unlikely to contain buried deposits. Historic aerial and topographic map review shows the Project site has had minimal development which occurred beginning in 1945.

A Phase I survey of the Project site was conducted by ASM Associate Archaeologist Robert Azpitarte, BA, and Assistant Archaeologist Daniel Ware, BA, conducted the fieldwork., from July 31 to August 2, 2024. Parallel survey transects spaced at 15 meters (m) apart were employed for the survey. The proposed Project consists of nature trails branching off the planned Phase III section of the Mariposa Creek Parkway Trail. The Project site consists largely of undeveloped land as well as unpaved and paved roads. Visibility for the Project site ranged from fair (approximately 50 percent) to poor (approximately 15 percent) with the exception of the northeastern and northwestern portions of the Project site which were too steep and vegetated to survey. Visibility was obscured by native and non-native vegetation. Two prospect pits (MAR-SITE-1 and MAR-SITE-2) and a collapsed structure (MAR-STRUCTURE-1) were observed within the Project site. No other cultural resources of any kind were observed within the Project site.

Two prospect pits (MAR-SITE-1 and MAR-SITE-2) and a collapsed structure (MAR-STRUCTURE-1) were observed within the Project site; however, the Project site remained largely undeveloped as far back as 1983, and there is no evidence that these resources meet the 50-year-

old age requirement to be considered historical resources under CEQA. No other cultural resources of any kind were observed within the Project site.

Based on the above analyses and findings, ASM recommends a finding of ***less-than-significant impact*** under CEQA. It is further recommended that, in the unlikely event that cultural resources are identified during Project construction, work be halted within a 100 ft. radius of the find and a qualified archaeologist be contacted to evaluate the newly discovered resource. Appropriate project conditions and mitigation measures should be adopted by the lead agency to reduce those impacts to less than significant.

1. INTRODUCTION AND REGULATORY CONTEXT

ASM Affiliates (ASM) was retained by the Provost and Pritchard Consulting Group to conduct an intensive Phase I cultural resources survey for the Mariposa Creek Parkway Phase III Hillside Trails Project (Project), Mariposa County, California. The study was undertaken to assist with compliance with the California Environmental Protection Act (CEQA) with the County of Mariposa acting as the CEQA lead agency. The investigation was conducted, specifically, to ensure that significant impacts to historical resources do not occur as a result of Project construction.

This current study included:

- A background records search and literature review to determine if any known cultural resources were present in the project zone and/or whether the area had been previously and systematically studied by archaeologists;
- An on-foot, intensive inventory of the Project site to identify and record previously undiscovered cultural resources and to examine known sites; and,
- A preliminary assessment of any such resources found within the subject property.

Director Peter A. Carey, MA, RPA, served as principal investigator. Senior Archaeologist Dustin Merrick, MA, RPA, was a contributing author of this report. Associate Archaeologist Robert Azpitarte, BA, and Assistant Archaeologist Daniel Ware, BA, conducted the fieldwork.

This document constitutes a report on the Phase I survey. Subsequent chapters provide background to the investigation, including historic context studies; the findings of the archival records search; a summary of the field surveying techniques employed; and the results of the fieldwork. We conclude with management recommendations for the Project.

1.1 PROJECT LOCATION

The Project is within Mariposa County, directly southeast of the city of Mariposa. This places the Project on the foothills of the Sierra Nevada range. The Project is within an unsectioned portion of the Mariposa USGS 7.5-minute topographic quadrangle. The proposed Project site consists of undeveloped lands adjacent to residential properties. Elevations within the Project area, which contains steep slopes, range from 2,000 feet (ft.) above mean sea level (amsl) to 2,540 ft. amsl.

1.2 PROJECT DESCRIPTION

The Hillside Trails Project proposes to construct approximately 12.3 miles (mi.) of nature trails branching off the planned Phase III section of the Mariposa Creek Parkway Trail. The total Project area consists of approximately 235 acres (ac.). Trail widths would vary from 3 to 8 ft. The intent of the proposed Hillside Trails Project is to bring a balance of adventure and tranquility to the area.

The new trails would be divided into four segments based on their location and intended purpose. These lengths are an estimate and include the following:

Front Country Trails

- 0.8 mi. and 1.6 mi. stacked loops from the Mariposa Creek Parkway
- Trail running grades 5–7 percent

Destination Trails

- 1.6 mi. trail from Mariposa Creek Parkway up to overlook
- 2.8 mi. trail from Mariposa Creek Parkway up to highpoint of the site
- Trail running grade 5–8 percent
- Opportunity for more technically challenging trails

Oak Woodland Trails

- 1.6 mi. woodland loop from proposed trailhead
- 0.7 mi. trail from proposed trailhead up to high point of the site
- Trail running grades <5 percent
- Opportunity for more accessible trails

Park Trails

- 2.5 mi. loop option from the County Park
- 1.9 mi. trail from County Park to overlook
- Trail running grade 4–8 percent

Trail Amenities and Features

The proposed Project would include various amenities and features within the trail system. They are anticipated to include the following if possible:

- Shaded benches
- Scenic viewpoints
- Restrooms with drinking fountains
- Ecological restoration areas
- Educational signage
- Pet facilities (i.e., waste bags and waterspouts)
- Americans with Disabilities Act (ADA) accessible routes
- Bike racks and repair station
- Isolated meditation areas
- Swing benches
- Large gathering spaces with table seating
- Exercise stations

- Outdoor classroom
- Bike jumps
- Bird blinds
- Ropes course
- Hitching post
- Parking
- Conservation zones

Zone Amendment

The Project may require a zone amendment for the Project parcels that are currently not zoned Public Quasi-Public.

1.3 REGULATORY CONTEXT

1.3.1 California Environmental Quality Act

CEQA is applicable to discretionary actions by state or local lead agencies. Under CEQA, lead agencies must analyze impacts to cultural resources. Significant impacts under CEQA occur when "historically significant" or "unique" cultural resources are adversely affected, which occurs when such resources could be altered or destroyed through Project implementation. Historically significant cultural resources are defined by eligibility for or by listing in the California Register of Historical Resources (CRHR).

CEQA Guidelines Section 15064.5 defines historical resources as:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (Pub. Res. Code § 5024.1, Title 14 CCR, Section 14 CCR, Section 4850 et seq.).
2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the CRHR (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 14 CCR, Section 4852)
4. The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey

> (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

Unique resources under CEQA are those that represent:

> An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC § 21083.2(g)).

Preservation in place is the preferred approach under CEQA to mitigating adverse impacts to significant or unique cultural resources.

1.3.2 California Register of Historical Resources Significance Criteria

The CRHR program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under CEQA.

To be eligible for listing in the CRHR, a resource must satisfy at least one of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Historical resources eligible for listing in the CRHR must meet at least one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for CRHR, integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (California Office of Historic Preservation 2001). This general definition

is strengthened by the more specific definition offered by the National Register of Historic Places (NRHP)—the criteria and guidelines on which the CRHR criteria and guidelines are based upon. In 2012, the California Office of Historic Preservation clarified that the intent of the CRHR regulations is to be the same as the NRHP (California Department of Transportation 2012).

1.3.3 Integrity

To be eligible for listing in the CRHR a property must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation*, establishes how to evaluate the integrity of a property: "Integrity is the ability of a property to convey its significance" (National Park Service, National Register of Historic Places 1998). The evaluation of integrity must be grounded in an understanding of a property's physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

1. **Location** is the place where the historic property was constructed or the place where the historic event occurred.
2. **Design** is the combination of elements that create the form, plan, space, structure, and style of a property.
3. **Setting** is the physical environment of a historic property and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or manmade, including vegetation, paths, fences, and relationships between other features or open space.
4. **Materials** are the physical elements that were combined or deposited during a particular period or time, and in a particular pattern or configuration to form a historic property.
5. **Workmanship** is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory and can be applied to the property as a whole, or to individual components.
6. **Feeling** is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.
7. **Association** is the direct link between the important historic event or person and a historic property.

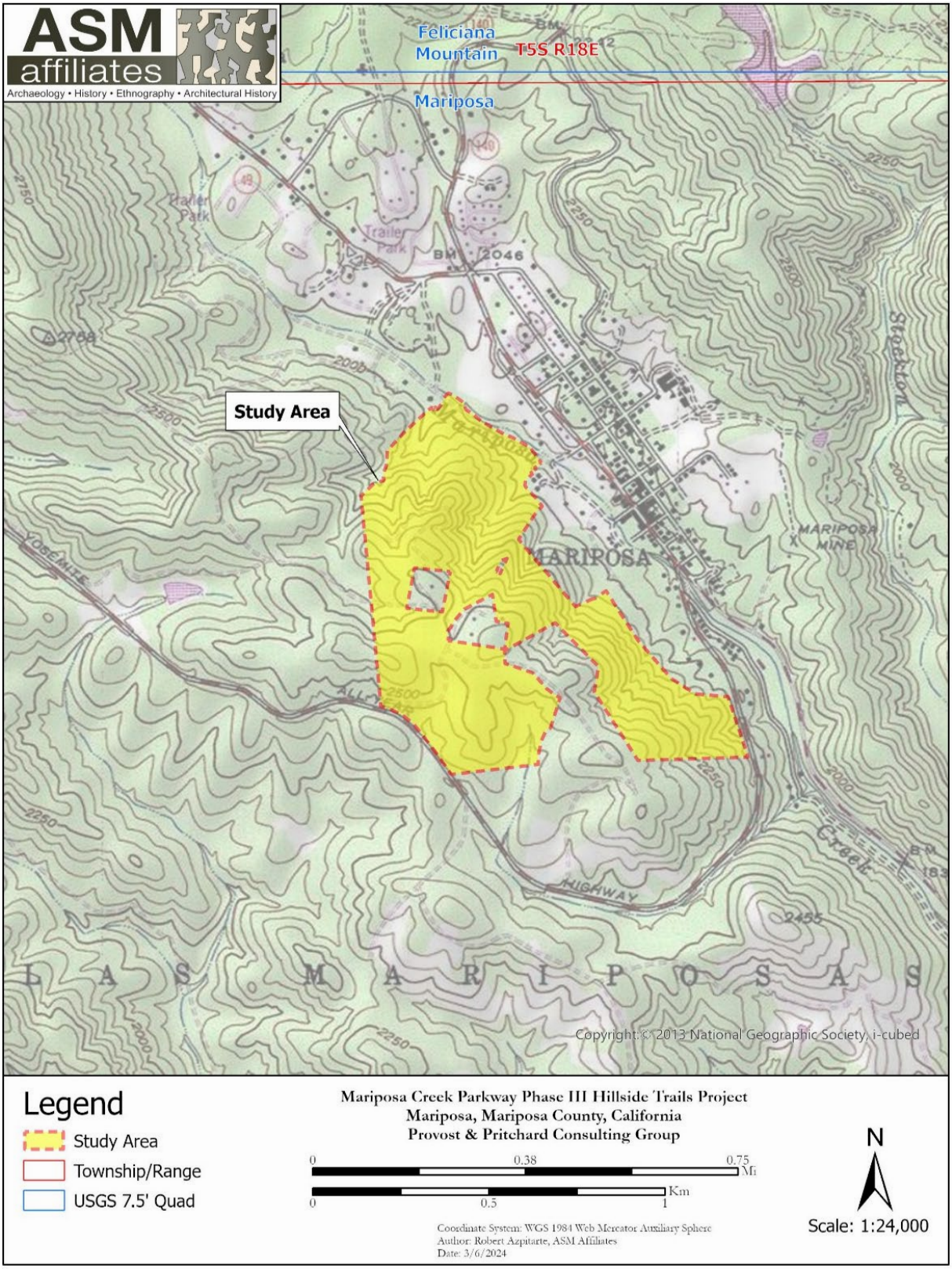


Figure 1. Location of the Mariposa Creek Parkway Phase III Hillside Trails Project Site, Mariposa County, California.

2. ENVIRONMENTAL AND CULTURAL BACKGROUND

2.1 ENVIRONMENTAL BACKGROUND

2.1.1 Environmental Setting

The Project area is directly southeast of the city of Mariposa in the western foothills of the Sierra Nevada range. As previously noted, the average elevation of the Project site is approximately 2,250 ft. amsl with slopes ranging between 3 and 60 percent. Bounded to the north-northeast by Mariposa Creek, and to the east, south, and west by the sinuous route of California Highway 140 (CA-140), the Project site is characterized by hillslopes, streams, and historic era-modern deposits associated with mining activities. In addition to Mariposa Creek, Buckeye Creek is within the southern portion of the Project site, and Stockton Creek is roughly 0.9 mi. east of the Project site. The Melones Fault bisects the Project area and is oriented roughly northwest-to-southeast. As outlined below, soils in the Project area formed between the Pre-Quaternary Period (>1.9 my) and the Historic era/modern period (150 years before present [YBP]).

2.1.2 Geology and Geomorphology

The geology of the Project area consists of Jurassic and Pre-Cretaceous deposits separated by the northwest-to-southeast trending Melones Fault (USGS 1985). One of the major tectonic features of the western Sierra Nevada Range, the Melones Fault is characterized by lenses of serpentine, quartz veins, and intensely sheared rocks (Konigsmark 2002:47). The Project site is composed of Jurassic Period metasedimentary rocks (Jms) and Jurassic Period metavolcanic rocks (Jmu) west of the Melones Fault, and Pre-Cretaceous Period metamorphosed ultramafic rocks (pKmv) east of the Melones Fault. Mariposa Mine is roughly 0.5 mile east of the Project site and is associated with pKmv deposits (USGS 1985).

2.1.3 Soils

Soils in the Project site were identified through the U.S. Department of Agriculture's National Resource Conservation Service (USDA-NRCS 2019) Soil Survey Geographic (SSURGO) soil data. Soils in the Project site consist of alluvium, colluvium, residuum, and historic era/modern mining deposits. The dates provided below largely originate from Rosenthal and Meyer (2004: Appendix D). Several soil types (Gardellones, Gopheridge, Motherlode, Jasperpeak) were not included in Rosenthal and Meyer's (2004) geoarchaeological overview. Based on their degree of soil development, and geomorphic location, these soil types at minimum pre-date the Holocene epoch. Aside from mined land, soil types accounting for less than five percent of the Project site were not included. Moving roughly north to south across the Project site, soil map units are as follows:

- Riverwash and Tailings (Historic-modern; <150 YBP);
- Gardellones; (Pre-Holocene; >11,500 YBP);
- Gopheridge; (Pre-Holocene; >11,500 YBP);

- Motherlode; (Pre-Holocene; >11,500 YBP);
- Trabuco; (Pre-Quaternary; >1.9 my);
- Jasperpeak (Pre-Holocene; >11,500 YBP);
- Rock outcrop (Pre-Quaternary; >1.9 my);
- Loafercreek (Pre-Quaternary; >1.9 my);
- Mined Land (Historic-modern; <150 YBP);

The youngest soil type within the Project site consists of alluvial deposits mapped as Riverwash and Tailings (USDA-NRCS 2019). These deposits are in the northeastern portion of the Project site, and account for roughly 7.58 acres of the Project site. Flanking Mariposa Creek, Riverwash and Tailings formed during the Historic era/modern period and are largely associated with mining activities. Aside from mining land, the remaining soil types consist of colluvium and residuum, and pre-date the Holocene epoch. Mining land is mapped as accounting for three percent of the Project site and is likely associated with tailing piles. Prospect Sites 1 and 2 are in the southern portion of the Project site and are associated with hillslopes marked by Loafercreek-Gopheridge soil complex.

2.1.4 Buried Site Sensitivity

As outlined above, most of the deposits in the Project site formed prior to the peopling of the region and have low to very low buried site potential (Rosenthal and Meyer 2004: Appendix D). The exception to this pattern centers on the historic era-modern deposits (Riverwash and Tailings) that flank Mariposa Creek. These deposits account for roughly 7.58 acres of the Project site and have moderate potential for buried sites (Rosenthal and Meyer 2004:108, Table 20).

2.2 ETHNOGRAPHIC BACKGROUND

Mariposa is within the territory of the Southern Sierra Miwok (alternatively Me-Wuk or Miwuk). The Sierra Miwok, members of the Penutian language group (Levy 1978), occupied the territory between the Mokelumne and Fresno rivers, as well as the full width of the west slope of the Sierra Nevada range, from the edge of the Central Valley to the Sierra crest (Moratto 1984:290).

The socio-political structure of the Southern Sierra Miwoks is based on the patrilineal joint family acting as an independent autonomous political unit (Kroeber 1925; Levy 1978). The men of the lineage remained at their ancestral home, bringing their wives to live with them, and sending their daughters and sisters to their husbands' homes. The patriarch, as head of the unit, was chief. Chieftainship was normally passed down directly from father to eldest son. As a land-owning group, the lineage-maintained lands were shared in common by all members of the family unit.

The Sierra Miwok lived in permanent settlements of "10 or 15 to several hundred people," usually on the southern exposure of ridges or knolls and close to water sources (Moratto 1984:290). The larger, main villages generally consisted of family dwellings, acorn granaries, bedrock mortars, a sweat house, a headman's house, and a ceremonial structure. The main villages were usually surrounded by smaller settlements related by kinship and economic ties to the primary village.

Dwellings were conical, ranging from 8 to 15 feet in diameter, and covered by slabs of cedar bark, or bark from other conifers (Levy 1978). Each dwelling had a shallow dirt fireplace in its center for warmth and light. Most cooking was done in the earth oven located next to the fire. The oven was often a simple pit, 12 to 18 inches deep by as many inches wide. Food was cooked, baked, or steamed by placing hot stones among the cooking items; acorn bread, greens, bulbs, corms (short, thick, solid, food-storing underground stems), meat, and fish.

Subsistence was gained by harvesting plants, hunting, and fishing (Moratto 1984:290). Important staple items included black and golden oak acorns, buckeye nuts, and pine nuts. Additionally, snares, traps, nets, and bow and arrows were used to hunt mule deer, pronghorn, black bear, rabbits, quail, and pigeons. Salmon, trout, suckers, whitefish, and sturgeon were caught by hook, net, trap, poison, and captured by hand.

The influx of outsiders to the central Sierra region during the Gold Rush period resulted in a major disruption for the Miwoks and their way of life. Within a decade, introduced diseases, environmental damage, and cultural conflicts with the outsiders had decimated much of the population. Despite this calamity, some tribal members managed to survive and have continued their cultural traditions.

2.3 PRE-CONTACT ARCHAEOLOGICAL BACKGROUND

The prehistory of the Sierra Nevada Mountains has been described in detail by Moratto (1984) who places Mariposa and the nearby Yosemite Valley in the central Sierran archaeological subregion, encompassing the watersheds of the Cosumnes, Mokelumne, Calaveras, Stanislaus, Tuolumne, Merced, Chowchilla, and Fresno rivers (Moratto 1984:288). Evidence indicates that Yosemite Valley has been inhabited for as long as 4000 to 6000 YBP. In addition, archaeological sites in the vicinity of El Portal indicate that the Merced River canyon may have been inhabited as early as 9,500 years ago (NPS 2022). Substantial additional evidence of early occupation is found in the central valley, especially to the southwest around Tulare Lake, where a number of sites are known to date to the *Paleoindian Period*, circa 12,500 to 9000 YBP.

Less evidence for early occupation has then been found at higher elevations, off the valley floor, a circumstance which may be due to preservation issues or potentially the changing nature of land-use during early pre-contact times. In general terms at least occasional use of the Sierra and foothills occurred during the *Early* and *Middle Archaic*, circa 9000 to 4000 YBP, as signaled by discoveries of characteristic projectile points or spear points. Substantial occupation had occurred by the *Late Archaic* (4000 to 1500 YBP) and *Late Prehistoric* (1500–150 YBP) periods, however, Moratto (1984) has defined a cultural sequence for these periods at the Buchanan Reservoir/Eastman Lake, about 12 mi. due south of Cathey's Valley, that is pertinent to the Project location.

Moratto's *Chowchilla Phase* (2300 YBP to 1700 YBP) is characterized by a few relatively large villages near rivers, with a corresponding large population size. Subsistence appears to have followed a generalized hunting and gathering pattern with little specialization. Trade occurred both with Great Basin groups to the east, and the lowland populations in the Central Valley to the west. This phase appears to represent a widespread expansion of populations across many California

environments and an increase in population size which occurred during the Late Archaic period in many parts of the state (Whitley 2000). At least initially, this was associated with (and may have been at least partly influenced by) favorable climatic conditions at the beginning of this period, known as the Mid-Holocene Optimum.

The *Raymond Phase* (1700–500 YBP) experienced a diminution in villages and population sizes and a fall-off in trade, but an increasing reliance on acorn processing in subsistence practices. This phase appears to correlate with sub-optimal climatic conditions that started with the so-called Medieval Climatic Anomaly, which was a period of drought, followed by the Little Ice Age, characterized by colder temperatures.

The *Madera Phase* (500–150 YBP) represents the lifeways recorded for the Miwok ethnographically. It was marked by large villages near rivers and smaller settlements dispersed in the hinterlands, large population size, intensive exploitation of the acorn, and the appearance of Brownware ceramics.

2.4 HISTORICAL BACKGROUND

Some of the earliest nonindigenous explorations of the Sierra Nevada mountains include Euro-American explorers and fur trappers such as Jedediah Smith, Kit Carson, and Joseph Walker. The earliest of these nonindigenous expeditions and explorations took place in 1827 with Jedediah Smith and continued into the 1840s with small group expeditions trekking across the Sierra Nevada. Cartographers and explorers continued to explore the Sierra Nevada throughout the late nineteenth and early twentieth centuries, with Yosemite Valley becoming the first federally protected region of the Sierra in 1864 (Farquhar 1925).

The discovery of gold in northern California in 1848 resulted in a dramatic increase in population, consisting of a good portion of fortune seekers and gold miners who began to scour other parts of the state. After 1851, when gold was discovered in the Sierra Nevada mountains in eastern Kern County, the area's population snowballed. In California in 1848, with the exclusion of indigenous inhabitants, the population was 10,000 residents, and in just over five years, that number increased to 250,000 residents (Dilsaver 1983). Some new immigrants began ranching in the San Joaquin Valley to supply the miners and mining towns. Ranchers grazed cattle and sheep, and farmers dry-farmed or used limited irrigation to grow grain crops, leading to the creation of small agricultural communities throughout the valley (JRP Historical Consulting 2009).

The general area that would become Mariposa was originally encountered in September 1806 during the expedition of Lieutenant Gabriel Moraga of the Mexican Army, which bestowed the name Las Mariposas (The Butterflies) on the region because of the incredible number of monarch butterflies they encountered. The Merced River, El Rio Nuestra Senora de la Merced (The River of Our Lady of Mercy), also was named by Lieutenant Moraga when he and his soldiers had just completed a 40-mi. march (Cook 1960). The first American to make a mark in Mariposa County history was the frontier explorer John C. Frémont. In 1847, Thomas O. Larkin inadvertently purchased the Rancho Las Mariposas instead of Rancho Santa Cruz for Frémont from the Mexican government. Frémont was at first upset with the accidental purchase of this seemingly worthless, isolated Indian land that lacked any farms or ranchlands; however, he changed his tune when gold

was discovered the following year. Mariposa turned out to be at the southern end of the mother lode and settlers soon inundated the area (Yosemite Mariposa County Tourism Bureau 2022).

Mariposa was originally founded as a mining camp on Agua Fría Creek approximately 6 mi. west of present-day Mariposa. The town was moved to its current location in 1850 due to dwindling gold returns in Agua Fría Creek and frequent fires and flooding. The Frémont adobe, built as Frémont's office in 1850, was one of the first permanent structures in the new town that would become the county seat of Mariposa County the following year. The Mariposa courthouse was constructed in 1854 and is still in operation (Durham 1998). The town has many additional structures, a few of which are the Mariposa Meat Market (1859), the Bogan Building (1850s), the International Order of Oddfellows (I.O.O.F.) Hall (1855), and the Capitol Saloon (1867). The Masonic Hall was constructed in 1851 and, after fires in 1858 and 1866, the hall was rebuilt again in 1917. It has been recently renovated. The present-day Mariposa Hotel was originally Gallison's Hotel housed in the Stolder Building from 1877 until it burned in 1887. It was rebuilt in 1901. (Gallucci n.d.).

While tourism has played a part in the economy of Mariposa since the 1870s, it wasn't until the route now known as CA-140 was completed in 1926 that it really took off. For the first time, Yosemite travelers were passing through the heart of Mariposa. At the same time, the increasing affordability of automobiles meant that more people than ever were able to travel at their leisure (Yosemite Mariposa County Tourism Bureau 2022). Tourism still plays a major role in Mariposa's economy, with over 50 percent of the population employed in tourism-related industries (DataUSA 2020).

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3. ARCHIVAL RECORDS SEARCH

3.1 ARCHIVAL RECORDS SEARCH

To determine whether the Project site had been previously surveyed for cultural resources, and/or whether any such resources were known to exist within or near to it, staff of the Central California Information Center (CCIC) conducted an archival records search on March 14, 2024. The records search was completed to determine: (i) if pre-contact or historic-era cultural resources had previously been recorded within the Project site; (ii) if the Project site had been systematically surveyed by archaeologists prior to the initiation of this fieldwork; and/or (iii) whether the area surrounding the proposed Project was known to contain archaeological sites or built environment resources and to thereby be culturally sensitive. Records examined included archaeological site files and maps, the National Register of Historic Places, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest. The records search included the Project site and a 0.5-mi. buffer.

According to the CCIC, three previous studies (MP-08710, MP-8988, MP-9258) have been conducted within the Project site, and 36 previous studies were identified within the 0.5 mi. buffer (Table 1). Based on CCIC data, approximately 5 percent of the Project site has been previously surveyed. All of these studies are less than 10 years old.

The CCIC results identified no previously recorded cultural resources within the Project site. A total of 80 previously recorded cultural resources were identified within the 0.5-mi. buffer, with the nearest located less than 0.1 mi. from the Project site (Table 2). The results of the CCIC records search are available in Confidential Appendix A.

Table 1. Previous Reports

Report #	Year	Author/Organization	Title	Project site Relationship
MP-00507	1978	Napton, L. K./ CSC Stanislaus Institute for Archaeological Research; for Boyle Engineering Corp.	Archaeological Survey of the Proposed Mariposa Wastewater Facilities Project, Mariposa County, California.	Outside
MP-00537	1990	Page, S./ Susan E. Page	Negative Archaeological Survey Report, District 10, Mariposa County, Highway 49 Widening Project	Outside
MP-00553	1979	Rhode, David/ David Rhode -CAL TRANS	Supplementary Archaeological Survey of a Proposed Passing Lane Construction Project on CA-140 in Mariposa County, California 10-Mrp-140 Location 6 (18.9/20.0)	Outside
MP-01967	1979	Rhode, David/ Caltrans District 10	Extended Survey Report of Two Archaeological Sites in a Proposed Passing Lane Location in Mariposa County 10-Mpa-140 Passing Lane 7 (P.M. 22.0/25.1).	Outside

Report #	Year	Author/Organization	Title	Project site Relationship
MP-02085	1993	Peak & Associates, Inc./ Peak & Associates, Inc.	Cultural Resource Assessment of a Proposed Multi-Family Apartment Complex in Mariposa, Mariposa County, California.	Outside
MP-02227	1982	Menderhausen, Ralph R./ Mariposa County Historical Society	Historic Survey Project, Mariposa, California, March 1, 1981 to April 30, 1982, Final Completion Report. (Mariposa County)	Outside
MP-02796	1996	Napton, L. K./ L. K. Napton	Negative Archaeological Survey Report, 10-MP-Joe Howard-Fournier Road, Mariposa County	Outside
MP-03908	1980	Baltich, Michael/ Caltrans District 10	Historic Property Survey Report, Supplemental Data, 10-MPA-140, Locations No. 2, 3, 4, 5 & 8, Between PM 4.2 and 26.0, and 10-MPA-140, Locations No. 7, PM 22.0/25.1	Outside
MP-03910	1979	Rhode, David/ California Department of Transportation District 10	Supplementary Archaeological Survey Report of a Proposed Passing Lane Location in Mariposa County, 10 MPA-140, Passing Lane 7, (P.M. 22.0/25.1)	Outside
MP-04007	2000	Levy, R. S., E. Wulf, and T. Keefe/ Caltrans District 10	Archaeological Survey Report for the Storm Damage Restoration Project on California State CA-140 in Mariposa County, CA 10-MPA-140, KP 54.72-83.36 (PM 34.1/51.8).	Outside
MP-04160	2000	Johnston, S. E./ Caltrans District 10	Historic Property Survey Report and Archaeological Survey Report for the Mariposa Creek Bridge Replacement Project on State Route 49 in Mariposa County, California; 10-MRP-49, PM 17.1/17.5, EA 10 1A8400.	Outside
MP-04301	2001	Davis-King, S./ Davis-King & Associates, for Mariposa County Dept. of Public Works	Historical Resources Survey Report (Positive) for the Mariposa Creek Parkway Phase 2 Pedestrian Improvements Mariposa County, California.	Outside
MP-04700	2001	Busby, Colin I./ Basin Research Associates and William Kostura, Historian	Historic Property Survey Report for Four Proposed Yosemite Area Regional Transportation System (YARTS) Staging Areas on State Route 140: Colorado Road, Midpines Post Office, Triangle Road, and State Route 49 Miners Inn, in Mariposa County.	Outside
MP-04728	1998	Rowney, R./ R. Rowney	CDF Project Review Report for Archaeological and Historical Resources, Long VMP.	Outside
MP-04738	2002	Rowney, R./ R. Rowney	Archaeological Survey Report: Long VMP.	Outside
MP-04986	2003	Varner, D./ Varner Associates, for County of Mariposa Dept. of Public Works	A Cultural Resource Study of the Mariposa Arts Park Site in Mariposa County, California.	Outside

Report #	Year	Author/Organization	Title	Project site Relationship
MP-05025	2003	Varner, D., K. Jacobson, J. Wilson, and S. Winter/ Varner Associates, for County of Mariposa Dept. of Public Works	Archaeological Investigations for the Mariposa Arts Park, Mariposa County, California.	Outside
MP-05750	2005	Billat, L./ EarthTouch Inc.	Historic Property Assessment for the Mariposa/CA-1293B Cellular Facility at 5074 Old Highway North, Mariposa City and County, California.	Outside
MP-05961	2005	Varner, D./ Varner Associates	A Cultural Resources Study of the Griffith Property in Mariposa County, CA	Outside
MP-06106	2006	Varner, D./ Varner Associates	A Cultural Resource Study of the Manzanita Estates Property in Mariposa County, California.	Outside
MP-06416	2007	Varner, D./ Varner Associates, for Dubberke/Lawson, LLC	A Cultural Resource Study for Access Roads and Utilities to Mariposa Town Blocks 12, 16, and 20, in Mariposa County, California.	Outside
MP-06707	2008	Varner, D. M./ Varner Associates, for Lawson Construction	A Cultural Resource Study of Vacant Parcels in the Town of Mariposa, Mariposa County, California.	Outside
MP-07346	2010	Marsh, S./ Sierra National Forest High Sierra Ranger District	Mariposa Storage Shed Demolition; a Sierra National Forest Project Funded through the American Recovery and Reinvestment Act of 2009; Heritage Resource Management Report, R2010051551030.	Outside
MP-07415	2001	Phillips, T./ Mariposa Historical Society	The Fremont Adobe: The Oldest Building in Mariposa. The Mariposa Sentinel, Vol. 44, No. 4: 5	Outside
MP-07417	1998	Pinkerton, S./ Pinkerton, S.	Mariposa Heritage Press Publishes New Booklet on Mariposa's Historic 1858 Jail. The Mariposa Sentinel, Vol. 41, No. 4	Outside
MP-07837	2014	Napton, L. K./ L. Kyle Napton, Historical Resources Consultant, for Mariposa Public Utilities District	Cultural Resources Investigations of the Proposed Mariposa Public Utilities District Wastewater Treatment Facilities Expansion Project, Mariposa County, California	Outside
MP-08153	2015	Napton, L. K./ L. Kyle Napton, Ph.D., Historical Resources Consultant for Mariposa Public Utility District	Final Report: Cultural Resources Investigations of the Proposed Mariposa Public Utility District Wastewater Treatment Facilities Improvement Project, Mariposa County, California	Outside
MP-08154	2015	Supernowicz, D./ Historic Resource Associates for Mariposa Public Utility District	Historic Resource Report of the Mariposa Public Utilities District Wastewater Treatment Facility Project, 4956 Miller Road, Mariposa, Mariposa County, California	Outside

Report #	Year	Author/Organization	Title	Project site Relationship
MP-08710	2017	Whitaker, A., A. Ugan & T. Hildebrandt/ Far Western Anthropological Research Group, Inc. for Caltrans	Director's Orders Hazard Tree Removal Survey and Site Assessment along State Routes 49 and 140, Mariposa County, California, EA 10-1G430	**Within**
MP-08779	2018	Kile, M./ Culturescape for John Hulbert	Letter Report: Phase I Cultural Survey of APN 013-130-045, Mariposa, CA 95338	Outside
MP-08827	2018	Brady, J./ Caltrans	Finding of No Adverse Effect for the Mariposa Crosswalks Project. Mariposa County, California; 10-MPA-140, PM 21.20/22.80, EA: 10-0Y600; Project I.D. 1300 0244	Outside
MP-08827A	2018	Brady, J./ Caltrans	Environmentally Sensitive Area (ESA) and Monitoring Action Plan for the Mariposa Crosswalks Project. Mariposa County, California; 10-MPA-140, PM 21.20/22.80, EA: 10-0Y600; Project I.D. 1300 0244	Outside
MP-08917	2018	Dallas, Herb and Denise Ruzicka/ CAL FIRE	An Archaeological Survey Report and Site Assessment for the Detwiler Incident in Mariposa County, California	Outside
MP-08988	2019	Parker, A. and A. Whitaker/ Far Western Anthropological Research Group, Inc. for Caltrans	Archaeological Survey Report for Director's Orders Hazard Tree Removal in District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, CA	**Within**
MP-09011	2021	Hudlow, S. M./ Hudlow Cultural Resources Associates for Self-Help Enterprises	A Phase I Cultural Resource Survey for Self-Help Enterprises, Mariposa Village Apartments, Mariposa, Mariposa County, California	Outside
MP-09011A	2021	Hudlow, S./Hudlow Cultural Resource Associates	An Additional Phase I Cultural Resource Survey for Self-Help Enterprises, Mariposa Village Apartments, Mariposa, Mariposa County, California	Outside
MP-09112	2019	Whitaker, A./ Far Western Anthropological Research Group, Inc. for Caltrans	Historic Property Survey Report for Caltrans Hazard Tree Removal Project, District 10 Segment 2: Tuolumne and Mariposa Counties, California, State Routes 108, 120, and 140; E-FIS 10-1800-0018, EA 10-1F6423 [Survey area extends in Alpine County]	Outside
MP-09112	2018	Ugan, A. & A. Whitaker/ Far Western Anthropological Research Group, Inc. for Caltrans	Archaeological Survey Report. 2018 Hazard Tree Removal Project, State Route 120, Caltrans District 10, Tuolumne and Mariposa Counties, California	Outside

Report #	Year	Author/Organization	Title	Project site Relationship
MP-09112	2018	Parker, A. & A. Ugan/ Far Western Anthropological Research Group, Inc. for Caltrans	Cultural Resources Monitoring Report. 2018 Hazard Tree Removal Project, State Route 140, Caltrans District 10, and Mariposa County, California	Outside
MP-09147	2020	Hudlow, Scott/ Hudlow Cultural Resource Associates For MRCC Properties, LLC	A Phase 1 Cultural Resource Survey for MRCC Properties, Brown Bear Hotel and Yosemite Conference Center, Mariposa, Mariposa County, California; January 2020; Revised April 2020	Outside
MP-09258	2019	Waechter, S. A./ Far Western Anthropological Research Group, Inc.	Historic Property Survey Report for Director's Orders Hazard Tree Removal Project District 10, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, California, State Routes 4, 5, 12, 26, 49, 88, 108, 120 and 140; E-FIS 10-1600-0133, EA 10-1F6403, Contract 06A2312, Task Order 11	**Within**
MP-09264	2021	Sims, A./ ESA for Wildhaven	Cultural Resources Findings Memorandum for the Wildhaven Yosemite Project	Outside
MP-09802	2024	Martisius, N. and Melinda Pacheco Patrick/ Far Western Anthropological Research Group, Inc. for Caltrans	Archaeological Survey Report for the District 10 Middle-Mile Broadband Initiative Project, State Routes 132 and 140, Mariposa and Tuolumne Counties, California; 10-MPA/TUO-132 PM 0.027/R0.460/3.774/R7.636/18.746; 10-MPA-140 PM 22.08/51.803; Project ID 1022000254, EA 10-1Q210	Outside

Table 2. Previously Recorded Resources

Primary #	Type	Description	Eligibility Status	Project site Relationship
P-22-000816	Prehistoric-era site	Lithic scatter, bedrock milling feature, habitation debris	Determined not eligible	Outside
P-22-001393	Prehistoric-era site	Bedrock milling feature	Determined not eligible	Outside
P-22-001707	Historic-era structure	Fremont Adobe	Determined eligible	Outside
P-22-001708	Historic-era structure	Schlageter Hotel	Determined eligible	Outside
P-22-001710	Historic-era structure	Mariposa County Jail	Determined eligible	Outside
P-22-002016	Historic-era district	Town of Mariposa Historic District	Determined eligible	Outside
P-22-002017	Historic-era structure	Mariposa County High School	Determined eligible	Outside
P-22-002018	Historic-era structure	Mariposa County Courthouse	Determined eligible	Outside
P-22-002024	Historic-era structure	St. Joseph's Catholic Church & Cemetery	Determined eligible	Outside
P-22-002067	Prehistoric-era site	Bedrock milling feature	Unknown	Outside
P-22-002068	Historic-era site	Mining site	Determined ineligible	Outside
P-22-002078	Historic-era structure	4887 Miller Road	Unevaluated	Outside
P-22-002298	Historic-era structure	Gimblin's Law Office	Determined eligible	Outside

Primary #	Type	Description	Eligibility Status	Project site Relationship
P-22-002299	Historic-era site	Mariposa Mine	Determined eligible	Outside
P-22-002301	Historic-era structure	Methodist Church South	Determined eligible	Outside
P-22-002305	Historic-era structure	Gardenia Cantina	Determined eligible	Outside
P-22-002307	Historic-era structure	Opera house	Unevaluated	Outside
P-22-002309	Historic-era structure	May Ballentyne's Doctor's Office	Determined eligible	Outside
P-22-002312	Historic-era structure	Masonic lodge and senior citizens center	Determined eligible	Outside
P-22-002320	Historic-era structure	Historic-era residence	Determined eligible	Outside
P-22-002322	Historic-era structure	Stolder House	Determined eligible	Outside
P-22-002329	Prehistoric site	Howard Rancheria	Unknown	Outside
P-22-002346	Historic-era structure	Dexter House	Determined eligible	Outside
P-22-002348	Historic-era structure	Duff residence	Determined eligible	Outside
P-22-002349	Historic-era structure	Bertken House	Determined eligible	Outside
P-22-002350	Historic-era structure	Lilian McNutt House	Determined eligible	Outside
P-22-002352	Historic-era structure	Schlageter House	Determined eligible	Outside
P-22-002354	Historic-era structure	A.R. Michaels House	Determined eligible	Outside
P-22-002356	Historic-era structure	Farnsworth House	Determined eligible	Outside
P-22-002362	Historic-era structure	Lind House	Determined eligible	Outside
P-22-002379	Historic-era structure	Milburn House	Determined eligible	Outside
P-22-002380	Historic-era structure	Garber House	Determined eligible	Outside
P-22-002382	Historic-era structure	Garber House	Determined eligible	Outside
P-22-002384	Historic-era structure	George Lang House	Not Evaluated	Outside
P-22-002389	Historic-era structure	Trabucco Sporting Goods Store	Determined eligible	Outside
P-22-002390	Historic-era structure	Western Auto	Determined eligible	Outside
P-22-002391	Historic-era structure	El Capitan Saloon	Determined eligible	Outside
P-22-002392	Historic-era structure	Bogan and Company Building	Determined eligible	Outside
P-22-002394	Historic-era structure	Stolder Building	Determined eligible	Outside
P-22-002395	Historic-era structure	Fremont House	Determined eligible	Outside
P-22-002396	Historic-era structure	W.S. Zellers residence	Determined eligible	Outside
P-22-002397	Historic-era structure	Wagon Wheel Restaurant	Determined eligible	Outside
P-22-002398	Historic-era structure	Mariposa Brewery	Determined eligible	Outside
P-22-002408	Historic-era structure	Fournier House	Determined eligible	Outside
P-22-002414	Historic-era structure	Alarid House	Determined eligible	Outside
P-22-002417	Historic-era structure	Emile Trabucco House	Determined eligible	Outside
P-22-002418	Historic-era structure	Pauline Trabucco House	Determined eligible	Outside
P-22-002420	Historic-era structure	Prouty House	Determined eligible	Outside
P-22-002421	Historic-era structure	Bessie McElligott House	Determined eligible	Outside
P-22-002423	Historic-era structure	Counts House	Determined eligible	Outside
P-22-002425	Historic-era structure	Newman House	Determined eligible	Outside
P-22-002427	Historic-era structure	Alta's House	Determined eligible	Outside
P-22-002428	Historic-era structure	Campbell House	Determined eligible	Outside
P-22-002429	Historic-era structure	John L. Dexter Museum	Determined eligible	Outside
P-22-002434	Historic-era structure	Kleiman House	Determined eligible	Outside
P-22-002438	Historic-era structure	Pettis House	Determined eligible	Outside
P-22-002439	Historic-era structure	Pratt House	Determined eligible	Outside
P-22-002440	Historic-era structure	Maguire's	Not evaluated	Outside
P-22-002441	Historic-era structure	Sudreau	Not evaluated	Outside
P-22-002454	Historic-era structure	Yosemite Market	Determined eligible	Outside
P-22-002455	Historic-era structure	Arndke House	Determined eligible	Outside
P-22-002456	Historic-era structure	Gann House	Not evaluated	Outside
P-22-002459	Historic-era structure	Rowlands Shoe Store	Determined eligible	Outside
P-22-002460	Historic-era structure	Trabucco Warehouse	Determined eligible	Outside
P-22-002461	Historic-era structure	Pine Tree Hotel	Determined eligible	Outside

Primary #	Type	Description	Eligibility Status	Project site Relationship
P-22-002462	Historic-era structure	Hull House/ Capitol Saloon/ Reeds Saloon	Determined eligible	Outside
P-22-002464	Historic-era structure	Highway Patrol Office	Determined eligible	Outside
P-22-002465	Historic-era structure	Butterfly Market	Determined eligible	Outside
P-22-002484	Historic-era structure	Bridge 40-02; 5338-0002-0000	Determined ineligible	Outside
P-22-002557	Prehistoric-era site	Bedrock milling feature	Unknown	Outside
P-22-002586	Historic-era site	Refuse scatter, fence	Unknown	Outside
P-22-003200	Historic-era structure	Jones St. Residence	Determined ineligible	Outside
P-22-003495	Historic-era structure	Mariposa Wastewater Treatment Plant	Unevaluated	Outside
P-22-003842	Historic-era site	Mining site	Unknown	Outside
P-22-003852	Historic-era site	Mining site	Unknown	Outside
P-22-003857	Historic-era site	Mining site	Unknown	Outside
P-22-003931	Historic-era structure	Single family property	Unevaluated	Outside
P-22-003932	Historic-era structure	Single family property	Unevaluated	Outside
P-22-003933	Historic-era site	Refuse scatter	Unknown	Outside
P-22-003964	Historic-era structure	Single family property	Unevaluated	Outside

3.2 TRIBAL OUTREACH AND CONSULTAION

As part of the CEQA process, the County of Mariposa conducted Assembly Bill 52 (AB 52) outreach and consultation with interested Tribes. No responses have been received as of the writing of this report. The outreach and consultation documentation are provided in Confidential Appendix B.

3.3 HISTORIC AERIAL AND TOPOGRAPHIC MAPS

Historical topographical maps and aerial imagery that included the Project site were consulted to identify potential historic-era structures or resources. According to USGS topographic quadrangles, historical aerials, Google Earth imagery, and Nationwide Environmental Title Research, the area has undergone minimal development since at least the mid-twentieth century. The 1912 USGS Mariposa 1:125,000 topographic maps depict the Project site as undeveloped with what is now the CA-140 highway surrounding the Project site on the east, south, and west. From 1945 to 1971, the Project site was unchanged according to topographic maps.

Aerial imagery depicts the majority of the Project site as undeveloped lands as far back as 1945. From 1945 to 1983, the Project site changed very little with the only observable change being the development of Martin Road in the 1983 aerial image. The same 1983 aerial depicts the development of two properties directly adjacent to the Project site, along with associated access roads. From 1984 to 2022, the Project site appears in its current form, according to aerial imagery.

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4. METHODS AND RESULTS

4.1 FIELD METHODS

A Phase I survey of the Project site was conducted by ASM Associate Archaeologist Robert Azpitarte and Assistant Archaeologist Daniel Ware, from July 31 to August 2, 2024. The field methods employed included intensive pedestrian examination of the ground surface for evidence of archaeological sites in the form of artifacts, surface features (such as bedrock mortars, historical mining equipment), and archaeological indicators (e.g., organically enriched midden soil, burnt animal bone); the identification and location of any discovered sites, should they be present; tabulation and recording of surface diagnostic artifacts; site sketch mapping; preliminary evaluation of site integrity; and site recording, following the California Office of Historic Preservation Instructions for Recording Historic Resources, using DPR 523 forms. Parallel survey transects spaced at 15 meter (m.) apart were employed for the inventory.

4.2 SURVEY RESULTS

The proposed Project site consists of nature trails branching off the planned Phase III section of the Mariposa Creek Parkway Trail. The Project site consists of largely of undeveloped land as well as unpaved and paved roads. Visibility for the Project site ranged from fair (approximately 50 percent) to poor (approximately 15 percent) with the exception of the northeastern and northwestern portions of the Project site which were too steep and vegetated to survey. Visibility was obscured by native non-native vegetation. Figure 2 and Figure 3 depict general conditions of the surveyable portions of the project site, and Figure 4 and Figure 5 depict areas too steep and/or vegetated to survey. Two prospect pits (MAR-SITE-1 and MAR-SITE-2) and a collapsed structure (MAR-STRUCTURE-1) were observed within the Project site. These resources are described below. No other cultural resources of any kind were observed within the Project site.



Figure 2. Project site overview, facing north.



Figure 3. Project site overview, facing south-southeast.



Figure 4. Example of unsurveyable area, facing southwest.



Figure 5. High vegetation density, facing west.

4.2.1 Newly Recorded Sites

MAR-SITE-1

MAR-SITE-1 is a prospect site located on a wide knoll roughly 660 ft. north-northwest of the intersection of CA-140 and Martin Road. The site measures 83 ft. in diameter and is situated at an elevation of 2,597 ft. amsl (Figure 6).

MAR-SITE-1 consists of three prospect trenches (Trench 1 through Trench 3). A short tailings feature is also associated with MAR-SITE-1. Measurements for these features are presented in Table 3. No diagnostic artifacts were observed. No previous structures or claims appear on historic topographic maps for MAR-SITE-1. Topographic maps from 1912 to 1972 depict the entire Project site as completely undeveloped. The 1983 aerial image depicts the first development within the project site; as such, it is unlikely MAR-SITE-1 is more than 50 years old.

Table 3. MAR-SITE-1, Observed Features

Designation:	Dimensions:
Trench 1	6 ft. long by 3 ft. wide by 2.5 ft. deep
Trench 2	2.5 ft. long by 5 ft. wide by 2 ft. deep
Trench 3	20 ft. long by 3 ft. wide by 3 ft. deep



Figure 6. MAR-SITE-1 overview, facing northeast.

MAR-SITE-2

MAR-SITE-2 is a prospect site located on a wide knoll roughly 1,295 ft. east-southeast from the intersection of CA-140 and Martin Road. The site measures 137.5 ft. in diameter, and it is situated at an elevation of 2,509 ft. amsl (Figure 7).

MAR-SITE-2 consists of two trenches (Trench 1 and Trench 2) and three pits (Pit 1 through Pit 3). A short tailings pile is associated with all features. Measurements for these features are presented in Table 4. No previous structures or claims appear on historic topographic maps for MAR-SITE-2. Topographic maps from 1912 to 1972 depict the entire Project site as completely undeveloped. The 1983 aerial image depicts the first development within the project site; as such, it is unlikely MAR-SITE-2 is more than 50 years old.

Table 4. MAR-SITE-2, Observed Features

Designation:	Dimensions:
Trench 1	8 ft. long by 3 ft. wide by 2 ft. deep
Trench 2	12 ft. long by 4 ft. wide by 4 ft. deep
Pit 1	5 ft. wide by 3 ft. deep
Pit 2	5 ft. wide by 2.5 ft. deep
Pit 3	6 ft. diameter by 2 ft. deep



Figure 7. MAR-SITE-2 overview, facing south-southwest.

MAR-STRUCTURE-1

MAR-STRUCTURE-1 is a collapsed structure located approximately 1,849 ft. northeast of the intersection of CA-140 and Martin Road. The structure measures approximately 60 ft. wide and 45 ft. long, and it is situated at an elevation of 2,544 ft. amsl (Figure 8).

MAR-STRUCTURE-1 consists of a collapsed structure composed of milled lumber and corrugated sheet metal and held together by mass-machined, round head nails. Remnant framing of the south facade is still standing. Square joint notching was observed on corner beams. A partially dilapidated barbed wire fence is just north and immediately east of MAR-STRUCTURE-1. The fence is composed of wooden posts and modern steel T-bars.

No diagnostic artifacts were observed. Topographic maps from 1912 to 1972 depict the entire Project site as completely undeveloped. The 1983 aerial image depicts MAR-STRUCTURE-1; as such, it is unlikely the structure is more than 50 years old.



Figure 8. MAR-STRUCTURE-1 overview, facing west.

5. SUMMARY AND RECOMMENDATIONS

A Phase I study was conducted from February to August 2024 for the Mariposa Creek Parkway Phase III Hillside Trails Project site, Mariposa County, California. To determine whether the Project site had been previously surveyed for cultural resources, and/or whether any such resources were known to exist within or near to it, staff of the Central California Archaeological Information Center, California State University, Stanislaus, conducted an archival records search. The records search included the Project site and a 0.5 mi. buffer. According to CCIC records, only a small portion of the Project site had previously been surveyed and no previously recorded cultural resources were within the Project site. A total of 80 previously recorded cultural resources were identified within the 0.5-mi. buffer, with the nearest located less than 0.1 mi. from the Project site. AB 52 outreach was also conducted by the County of Mariposa, and the results were negative for Tribal Cultural Resources.

Archival research indicates that the Project site has low to very low buried site potential and has remained largely undeveloped throughout the twentieth and twenty-first centuries.

Phase I survey fieldwork was conducted from July 31 to August 2, 2024, with parallel transects spaced at a maximum 15 m. intervals walked throughout the Project site, where accessible. The Project site consists largely of undeveloped land as well as unpaved and paved roads. Visibility for the Project site ranged from fair (approximately 50 percent) to poor (approximately 15 percent) with the exception of the northeastern and northwestern portions of the Project site which were too steep and vegetated to survey. Visibility was obscured by native and non-native vegetation. Two prospect pits (MAR-SITE-1 and MAR-SITE-2) and a collapsed structure (MAR-STRUCTURE-1) were observed within the Project site; however, the Project site remained largely undeveloped as far back as 1983, and there is no evidence that these resources meet the 50-year-old age requirement to be considered historical resources under CEQA. No other cultural resources of any kind were observed within the Project site.

5.1 RECOMMENDATIONS

Based on the above analyses and findings, ASM recommends a finding of ***less than significant impact*** under CEQA. It is further recommended that, in the unlikely event that cultural resources are identified during Project construction, work be halted within a 100 ft. radius of the find and a qualified archaeologist be contacted to evaluate the newly discovered resource. Appropriate project conditions and mitigation measures should be adopted by the lead agency to reduce those impacts to less than significant.

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CONFIDENTIAL APPENDICES