BIOLOGICAL ANALYSIS REPORT

SCENIC WONDERS, INC.

SCENIC WONDERS PROJECT, YOSEMITE WEST, MARIPOSA COUNTY



AUGUST 2019

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ACRONYMS AND ABBREVIATIONS

APN	Assessor Parcel Number
BAR	Biological Analysis Report
BIOS	Biogeography Information and Observation System
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWHR	California Wildlife Habitat Relationships
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
NHD	National Hydrography Dataset
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
SR	State Route
USFWS	U.S. Fish and Wildlife Service
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
YNP	Yosemite National Park

EXECUTIVE SUMMARY

Quad Knopf, Inc. (QK) has prepared this Biological Analysis Report (BAR) to evaluate the potential for special-status biological resources to be impacted by the proposed development of support facilities for Scenic Wonders staff working at the Yosemite West Rural Home Enterprise in Mariposa County, California.

The proposed Project is on privately-owned parcels adjacent to the Yosemite National Park (YNP) boundary in the western reaches of the Yosemite Valley. It is approximately 12 miles north of the YNP South Entrance on State Route 41 and approximately 4.2 miles southeast of the YNP Arch Rock Entrance. The applicant is proposing to construct support facilities in two (2) phases for staff working at the existing Rural Home Enterprise. The proposed development site is located on a 7.2-acre parcel (APN 006-150-003, 7548 Henness Circle, Yosemite CA 95389) which is currently vacant and adjacent to the existing Yosemite West Condominiums used as vacation rentals.

Phase 1 of site development includes the construction of a primary and auxiliary residence used for monthly rental in addition to a detached garage structure. Phase 2 of development proposes 16 additional, low cost, apartments which will be utilized for staff employed by the applicant and a laundry facility. An optional proposal for Phase 2 may include expanding septic disposal onto the applicant's 15-acre parcel to the north (APN 006-150-006), if needed. Phase 1 is planned to be constructed in 2020. The schedule for construction of Phase 2 has not been established.

The Biological Study Area (BSA) includes both the 7.2-acre parcel and 15-acre parcel, plus a 500-foot buffer around both. The result of a database and literature review and a reconnaissance site visit on July 29, 2019 determined that 16 special-status species have the potential to occur within the BSA. Direct impacts to these species could include injury and/or mortality during construction of the project and loss of habitat. Indirect impacts could include longer-term changes to habitat composition due to introduction of non-native species and increased human presence, as well as decreased long-term population viability due to habitat loss. Despite the small nature of the Project site, these impacts could be significant because some of these special-status species with potential to occur are rare and have limited distributions.

Potential jurisdictional aquatic features were identified on-site, including a fresh emergent wetland on the northern parcel and four (4) streams. Wetlands are a unique resource and therefore sensitive, and these features may provide important habitat for special-status plant and animal species. As such, impacts to these features could be considered significant under CEQA. These features may also be regulated by the Central Valley Regional Water Quality Control Board, California Department of Fish and Wildlife, and U.S. Army Corps of Engineers. A jurisdictional delineation is recommended to determine jurisdictional status for each feature.

Avoidance and minimization measures are prescribed which, when implemented, would reduce Project impacts to biological resources to a less than significant level.

SECTION 1 - INTRODUCTION

Quad Knopf, Inc. (QK) prepared this Biological Analysis Report (BAR) to evaluate the potential for special-status biological resources to be impacted by the proposed development of support facilities (Project) for Scenic Wonders staff working at the Yosemite West Rural Home Enterprise in Mariposa County, California. The primary goals of the Project are to address the need for affordable housing for the local workforce while also reorganizing and relocating some of the operations and maintenance facilities in the Yosemite West neighborhood due to vacation rental activity to this new location.

1.1 - Project Location

The proposed Project is located on privately-owned parcels within the Yosemite National Park (YNP) boundary in the western reaches of the Yosemite Valley. It is approximately 12 miles north of the YNP South Entrance on State Route (SR) 41 and approximately 4.2 miles southeast of the YNP Arch Rock Entrance, as the crow flies. The nearest intersection is Wawona Road (SR 41) and Henness Ridge Drive approximately 0.6 mile east of the proposed Project Site (Figures 1-1 and 1-2). The general latitude and longitude for the Project Site is 37.648043° and -119.713848°. The Project is in the *El Capitan, California* US Geological Survey (USGS) 7.5-minute quadrangle.

1.2 - Project Description

Scenic Wonders Inc. (applicant) currently operates a Rural Home Enterprise managing rental homes within the Planning Area of Yosemite West in unincorporated Mariposa County. The applicant's operation manages the majority of rental homes in Yosemite West and is anticipating the need to hire an additional employees in 2021. The applicant is proposing to construct support facilities in two (2) phases to aid in the operations and maintenance of the existing Rural Home Enterprise. The proposed development site is located on a 7.2-acre parcel (APN 006-150-003, 7548 Henness Circle, Yosemite CA 95389) which is currently vacant and adjacent to the existing Yosemite West Condominiums used as vacation rentals (Figure 1-3). Phase 1 of site development includes the construction of a primary and auxiliary residence used for monthly rental in addition to a detached garage structure



Figure 1-1. Regional Map,
Scenic Wonders Project,
Mariposa County, California

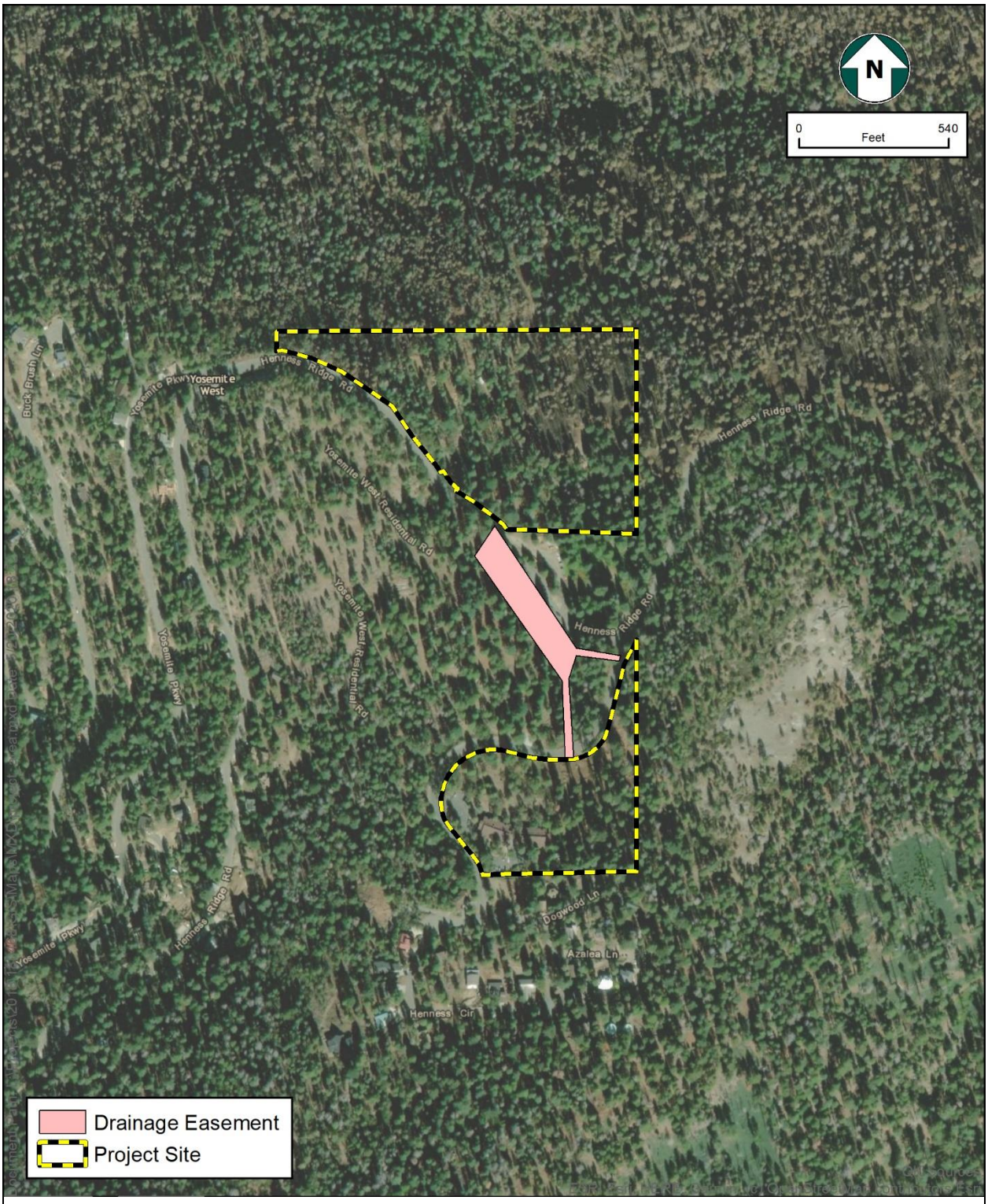


Figure 1-2. Project Location Map,
Scenic Wonders Project,
Mariposa County, California

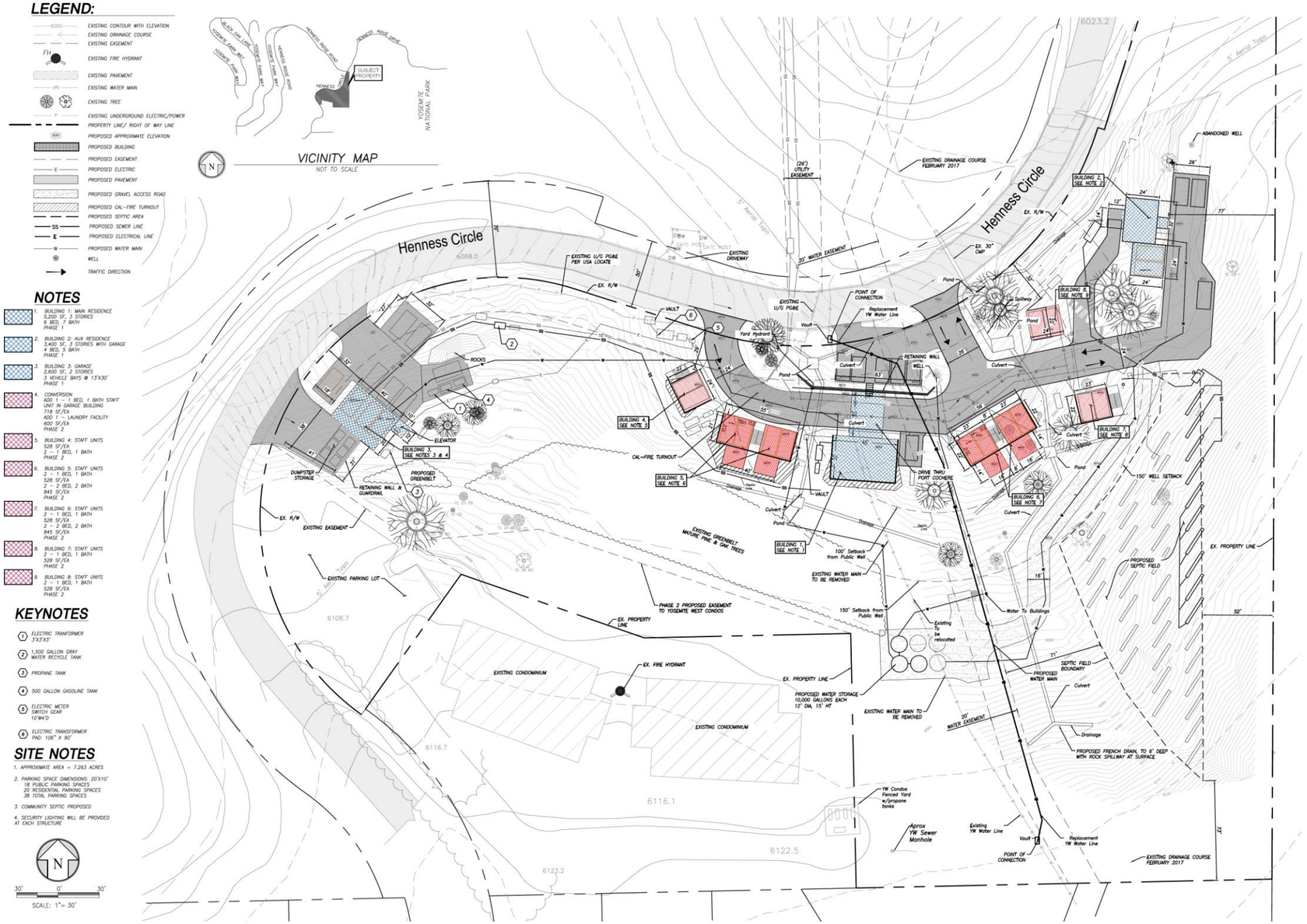


Figure 1-3. Proposed Development,
Scenic Wonders Project,
Mariposa County, California

Phase 2 of development proposes 16 additional, low cost, apartments which will be utilized for staff employed by the applicant. These additional staff only units would include 12 one-bedroom units and four (4) two-bedroom units. It is assumed that the density of the Project will be approximately 2.5 dwelling units per gross acre following completion of Phase 2. The current density of Unit 1 of Yosemite West is up to eight (8) dwelling units per acre (1/4 acres lots with two units each). The additional staff housing will reduce some of the overall commuter traffic and improve service of the growing nightly rental activity. Site access would be provided along Henness Circle in areas that provide visibility for motorists during all seasons.

Additionally, Phase 2 includes a laundry facility. The facility will be an incubator enterprise and will operate with 14 washing machines while using modern equipment and technology for water, waste and energy conservation. The laundry will be a private facility for the service of rental homes in Yosemite West. The laundry will dispose of grey water to an engineered septic field on the 31-acre parcel across the street in a recorded easement with this intended use and irrigation, where possible. The associated equipment such as holding, separation and any filter tanks and/or recycling equipment will be located on the Project parcel.

Phase 1 water and septic systems for the auxiliary and primary residences along with the detached garage will be developed during Phase 1. It will include completion of the existing on-site water well with storage tanks. Phase 1 is planned to be constructed in 2020. The schedule for construction of Phase 2 has not been established.

Phase 2 development will include expansion of the Phase 1 septic and water systems if and when the proposed expansion is approved and permitted. The Phase 2 garage upgrade will add a 500-gallon diesel and gasoline storage tanks for private use only. The Phase 2 zoning proposal will be a multi-family, residential land use with no public use facilities on the property. The previously proposed public use facilities such as internet café, retail food sales or public meeting area have been removed from the plan due to early opposition comments by a group of Yosemite West landowners. This will reduce impacts from added noise, traffic, energy, water and septic use.

The detached garage will be expanded from private equipment storage to an employee service building with repair shop, staff meeting room, and added bathrooms. It will be converted to include an apartment and the in-house laundry service.

An optional proposal for Phase 2 may include expanding septic disposal onto the applicant's 15-acre parcel to the north (APN 006-150-006), if needed. It would utilize the existing easement on the property across the street for underground plumbing to deliver effluent from Phase 2 apartments to the larger parcel.

1.3 - Purpose, Goals, and Objectives

The purpose of this BAR is to identify where potential special-status biological resources may occur within the Project site, determine how those resources may be impacted by the proposed Project, and recommend avoidance, minimization, and mitigation measures to

reduce the potential for impact to a less than significant level. This BAR was prepared to support an analysis of biological conditions as required by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), and to support regulatory permit applications, if needed.

SECTION 2 - METHODS

2.1 - Definition of Biological Study Area

The Biological Study Area (BSA) includes both the 7.2-acre parcel and 15-acre parcel, plus a 500-foot buffer around both (Figure 2-1).

2.2 - Definition of Special-Status Species

For the purposes of this report, special-status species include:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA); species that are under review may be included if there is a reasonable expectation of listing within the life of the project,
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA),
- Species designated as Fully Protected, Species of Special Concern, or Watch List by the California Department of Fish and Wildlife (CDFW),
- Plant species with a California Rare Plant Rank (CRPR) in categories 1 or 2, and
- Species designated as locally important by the Local Agency and/or otherwise protected through ordinance or local policy.

The potential for each special-status species to occur in the study area was evaluated according to the following criteria:

- **No**. Habitat on and adjacent to the site is clearly unsuitable to meet the needs of the species (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees).
- **Yes**. Conditions on the site may, in some way, support a portion of the species ecology (foraging, reproduction, movement/migration) and there is a potential for the species to occur, even though there was no observations of the species or diagnostic signs of the species observed.
- **Present**. Species was observed on the site, diagnostic signs of the species was observed, or the species is assumed to be extant based upon recorded occurrences (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

2.3 - Literature Review and Database Analysis

The following sources were reviewed for information on special-status biological resources in the Project vicinity:

- CDFW's Biogeographic Information and Observation System (BIOS; CDFW 2019a)
- CDFW's California Natural Diversity Database (CNDDB; CDFW 2019b)
- CDFW's California Wildlife Habitat Relationships (CWHR) System (Mayer and Laudenslayer 1988)

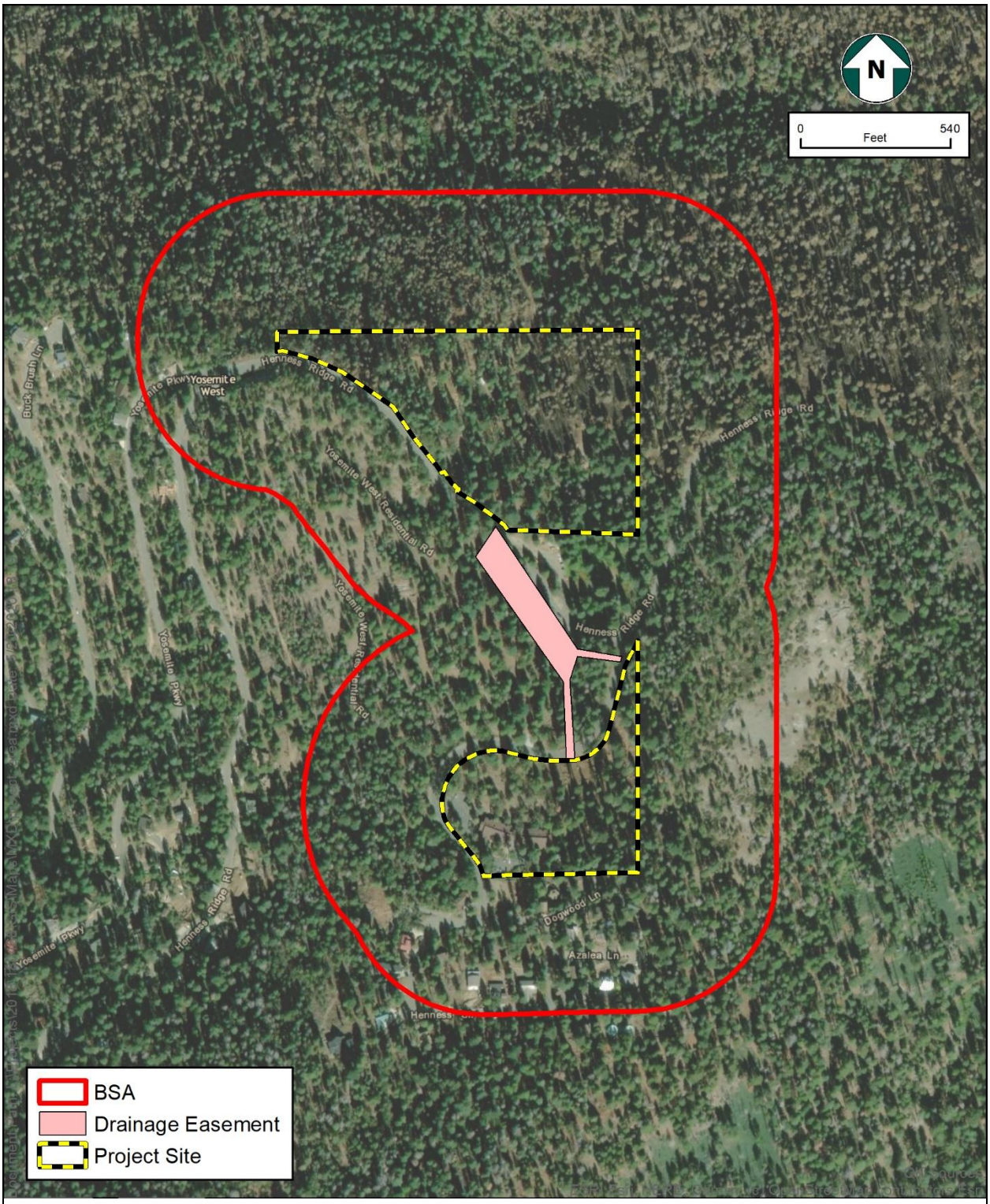


Figure 2-1. Biological Study Area,
Scenic Wonders Project,
Mariposa County, California

- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2019)
- California Protected Areas Data Portal (GreenInfo Network 2019)
- Federal Emergency Management Agency (FEMA) flood zone maps (FEMA 2019)
- National Marine Fisheries Service (NMFS) online fisheries information (NMFS 2019)
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2019)
- U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation system (USFWS 2019)
- USFWS Critical Habitat Mapper (USFWS 2019a)
- USFWS National Wetlands Inventory (NWI; USFWS 2019b)
- USGS National Hydrography Dataset (NHD; USGS 2019)
- USGS Topographic maps (USGS 2019)
- Current and historical aerial imagery (Google LLC 2019)

For each of these data sources, the search was focused on the *El Capitan, California* USGS 7.5-minute quadrangle in which the Project is located, plus the surrounding eight (8) quadrangles. For the CNDDB, a 10-mile search radius was used.

The CNDDB provides element-specific spatial information on individually documented occurrences of special-status species and sensitive natural communities. Some of the information available for review in the CNDDB is still undergoing review by the CDFW; these records are identified as unprocessed data. The CNPS database provides similar information as the CNDDB, but at a much lower spatial resolution. Much of this information in these databases is obtained opportunistically and is often focused on protected lands or on lands where development has been proposed. Neither database represents a comprehensive survey for special-status resources in the region. As such, the absence of recorded occurrences in these databases at any specific location does not preclude the possibility that a special-status resource could be present. The NWI and Web Soil Survey provide comprehensive data, but at a low-resolution requiring confirmation in the field.

The results of the database inquiries were reviewed to develop a list of special-status resources that may be present within vicinity of the Project. This list was then evaluated against the existing conditions observed during the reconnaissance site visit of the BSA to determine which special-status resources have the potential to occur, and then the potential for impacts to those resources as a result of implementation of the Project.

2.4 - Reconnaissance-Level Field Surveys

A reconnaissance-level site survey of the BSA was conducted to characterize the existing biological conditions of the Project site and the greater BSA. The Project contains two separate parcels and pedestrian transects covering both parcels were conducted to ensure visual coverage of the Project site plus the 500-foot BSA. QK biologists looked specifically for the presence of sensitive biological resources and any habitat that could support them.

All plant and animal species encountered were recorded and identified to the lowest taxonomic level necessary to determine rarity. The locations of any special-status species encountered were documented using GPS. All other potential special-status biological resources, such as aquatic habitats, were also recorded.

SECTION 3 - REGULATORY SETTING

Regulated or sensitive resources that were studied and analyzed included special-status plant and animal species, nesting birds and raptors, sensitive plant communities, wetlands and other waters, wildlife movement areas, and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by federal, State, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions, in this instance, the County of Mariposa.

Potential impacts to biological resources were analyzed based on the following list of statutes. Summaries of these statues are provided in Appendix A.

- CEQA
- FESA
- CESA
- Federal Clean Water Act
- California Fish and Game Code
- Migratory Bird Treaty Act
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- Mariposa County General Plan

SECTION 4 - ENVIRONMENTAL SETTING

This section identifies the regional and local environmental setting of the Project and describes existing baseline conditions. The environmental setting of the BSA was documented during site surveys conducted by QK biologists (Table 4-1).

Table 4-1
Field Survey Personnel and Timing

Date	Personnel	Time	Weather Conditions	Survey Type
7/26/19	Curtis Uptain, Theresa Brickley, Sarah Yates	10:30 am - 2:30 pm	78°F- 84°F, calm, partly cloudy, sunny	Reconnaissance

4.1 - Physical Characteristics

The BSA falls within the low-density Yosemite West residential subdivision and is located near the edge of the western extent of Yosemite National Park. Representative photographs are included in Appendix B.

4.1.1 - TOPOGRAPHY

The BSA is located on a generally north-facing slope facing towards El Portal Road and the Merced River in the Yosemite Valley. The Badger Pass Ski Area is less than 3 miles to the east. The topography of the BSA is variable and ranges between 5,934 to 6,129 feet above mean sea level.

The southern parcel has been partially developed with a paved road leading to residences and other structures nearby. The northern parcel consists of very steep, undeveloped terrain which slopes northward.

4.1.2 - CLIMATE

The BSA is in the lower elevations of the Sierra Nevada Mountain range that is characterized by a climate of warm summers and wet, cold winters. Average high temperatures range from 46.4°F in January to 82°F in July, with low temperatures ranging from 25.7°F in January and 49.4°F in July (WWRC 2019). Annual average precipitation is approximately 17 inches that occurs as rain and snow.

4.1.3 - LAND USE

The BSA is located on the eastern side of the unincorporated community of Yosemite West, which is surrounded by the Sierra National Forest to the north, west, and south, and Yosemite National Park to the east.

4.1.4 - SOILS

The BSA is underlain by one soil type (Figure 4-1; NRCS 2019a).

Typic Dystroxerepts-Humic Dystroxerepts-Rock outcrop association, 15 to 45 percent slopes, mountain slopes, frigid

This soil map unit is a composite of three soil types.

Typic Dystroxerepts, coarse-loamy, frigid. This acidic, sandy loam soil is moderately to somewhat excessively drained and is derived from Holocene-era alluvium, often from a granitoid parent material (NRCS 2019a). A top layer of duff (decomposed plant material) is characteristic of this soil type. It is typically found on mountain slopes and moraines. It is not associated with flooding or ponding and has a low water storage profile. Native vegetation commonly includes coniferous forest, particularly Sierra Mixed Conifer Forest and Jeffrey Pine Forest, and in areas with mild slopes these soils have been converted to crop and pastureland.

Humic Dystroxerepts, loamy -skeletal. Similar to the soil type above, this is a somewhat excessively drained soil derived from colluvium or granitoid rock but is more cobbly and gravelly (NRCS 2019b). It is found on mountain slopes, moraines, mountainsides, and landslides. It is not associated with flooding or ponding and has a very low water storage profile. Jeffrey Pine Forest is commonly associated with this soil type.

Rock Outcrop. Rock outcrops are formed of granitoid rock on moraines and mountain slopes (NRCS 2019b).

None of these soils are designated as hydric by the NRCS (NRCS 2019b).

4.1.5 - HYDROLOGY

The Project Site is within the Yosemite Creek-Merced River watershed (HUC 10-1804000803) within the greater Upper Merced River watershed (HUC 8-18040008) (USGS 2019). The NWI shows no wetland features within the BSA (USFWS 2019c; Figure 4-2). According to the NHD, one unnamed intermittent stream and three unnamed ephemeral stream features exist within the BSA. Two of the ephemeral features enter the Project site at the southern parcel and flow north into the northern parcel where they converge with the unnamed intermittent stream. A small portion of the third ephemeral feature exists at the north edge of the northern parcel and it converges with the intermittent stream off-site. The intermittent stream flows north (downslope) and dumps into Indian Creek, a perennial feature, which flows northwest towards the Merced River at the bottom of the valley.

The project is not within a known flood zone (Figure 4-3; FEMA 2019)

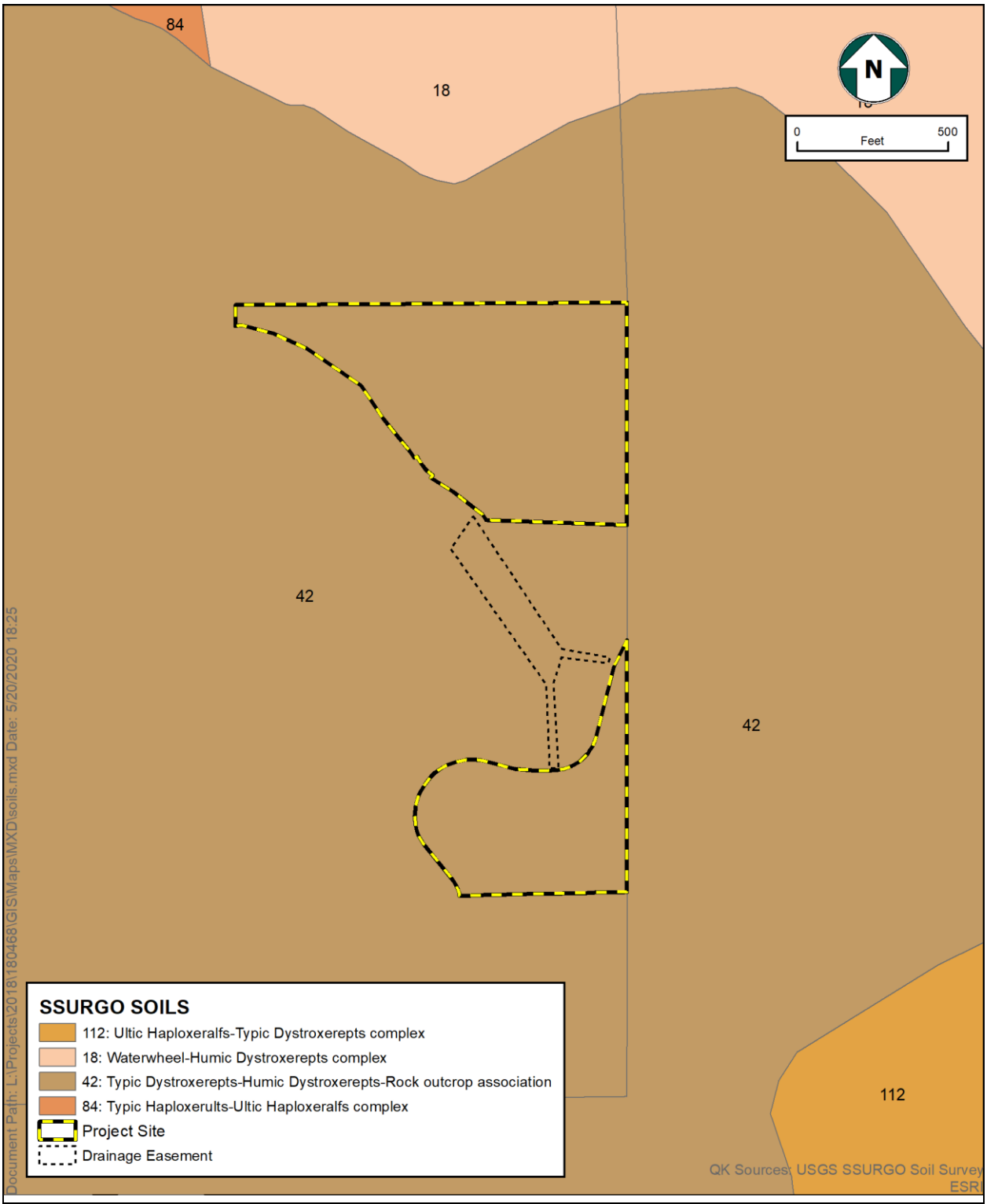


Figure 4-1. Soils Mapped within the BSA, Scenic Wonders Project, Mariposa County, California

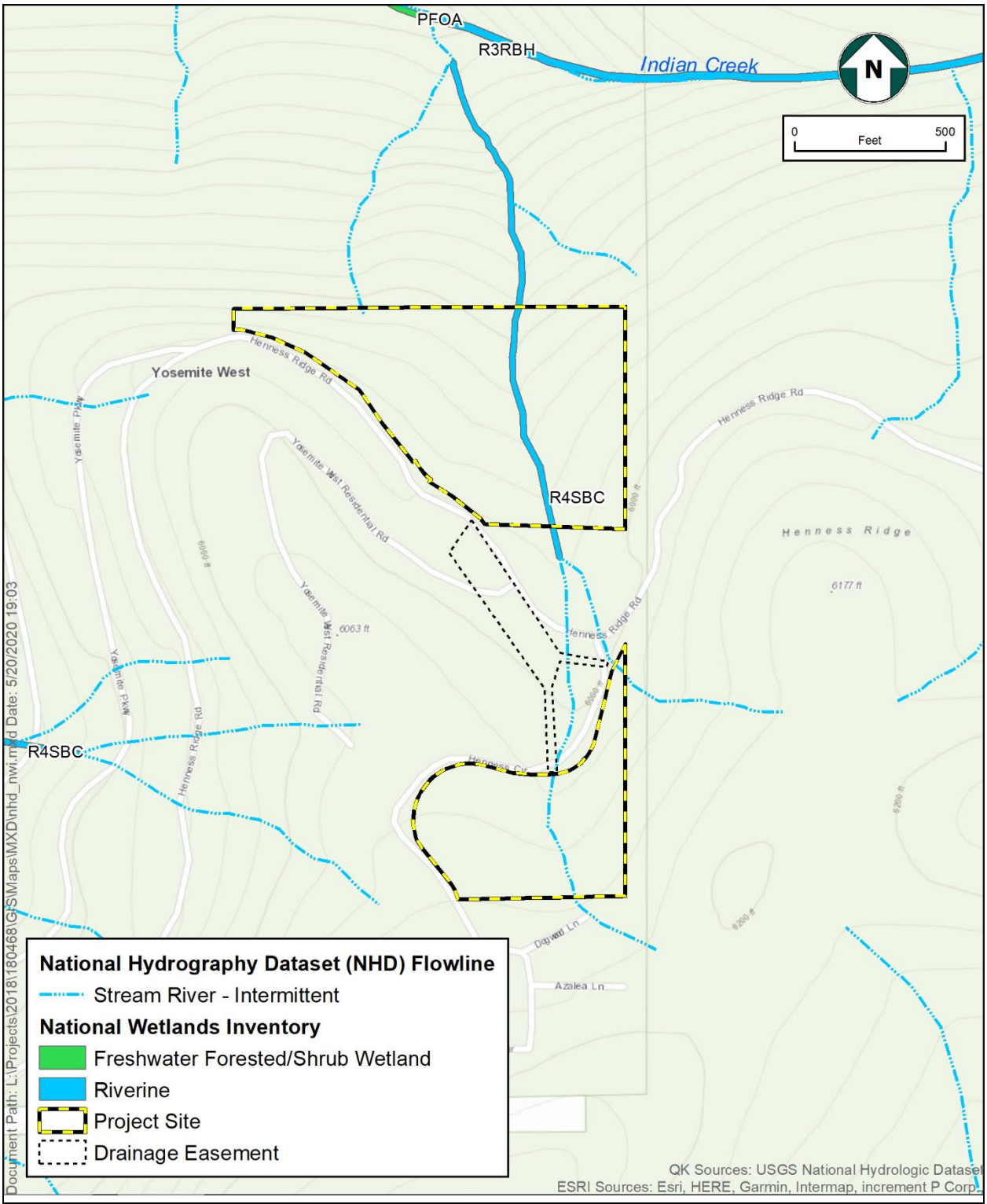


Figure 4-2. NWI and NHD Records of Aquatic Resources, Scenic Wonders Project, Mariposa County, California

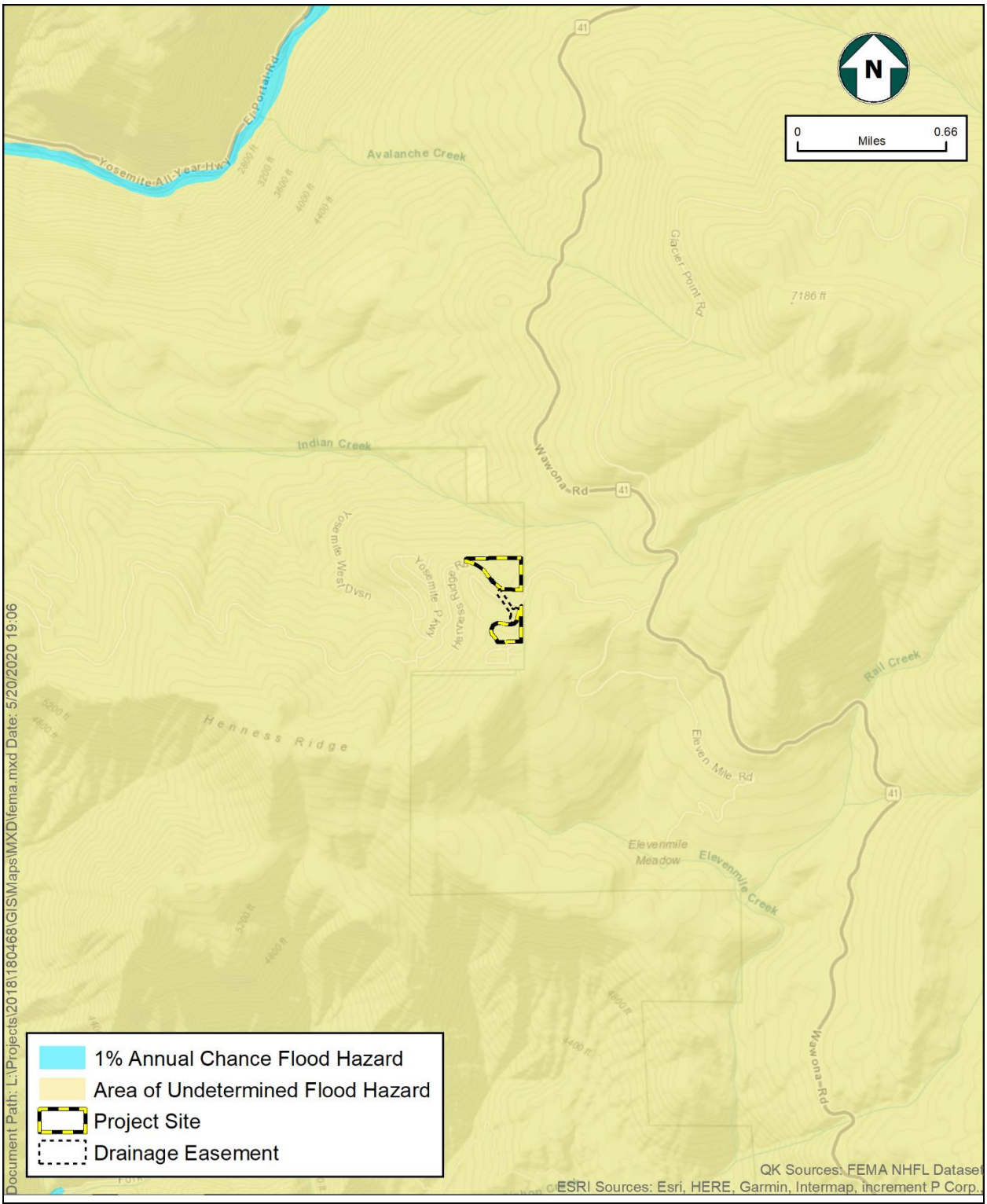


Figure 4-3. FEMA Flood Zone Map,
Scenic Wonders Project,
Mariposa County, California

4.2 - Vegetation and Other Land Cover

Three habitat types were observed within the BSA: Sierran mixed conifer, fresh emergent wetland, and urban (Figure 4-4). Habitats on-site were identified in accordance with the CWHR (Mayer and Laudenslayer 1988). The acreages of each habitat within the BSA and the respective parcels are presented in Table 4-2.

Table 4-2
Habitat Acreages Observed On-Site

Habitat Type	BSA	Acreages Northern Parcel	Southern Parcel
Sierran Mixed Conifer			
Burned	33.09	7.35	None
Unburned	64.51	6.00	3.86
Fresh Emergent Wetland	0.38	0.05	None
Urban	21.56	0.80	3.24

Sierran Mixed Conifer

Sierran mixed conifer is the dominant habitat type within the BSA at approximately 97.6 acres (Figure 4-4). Tree species include various pine species (*Pinus* sp.), white fir (*Abies concolor*), red fir (*A. magnifica* var. *magnifica*) cedar species (*Cedrus* sp.), and black oak (*Quercuskelloggii*). Tree density within the BSA is thinner than the surrounding areas, likely due to tree thinning for wildfire management. Approximately 33.09 acres in the northern portion of the BSA burned in a 2018 wildfire.

Fresh Emergent Wetland

Two small potential fresh emergent wetland features totaling approximately 0.38 acre were recorded on-site (Figure 4-4). The larger feature, which appears to be the headwaters that feed the unnamed intermittent stream in the northern parcel, is found within the BSA between northern and southern parcels. At the time of the survey that wetland was shallow and resembled a wet meadow. The smaller feature was greater than three (3) feet-deep and was situated within the northern parcel.

Urban

Urban is described in the CWHR as a subcategory of Developed Habitats (Figure 4-4). Urban habitat accounts for approximately 21.56 acres within the BSA and includes roads, structures, and drainages. Unlike in typical urban settings, vegetation in dominated by native species found throughout the area.

4.3 - General Wildlife Observations

The birds and mammals observed on-site are all common species known to occur in the region. Wildlife activity within the BSA was relatively low, possibly due to the wildfire impacts to the area during the previous year. A complete list of animals observed is provided in Appendix C.

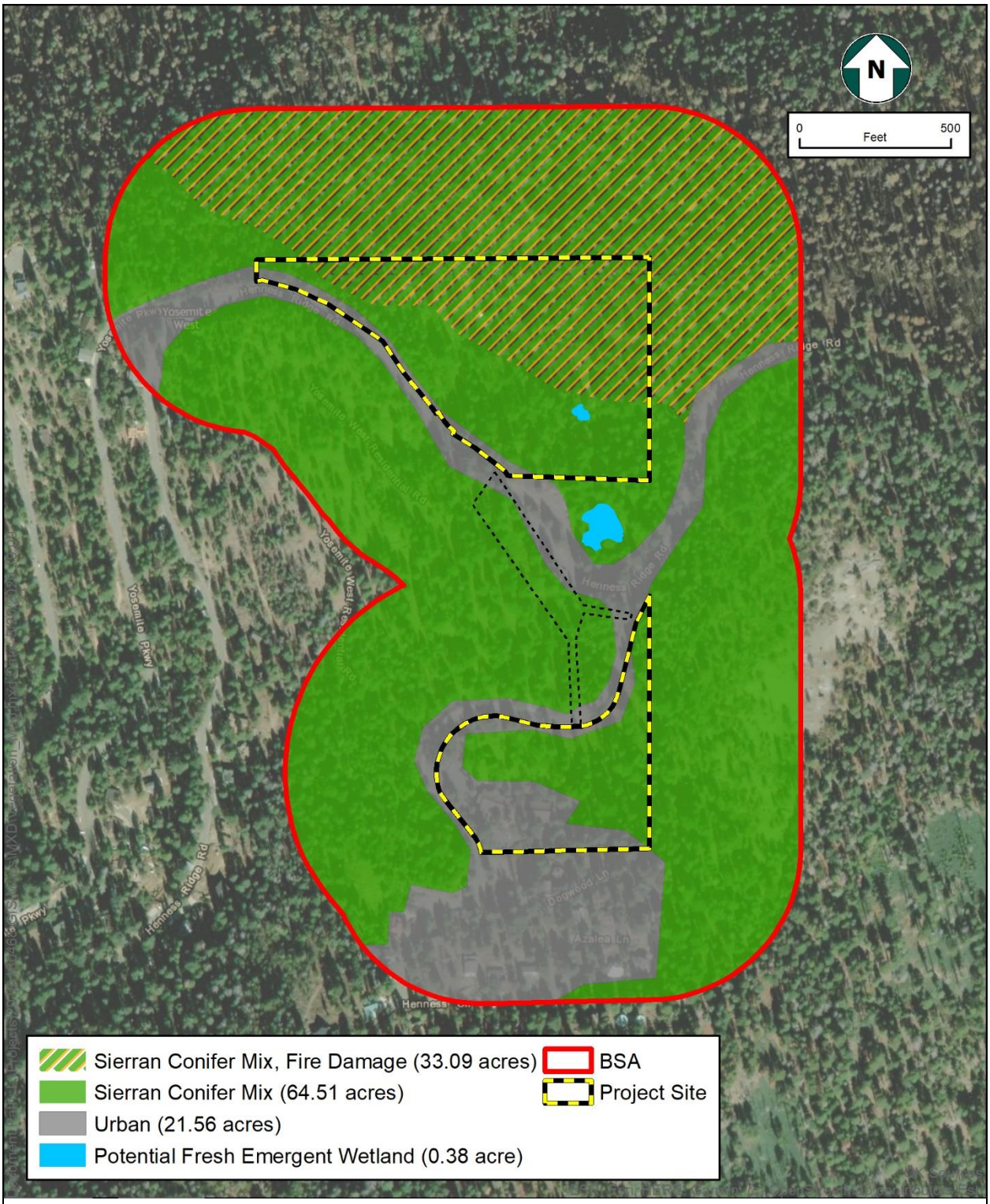


Figure 4-4. Vegetation Communities within the BSA, Scenic Wonders Project, Mariposa County, California

SECTION 5 - SPECIAL-STATUS RESOURCES

Local, State, and federal agencies regulate special-status species and other sensitive biological resources and require an assessment of their presence or potential for presence to be on-site prior to the approval of proposed development on a property. This section discusses sensitive biological resources observed on the Project site and evaluates the potential for the Project site to support additional sensitive biological resources. Assessments of the potential occurrence of special-status species are based upon known ranges, habitat preferences of the species, historic occurrence records from the CNDDB and CNPS, species occurrence records from other sites in the vicinity of the survey area, previous reports for the Project site, and the results of the reconnaissance survey of the Project site.

5.1 - Special-Status Species

Table 5-1 presents the list of special-status plant and animal species determined to have potential to occur on-site and identifies if the Project may affect the species and threaten the viability of the species population. The complete list of species evaluated for this Project is included in Appendix D.

Table 5-1
Special-Status Species with Potential to Occur On-Site

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Potentially Affected by Project? Yes/No	Viability Threat? Yes/No
Plants			
Allium yosemitense Yosemite onion	--/-- 1B.3/SR	Yes	No
Boechera tularensis Tulare rockcress	--/-- 1B.3	Yes	No
Carex tompkinsii Tompkins' sedge	--/-- 4.3/SR	Yes	No
Cinna bolanderi Bolander's woodreed	--/-- 1B.2	Yes	No
Erigeron aequifolius Hall's daisy	--/-- 1B.3	Yes	No
Hulsea brevifolia short-leaved hulsea	--/-- 1B.2	Yes	No
Orthotrichum holzingeri Holzinger's orthotrichum moss	--/-- 1B.3	Yes	No
Rhynchospora alba White beaked-rush	--/-- 2B.2	Yes	No

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Potentially Affected by Project? Yes/No	Viability Threat? Yes/No
Amphibians			
Rana draytonii California red-legged frog	FT/- SSC	Yes	No
Rana sierrae Sierra Nevada yellow-legged frog	FE/ST WL	Yes	No
Birds			
Accipiter gentilis Northern goshawk	-/- SSC	Yes	No
Mammals			
Antrozous pallidus pallid bat	-/- SSC	Yes	No
Eumops perotis californicus western mastiff bat	-/- SSC	Yes	No
Gulo gulo California wolverine	FPT/ST SFP	No	No
Lasiurus blossevillii western red bat	-/- SSC	Yes	No
Pekania pennanti fisher - West Coast DPS	-/FT SSC	Yes	No
Taxidea taxus American badger	-/- SSC	Yes	No
Vulpes vulpes necator Sierra Nevada red fox	FC/ST -	Yes	No

CRPR (California Rare Plant Rank):
- 1A Presumed Extinct in California
- 1B Rare, Threatened, or Endangered in California and elsewhere
- 2A Plants presumed extirpated in California, but more common elsewhere
- 2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension:
- .1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 Fairly endangered in California (20-80% occurrences threatened)
- .3 Not very endangered in California (<20% of occurrences threatened)

- FE Federally Endangered
- FT Federally Threatened
- FC Federal Candidate Species
- FPT Federally Proposed Threatened
- SE State Endangered
- ST State Threatened
- SCT State Candidate Threatened
- SSC State Species of Special Concern
- SFP State Fully Protected
- SR State Rare
- WL Watch List

5.1.1 - SPECIAL-STATUS PLANT SPECIES

The literature and database review identified 38 special-status plant species that are known or have a potential to occur within the vicinity of the Project (Appendix D). Of those, eight

(8) species were determined to have a potential to occur within the BSA based on the habitat conditions observed during the reconnaissance site visit and in aerial imagery (Table 5-1).

Yosemite Onion

Allium yosemitense
Status: CRPR 1B.3

Yosemite onion is a perennial bulbiferous herb associated with rocky metamorphic or granitic soils and can be found in pockets of wet soil or wet cracks of metamorphic rock (CDFW 2019b, CNPS 2019). It can also be found on slopes and walls of rock. The current known elevational range is from 1,755 to 7,217 feet. It is endemic to California, and can be found in the broad-leaved upland forest, chaparral, the foothill woodlands, and the lower montane coniferous forest. Yosemite onion is ranked as a CRPR List 1B.3 plant, indicating the species is not very threatened in California and there are less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known.

The species is known only from Mariposa and Tuolumne Counties (CNPS 2019). Recorded occurrences are scattered across the southwestern portion of the 10-mile CNDDB buffer (CDFW 2019b). The nearest occurrence (EONDX 21822) was recorded approximately 2.8 miles to the southwest of the Project site in 1981 and is presumed extant in the area. The intermittent stream that flows through the northern parcel provides suitable habitat. The three (3) ephemeral streams within the Project site are expected to only be wet during and for a brief period after rainfall and would not offer sufficient moisture to support this species.

Tulare Rockcress

Boechera tularensis
Status: CRPR 1B.3

Tulare rockcress is a perennial herb that blooms May through August and occurs in subalpine coniferous forests and upper montane coniferous forests (CDFW 2019b, CNPS 2019). It is often found on rocky slopes and sometimes along roadsides. Its current known elevational range is from approximately 5,985 feet to 10,990 feet. It is known only from high Sierra Nevada from El Dorado County south to Tulare and Inyo Counties.

The nearest occurrence was recorded approximately 5.5 miles to the north of the Project site (EONDX 84758) and was recorded in 1939 (CDFW 2019b). It is presumed extant, but the record is old and the exact location is unknown. Tulare rockcress could occur within the BSA, likely more towards the higher elevation portions of the Project site. Several CNDDB occurrences have been recorded along trails, roads, parking areas, pull-outs, and other disturbed areas, suggesting the species is not deterred by disturbance. Some of these occurrences were also recorded in sandy soils and pine duff, and in moist conditions along creeks and edges of meadows, indicating this species occurs in more microhabitats beyond rocky slopes.

Tompkins' sedge

Carex tompkinsii
Status: CRPR 4.3 and State Rare

Tompkins' sedge is a perennial rhizomatous herb that blooms from May to July (CDFW 2019b, CNPS 2019). It occurs in chaparral, cismontane woodland, and lower upper montane coniferous forests, sometimes on granitic soils. The current known elevational range is from approximately 1,375 feet to 6,000 feet and it is known from a limited number of populations in the Sierra Nevada mountains in Fresno, Mariposa, and Tuolumne counties. Given it is a sedge, it is most likely restricted to mesic conditions.

The nearest occurrence or Tompkins' sedge was recorded approximately 3.5 miles to the northeast of the Project along the Merced River, just east of El Portal (EONDX 3847; CDFW 2019b). The species has been observed in that area several times, with the last recorded occurrence in 1994; it is presumed extant. It was observed primarily on shady, south-facing slopes along ephemeral streambeds and the bank of the Merced River. Drainages within the BSA offer suitable habitat for this species. Sierra sedge (*Carex nervina*) was observed during the reconnaissance site visit. The intermittent stream that flows through the northern parcel provides suitable habitat. The three (3) ephemeral streams within the Project site are expected to only be wet during and for a brief period after rainfall and would not offer sufficient moisture to support this species.

Bolander's Woodreed

Cinna bolanderi
Status: CRPR 1B.2

Bolander's woodreed is a perennial herb associated with wet or mesic soils along stream sides and wetlands, meadows and seeps in upper montane coniferous forest (CDFW 2019b, CNPS 2019). The known elevation range is from approximately 5,480 to 8,000 feet. Bolander's woodreed is ranked as a CRPR 1B.2 plant, indicating the species is rare in California and elsewhere. It is moderately threatened in California with 20- to 80 percent of its occurrences threatened.

Recorded occurrences within the 10-mile CNDDB buffer are located mostly to the north of the Project. The nearest occurrence was recorded in 1944 (EONDX 109160) and is approximately 5.2 miles north of the Project (CDFW 2019b). The species was found in mud by a spring in the forest, near New Big Oak Flat Road, east of Wildcat Creek. It was mapped by CNDDB as a best guess. The other known occurrences were mapped near creeks. The intermittent stream that flows through the northern parcel provides suitable habitat. The three (3) ephemeral streams within the Project site are expected to only be wet during and for a brief period after rainfall and would not offer sufficient moisture to support this species.

Hall's Daisy
Erigeron aequifolius
Status: CRPR 1B.3

Hall's daisy is a perennial rhizomatous herb associated with rocky and granitic soils in pinyon-juniper woodland and lower and upper montane coniferous forests. The known elevation range is from 4,921 to 8,005 feet. Hall's daisy is ranked as a CRPR List 1B.3 plant, indicating the species is not very threatened in California and there are less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known.

There are no recorded CNDDB occurrences within 10 miles of the Project site (CDFW 2019b). The Consortium of California Herbaria contains an occurrence recorded in 1965 within the *El Capitan, California* USGS 7.5-minute quadrangle (CNPS 2019, Consortium of California Herbaria 2019); however, this is an isolated record nearly 100 miles north of where all other known occurrences have been recorded. The record has been flagged for possible locational discrepancy. While this occurrence may be in question, the conditions within the BSA do appear suitable for this species.

Short-Leaved Hulsea
Hulsea brevifolia
Status: CRPR 1B.2

The short-leaved hulsea is a perennial herb associated with gravely or sandy soils derived from granitic or volcanic sources (CDFW 2019b, CNPS 2019). It is found most commonly in forest openings and along road cuts in upper and lower montane coniferous forests. The known elevation range is from 4,921 to 10,499 feet. Short-leaved hulsea is ranked as a CRPR 1B.2 plant, indicating the species is rare in California and elsewhere. It is moderately threatened in California with 20 to 80 percent of its occurrences threatened.

Recorded occurrences within the 10-mile CNDDB buffer are located mostly northeast of the Project (CDFW 2019b). Many of these occurrences are associated with steep sandy slopes or granitic outcrops with open canopies near road cuts, and some were found in burned areas. The nearest occurrence was recorded in 2004 (EONDX 74122) and is approximately 2.2 miles northeast of the Project. This occurrence was at Glacier Point Road, northwest of Badger Pass ski area at Yosemite National Park. Most of the individuals were observed on a steep north-facing road cut composed primarily of sand over bedrock or in open canopy forest edge above the roadcut. Within the BSA the soils appear to be appropriate and there are areas of open canopy, including recently burned areas, that could support this species.

Holzinger's Orthotrichum Moss
Orthotrichum holzingeri
Status: CRPR 1B.3

Holzinger's orthotrichum moss is typically found on rocks in and along streams and, rarely, on tree limbs in cismontane woodland, pinyon and juniper woodland, and lower and upper montane coniferous forest (CDFW 2019b, CNPS 2019). The current known elevational range

is approximately 2,345 to 5,905 feet. It has been documented in limited scattered occurrences throughout the Sierra Nevada and Cascade mountains and the Modoc Plateau.

The nearest occurrence (EONDX 94915) was recorded more than 10 miles from the BSA in 2002 along the middle fork of the Tuolumne River in the Stanislaus National Forest (CDFW 2019b). Within the BSA, conditions along streams appear suitable, and an unidentified moss was observed along the stream in the northern parcel.

White Beaked-Rush
Rhynchospora alba
Status: CRPR 2B.2

White beaked-rush is a perennial rhizomatous herb that blooms from June through August and occurs in bogs, fens, meadows, seeps, freshwater marshes, sphagnum bogs, and swamps (CDFW 2019b, CNPS 2019). The species' current known elevational range is from approximately 197 feet to 6,693 feet. It has been documented in scattered occurrences throughout mountain regions of central and northern California, mostly at higher elevations, and also occurs in Oregon, Washington, and Idaho.

The nearest occurrence was recorded to the north east of the BSA in the Yosemite Valley (EONDX 59954, CDFW 2019b). The observations in this recorded were made in 1954 and 1959 and lack specific location detail. There are no other records of this species in Mariposa County in the CNDDB of the Consortium of California Herbaria's (2019) online database; however, the CDFW presumes the species is extant in the area. Suitable habitat is present for this species in the fresh emergent wetlands observed on-site.

5.1.2 - SPECIAL-STATUS ANIMAL SPECIES

The literature review identified 24 special-status animal species known or with potential to occur in the vicinity of the Project (see evaluation table in Appendix A). Of those, nine (9) were determined to have the potential to occur on-site although ten (10) species are discussed below.

California Red-Legged Frog
Rana draytonii
Status: Federally Threatened and State Species of Special Concern

California red-legged frogs are found primarily in and near ponds and stream sides in forests, woodlands, grasslands, and coastal scrub (CDFW 2019b, Zeiner et al. 1990). This species is endemic to California and northern Baja California and can be found throughout coastal California and inland areas within the Sacramento Valley and foothills of the Sierra Nevada. The species is most commonly found below approximately 3,935 feet but has been documented as high as 5,200 feet in Yosemite National Park (USFWS 2002). Plant cover along the edges of aquatic habitats, usually as emergent wetland vegetation, are important for shade and cover from predators (CDFW 2019b, Zeiner et al. 1990). They breed in either permanent or ephemeral aquatic habitats. Most breeding sites contain slow-moving water flows, shallow water at edges with emergent vegetation, and a deeper interior pool. During

the non-breeding season, California red-legged frogs estivate (i.e., hibernation during summer months) in animal burrows or other moist refugia to avoid desiccation during dry conditions. Presence of predator species, especially American bullfrogs (*Lithobates catesbeianus*), may preclude the presence of California red-legged frogs.

The nearest occurrence was recorded in 1922 more than 15 miles to the north near the Tuolumne River (EONDX 85653; CDFW 2019b). According to the record, this species is considered by the CDFW extirpated from the Tuolumne River watershed but is believed to be extant in the Upper Merced River watershed in which the BSA is located. Yosemite National Park has undertaken an effort to restore the species to its former habitat through invasive bullfrog eradication efforts and reintroductions, which have led to successful reproduction of red-legged frogs in Yosemite Valley in 2019 (KQED 2019). The BSA is located within the eastern portion of the species' range. The southern parcel contains no habitat that would support this species. On the northern parcel, the wetland may support breeding habitat and the ephemeral streams may support movement.

Sierra Nevada Yellow-Legged Frog

Rana sierrae
Status: Federally Threatened

Sierra Nevada yellow-legged frog populations range from Lake Tahoe down to Fresno County and exist on the eastern and western slopes of the Serra Nevada Range (CDFW 2019b, Zeiner et al. 1990). They are highly aquatic and are observed within a few feet of water along lakes, ponds, marshes, and streams. It is most commonly found at higher elevations from about 4,500 feet to 12,000 feet in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats (Zeiner et al. 1990). They prey primarily on invertebrates but have been known to feed on tadpoles and dead frogs. The female will lay eggs on vegetation or they can be left free floating, depending on the water flow velocity of the aquatic habitat.

Eighteen occurrences were mapped within 10 miles of the Project Site (CDFW 2019b). The closest record of occurrence is approximately 1.16 miles northeast of the Project in 1959 and is presumed extant (EONDX 71142). The most recent occurrence (EONDX 7856) was recorded in 2011 approximately 4 miles to the northeast. The species is known to occur in the area. The intermittent stream that flows through the northern parcel provides suitable habitat. The three (3) ephemeral streams within the Project site are expected to only be wet during and for a brief period after rainfall and would not offer sufficient moisture or habitat conditions that would support this species.

Northern Goshawk

Accipiter gentilis
Status: State Species of Special Concern

Northern goshawks occur in north coast, subalpine, and upper montane coniferous forests, usually at mid- to high-elevation locations (CDFW 2019b; Squires and Reynolds 1997). They prefer dense canopies in mature forests with open understories for foraging, mostly on birds

and mammals. They nest in and around forest habitat, usually on north slopes, and often in old nests in red fir lodgepole pine on north-facing slopes, Jeffrey pine and aspens, and usually on the largest tree in their territory. They prefer to be near water. During the winter, they can be found downslope in valley foothill hardwood habitat along the Sierra Nevada.

The nearest occurrence was recorded approximately five (5) miles to the northeast 1977 of nest along Pohono Trail (EONDX 26590, CDFW 2019b). There are several more records to the north and northeast in Yosemite National Park, and the species is known to occur throughout most of the Sierra National Forest. Suitable habitat is present in the northern portion of the BSA, including the northern parcel, where thinning for wildlife management and tree mortality has not occurred. The area that burned in 2018 is not currently suitable but may become suitable over time as it recovers.

Pallid bat

Antrozous pallidus
Status: State Species of Special Concern

Pallid bats occur throughout California in a wide variety of natural habitats from sea level up through mixed conifer forests (CDFW 2019b, Zeiner et al. 1990). They are most often found in open, dry habitats with rocky areas. Day roosts typically consist of caves, crevices, mines, and occasionally hollow trees, buildings, and bridges, so long as the roost can protect them from high temperatures. Night roots usually consist of more open sites. Pallid bats feed mainly on insects and arachnids, and they need access to water. Maternity season is from early April to as late as August. This species is very sensitive to disturbance at its roosts.

Six occurrences were mapped within 10 miles of the Project Site. The closest record of occurrence is approximately 5.09 miles north of the Project and is presumed extant. (EONDX 69458, CDFW 2019a) This record from 1999 specifies a strip of habitat in Yosemite Valley where this species has been known to occur. This area remains largely undisturbed and features a sierra-conifer mix canopy and exposed granite rock faces that could support this species. The southern parcel or surrounding BSA would not provide suitable habitat due to the presence of ongoing human disturbance that would discourage the species' presence. The thinning of trees in and around the southern parcel could result in higher temperatures rendering the trees unsuitable for day roosting. The habitat within the northern parcel is denser, allowing for better temperature regulation, and far enough removed form human disturbance that it could provide suitable habitat, particularly in the area that has not burned. The burned area may not be suitable at this time but may be come suitable in the future as the area recovers.

Western Mastiff Bat

Eumops perotis californicus
Status: State Species of Special Concern

Western mastiff bats occur in open, semi-arid to arid habitats, and urban habitats, throughout the southeastern San Joaquin Valley and Coast Ranges from Monterey County southward (CDFW 2019b, Zeiner et al. 1990). They feed primarily on insects captured in

flight. They are known to be colonial and can roost include cliff faces, high buildings, trees, and tunnels. Nursery roosts are most often found in tight crevices in rocks or buildings. Maternity season begins in March and generally ends in September.

The nearest occurrence was recorded in 1996 approximately five miles to the north along the Merced River (EONDX 35666; CDFW 2019b). Within the BSA and in the Project sites, there may be suitable day and night roosts in some of the larger trees for small numbers of individuals, but nursery roost options are lacking.

California Wolverine

Gulo gulo
Status: Federally Proposed as Threatened, State Threatened, State Fully Protected

The California wolverine is an uncommon resident found in a wide variety of habitats in the North Coast and Sierra Nevada mountains from Del Norte and Trinity counties east through Siskiyou and Shasta counties, and south through Tulare County (CDFW 2019b, Zeiner et al., 1990). Its current known elevational range is from 1,600 feet to more than 10,000 feet, with observations in the southern Sierra Nevada mostly between 6,400 feet and 10,800 feet. They are known to travel long distances, include beyond their normal home ranges for several days. They use caves, logs, and burrows for cover and denning. They feed primarily on small mammals and carrion and require a water source. They may be sensitive to human disturbance.

The nearest occurrence was recorded in 1941 at Bridalveil Creek Campground south of Glacier Point Road, approximately five miles east of the BSA (EONDX 23322, CDFW 2019b). No specific information on that observation is available. Habitat within the BSA appears suitable to support foraging and movement, though it is less likely to support denning. However, only one individual has been observed in California in nearly 100 years and that animal is expected to have passed as well. Given the lack of sightings within California, this species is not expected to occur at the Project site nor be impacted by the Project.

Western red bat

Lasiurus blossevilii
Status: State Species of Special Concern

Western red bats are locally common from Shasta County south to the Mexican border, west of the Sierra Nevada and Cascade crests (CDFW 2019b, Zeiner et al. 1990). They migrate between summer and winter ranges but may be found year-round in the Central Valley. They are most often found in forests and woodlands from sea level up through mixed conifer forest but are not found in deserts. Western red bats feed on insects over grasslands, shrublands, croplands, and open areas in forests and woodlands. They will repeatedly forage in the same areas, often in large groups, and subsist on a diet consisting mostly of moths, crickets, cicadas, and beetles. They roost primarily in trees on the edges of habitats near streams, fields, or urban areas. They also require water. Their maternity season is from May through July.

One occurrence was mapped within 10 miles of the Project Site. This record of occurrence is approximately 8.1 miles southeast of the Project and is presumed extant. (EONDX 69465, CDFW 2019b) This record from 1998 specifies a 1/10-mile radius on the west side of the town of Wawona where this species has been known to occur. Since 1998, the footprint of human development around Wawona remains largely unchanged according to historical aerial imagery. The habitat surrounding this occurrence features open areas including a golf course, a stream, disjointed sierra-conifer woodland and forest, and some human structures. Within the BSA and on the Project sites, there are trees that could support roosting and other habitats that could support foraging.

Fisher (West Coast DPS)

Pekania pennanti
Status: Federally Threatened, State Species of Special Concern

Fishers occur in coniferous forests, deciduous forests, and riparian areas with intermediate to large tree stages and a dense canopy (CDFW 2019b, Zeiner et al. 1990). They prefer old-growth areas with cavities, snags, logs, and rocky areas for cover and denning. They feed on small mammals, particularly rabbits and hares, as well as birds, carrion, and sometimes fruit.

Twelve occurrences have been recorded within 10 miles of the BSA (CDFW 2019b). The closest occurrence was recorded in 1993 less than a tenth of a mile east of the Project and is presumed extant (EONDX 23625). The species is known to occur in the region and the BSA is located within the Southern Sierra Fisher Conservation Area where the U.S. Forest Service (USFS) implements conservation strategies in cooperation with state agencies and non-governmental organizations (Spencer et al. 2016). The BSA and the Project sites contain habitat suitable for fisher, although the developments and habitat disturbances on and near the southern parcel, mostly consisting of logging and related ground disturbances, reduces the potential for this species to be present. There was one tree cavity found in a California black oak on the southern parcel that would be a potential den for the fisher confirming the potential for presence on that parcel. Habitat on the northern parcel is more suitable with denser trees that may contain cavities. The trees in the burned portion of the northern parcel may become suitable as they decay.

American Badger

Taxidea taxus
Status: State Species of Special Concern

American badgers occur most often in open, drier stages of grassland, shrubland, and forests habitats where friable soils are present (CDFW 2019b, Zeiner et al. 1990). They dig burrows for cover and reproduction and can dig a new burrow every night. American badgers are nocturnally active and feed mostly on fossorial rodents, such as gophers and ground squirrels. Litters are born in March or April. They are somewhat tolerant of human activities but avoid cultivated agricultural habitats.

One occurrence was recorded within 10 miles of the BSA in the vicinity of Wawona (EONDX 57507, CDFW 2019b). The date of the record is unknown, but the observation was made

prior to 1986. Within the BSA and the Project sites there is suitable habitat in the more open canopied forests and burned areas further from human developments. It is more likely that the species would be present as a transient forager because, in general, soils are shallow and not suitable for denning.

Sierra Nevada Red Fox
Vulpes vulpes necator
Status: Federal Candidate and State Threatened

The Sierra Nevada red fox is a rare fox that has historically been found in nearly all habitats present throughout the Cascade and Sierra Nevada mountains, though its range has become restricted due to human disturbance and introduction of non-native canids (CDFW 2019b, Zeiner et al. 1990). It is likely that their populations were never very numerous. They prefer areas with dense vegetation and rocks for cover and den sites, particularly in habitat mosaics where meadows and alpine fellfields intersperse forest habitats. Current known elevational range is approximately 4,500 feet to 11,500 feet (Grinnell et al. 1937), though recent studies show they may be less common at lower elevations (Perrine 2005).

The nearest occurrence was recorded in 1950 along State Route 41 to the east of the BSA (EONDX 23752; CDFW 2019b). This occurrence was presumed to be the Sierra Nevada red fox based on elevation and range but acknowledged that DNA analysis was needed to confirm the subspecies. According to the information in the record, more recent studies failed to detect the species, with known populations as of 2013 limited to near Lassen Peak and Sonora Pass. Habitat on-site and in the greater region could support foraging and movement for this species; however, Sierra Nevada red foxes have not been recorded within 10 miles of the BSA since 1971 and the current known populations are well north of the Project site. As such, this species is unlikely to occur.

5.1.3 - OTHER PROTECTED SPECIES

In addition to the special-status species above, habitat conditions within the BSA and on the Project sites could support a range of nesting birds such songbirds, woodpeckers, raptors, and owls.

5.2 - Sensitive Natural Communities

The database and literature review identified one sensitive plant community documented within the vicinity of the BSA: Big Tree Forest (CDFW 2019b). Big Tree Forest was originally described by Holland (1986) as very similar to Sierran Mixed Conifer Forest but with fewer drought adapted species and with giant sequoias (*Sequoiadendron giganteum*) as a major component. These occurrences were recorded over 9.5 miles northwest of the Project site. There are no giant sequoias on-site and thus this habitat is not present.

5.2.1 - CRITICAL HABITATS

No critical habitats occur within the BSA. The closest critical habitat is approximately 3.1 miles east of the BSA for the Yosemite toad (*Anaxyrus canorus*), but suitable aquatic habitat is lacking on-site (Figure 5-1).

5.3 - Jurisdictional Aquatic Resources

During the literature review, one intermittent and three ephemeral unnamed stream features were identified to potentially exist within the BSA (Figure 4-3; USFWS 2019c, USGS 2019). During the site visit, the intermittent stream was confirmed to be present on-site. The rest of the features detailed by the NHD did not appear to be present on-site. Two additional small wetland features were observed (Figure 5-2). The larger feature appears to be a headwater that feeds the intermittent stream that bisects the northern parcel as it flows north. The smaller wetland is isolated. A formal delineation was not conducted during the site visit.

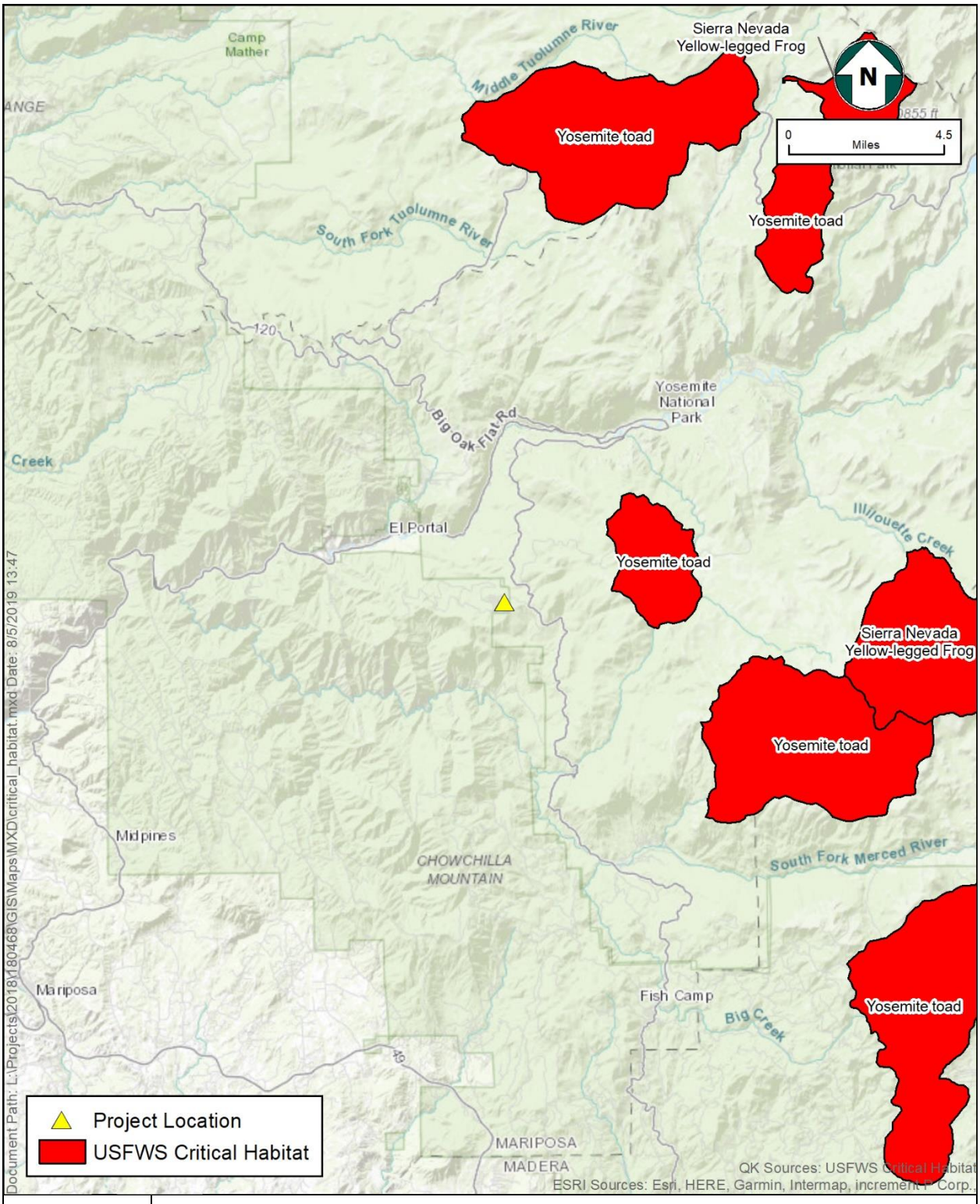


Figure 5-1. Critical Habitat in the Project Vicinity, Scenic Wonders Project, Mariposa County, California

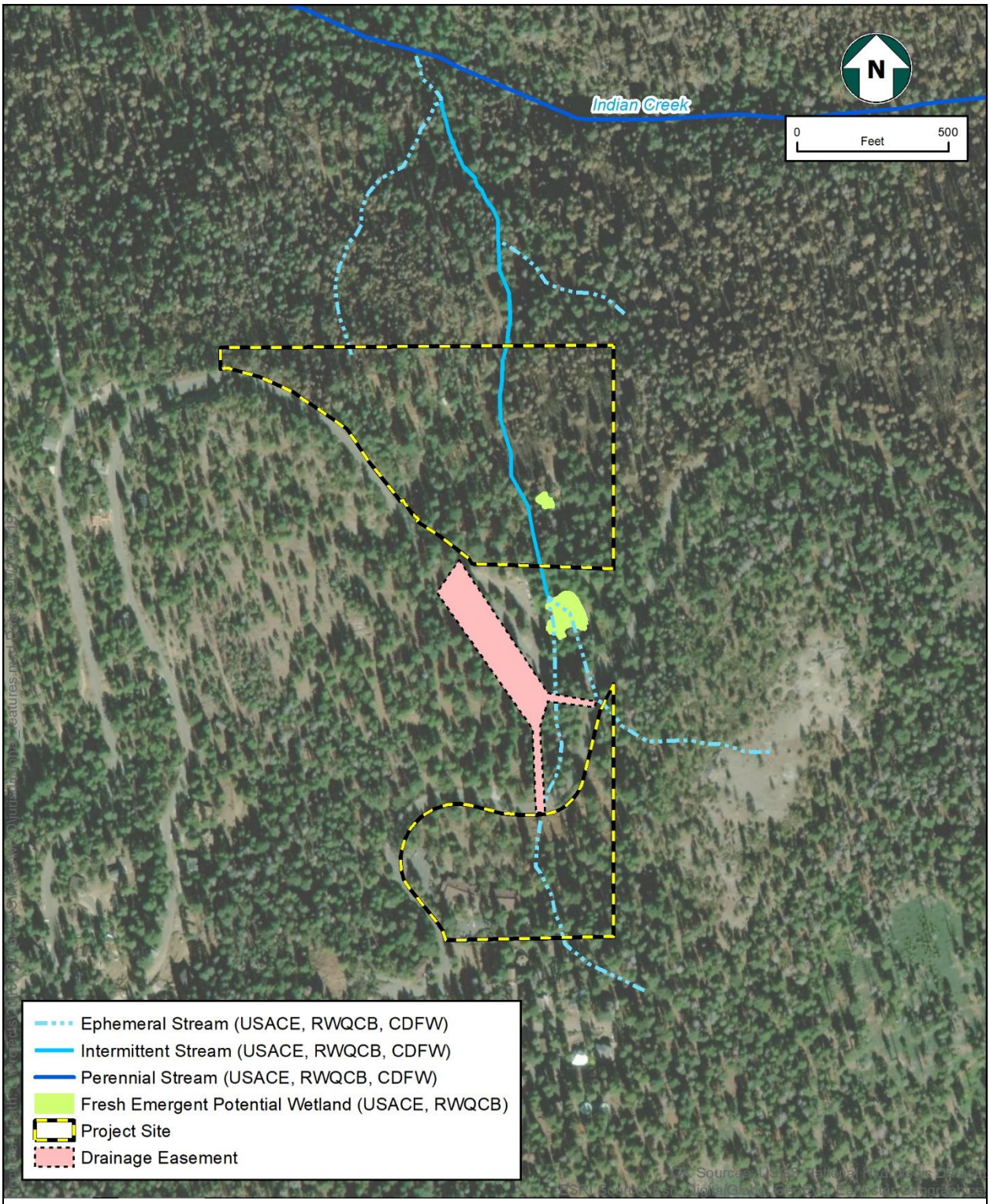


Figure 5-2. Potential Jurisdictional Aquatic Resources, Scenic Wonders Project, Mariposa County, California

5.4 - Wildlife Movement

Wildlife movement corridors, also referred to as dispersal corridors or landscape linkages, are generally defined as linear features along which animals can travel from one habitat or resource area to another. Wildlife movement corridors can be large tracts of land that connect regionally important habitats that support wildlife in general, such as stop-over habitat that supports migrating birds or large contiguous natural habitats that support animals with very large home ranges (e.g., coyotes [*Canis latrans*], mule deer [*Odocoileus hemionus californicus*]). They can also be small scale movement corridors, such as riparian zones, that provide connectivity and cover to support movement at a local scale.

The BSA is not located within an identified wildlife corridor (Figure 5-3). The nearest wildlife corridors are found north and south of the BSA near the Merced River and the North Fork of the Merced River. However, the BSA includes natural forest habitat that is contiguous throughout the region and could support movement by a wide variety of species.

5.5 - Resources Protected by Local Policies and Ordinances

No specific resources are protected by local policies or ordinances. The Mariposa County General Plan includes goals and policies aimed at the general conservation and enhancement of ecosystems, plant communities, and wildlife habitat, with implementation measures directed towards conserving wetlands, riparian habitats, and wildlife habitat and movement, and towards minimizing impacts to watersheds and minimizing the spread of invasive species (Mariposa County 2006).

5.6 - Habitat Conservation Plans

The BSA is not located within the boundaries of a Habitat Conservation Plan or Natural Community Conservation Plan. The BSA is located within the Southern Sierra Fisher Conservation Area administered by the USFS and its partners (Spencer et al. 2016). The Project site is privately owned and is not subject to USFS programs.

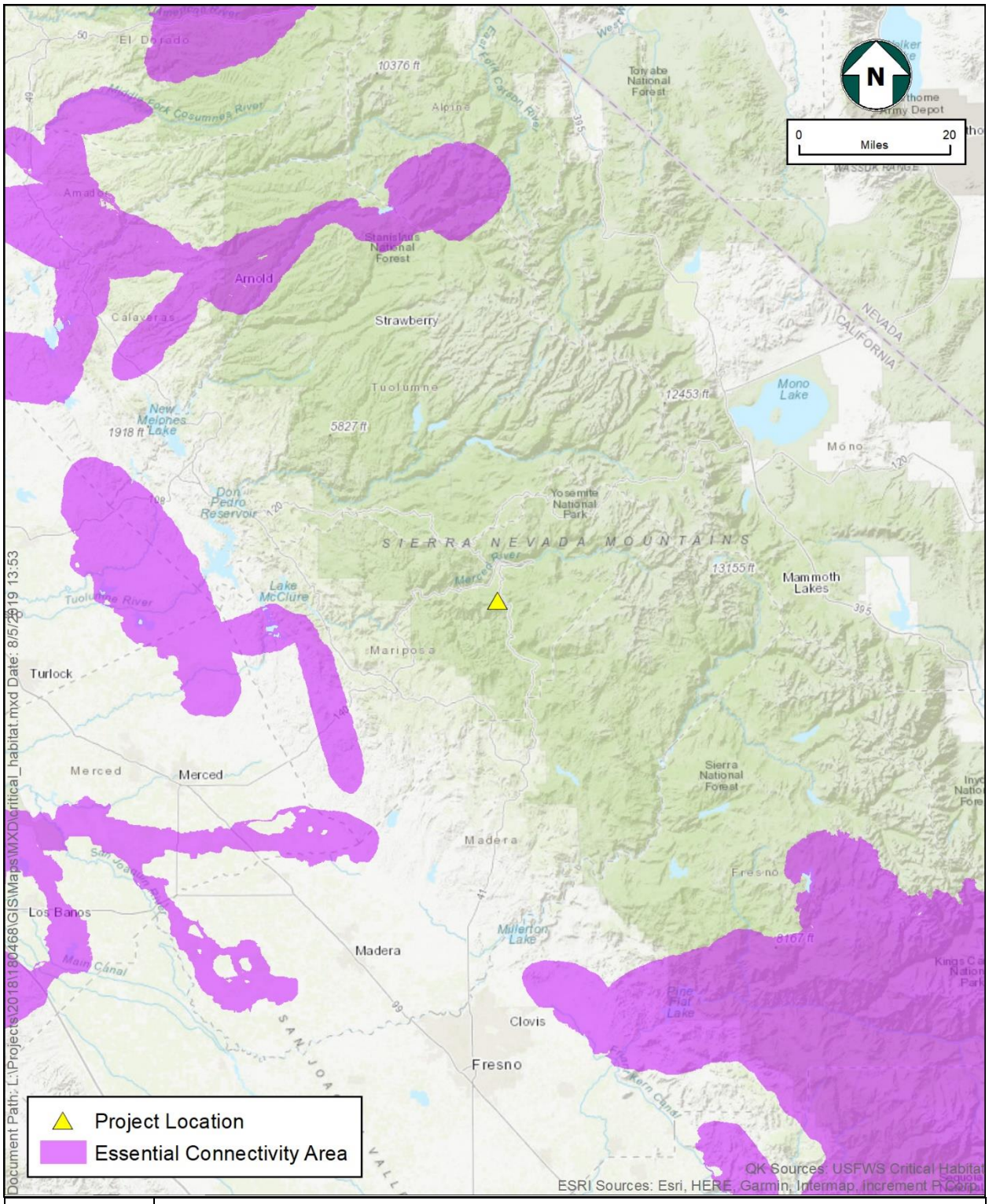


Figure 5-3. Movement Corridors and Linkages, Scenic Wonders Project, Mariposa County, California

SECTION 6 - IMPACT ANALYSIS AND AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

This section provides an analysis of the potential for biological resources to be impacted by the proposed Project. This analysis has been developed using the CEQA Appendix G questions, but also provides enough information to support NEPA documentation.

At this time there are design plans for the southern 7.2-acre parcel, but not for the northern 15-acre parcel. For the purpose of this analysis it is assumed that the entirety of both parcels will be developed.

6.1 - Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

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.

6.1.1 - PROJECT IMPACTS TO SPECIAL-STATUS PLANT SPECIES

As discussed in Section 5, seven (7) special-status plant species were determined to have the potential to occur within the BSA based on the presence of suitable habitat and soil conditions:

- Yosemite Onion – CRPR 1B.3
- Tulare rockcress – CRPR 1B.3
- Tompkins' sedge – CRPR 4.3 and State Rare
- Bolander's woodreed – CRPR 1B.2
- Hall's daisy – CRPR 1B.3
- Short-leaved hulsea – CRPR 1B.2
- Hozinger's orthotrichum moss – CRPR 1B.3
- White beaked-rush – CRPR 2B.2

Yosemite onion, Tompkins' sedge, Bolander's woodreed, Hozinger's orthotrichum moss, and white beaked-rush are associated with mesic sites and are likely to be associated with the intermittent drainage on the northern parcel. Tulare rockcress, short-leaved hulsea, and Hall's daisy could have a more widespread distribution across the area. While the potential for occurrence of Hall's daisy is uncertain due to a questionable occurrence record near the site, it cannot be ruled out at this time.

Direct impacts to these species could include destruction and loss of individuals and isolated populations as well as habitat loss. Indirect impacts could include the loss of habitat for future colonization of the species, thereby impacting the species' viability over the long-term,

as well as long-term changes to habitat composition due to the spread of non-native invasive plant species during construction.
Due to the rare nature of these species and limited distributions, these impacts could be significant. Impacts to very small numbers could still represent a relatively high percentage of the overall population.

Avoidance, Minimization, and Mitigation Measures

Locally, large portions of the ranges for each of these species overlaps federally- and state-owned lands which would not be subject to intense and wide-spread development, thus buffering impacts the proposed Project may cause. The following avoidance and minimization measures would further help to reduce the impact of the Project on special-status animal species.

BIO-MM-1 **Pre-Activity Surveys for Rare Plant Surveys**. This measure applies to both parcels as identified in Table 6-1. Prior to start of ground disturbance where suitable habitat is present, A qualified biologist knowledgeable on the identification of special-status plant species should conduct a pedestrian survey of areas of the Project disturbance footprint plus a 100-foot buffer within the Project area to determine if they are present. These surveys should be floristic in nature and should be conducted during the bloom periods for the target species immediately prior to start of construction activities at each site in accordance with the most current USFWS and CDFW protocols. Locations of any special-status plant species observed during the survey should be mapped and described in the Biological Site Review Report. If special-status plants are not identified during the survey(s), no further action is required.

Table 6-1
Location and Timing for Rare Plant Surveys

Species	Survey Location	Bloom Period
Yosemite onion	Northern Parcel and emergent wetland between parcels	April through July
Tulare rockcress	Northern and Southern Parcels	May through August
Tompkins' sedge	Northern Parcel and emergent wetland between parcels	May through July
Bolander's woodreed	Northern Parcel and emergent wetland between parcels	July through September
Hall's daisy	Northern and Southern Parcels	June through August
short-leaved hulsea	Northern and Southern Parcels	May through August
Holzinger's orthotrichum moss	Northern Parcel	n/a
white beaked-rush	Northern Parcel and emergent wetland between parcels	June through August

If special-status plant species are detected on-site, an Environmentally Sensitive Area (ESA) buffer should be established with a minimum buffer of 15

feet. If any non-listed special-status plant species are present and cannot be avoided, the CDFW should be contacted at least 10 days prior to disturbance to allow for the collection of seed from these plant species (the construction schedule will proceed whether the CDFW collects seed or not).

If Thompkin's sedge is present and cannot be avoided, impacts should be minimized to the greatest extent feasible in consultation with the USFWS and/or CDFW, as appropriate. A Restoration and Revegetation Plan (RRP) should be developed prior to construction and should include the following:

- Target mitigation ratios for impacted special-status plant species.
- The source for restoration plantings and seed mixes. Native seed should be sourced locally from a native plant nursery to maintain genetic integrity with the plant species on-site the site and should consist of a mix of plant species similar to what is present on-site or otherwise is known to occur within the same types of habitats in the region.
- Methods for plant installation including size and species to be planted, and planting and irrigation installation. Methods for seed installation including species of seed and planting and irrigation. Management and maintenance methods should be included.
- Criteria and methods for determining successful establishment of mitigation efforts.
- Contingency and adaptive management efforts if restoration efforts not successful.
- Monitoring and reporting requirements. Seeded areas should be monitored through at least one winter to ensure that seed has sprouted successfully. Restoration plantings should be monitored for at least three (3) years to determine if they have successfully become established (irrigation should not occur during the last year of monitoring).

Topsoil for areas that are occupied by special-status plant species should be retained and re-spread over disturbed areas from where it was extracted after construction has been completed.

Significance After Mitigation. Implementation of the measures above would reduce Project impacts to special-status plants to a less than significant level.

6.1.2 - PROJECT IMPACTS TO SPECIAL-STATUS ANIMAL SPECIES

Nine special-status animal species were determined to have a potential to occur on-site.

- California red-legged frog – Federally Threatened and State Species of Special Concern
- Sierra Nevada yellow-legged frog – Federally Threatened
- Northern goshawk – State Species of Special Concern
- Pallid bat – State Species of Special Concern

- Western mastiff bat – State Species of Special Concern
- Western red bat – State Species of Special Concern
- Fisher (West Coast DPS) – Federally Threatened, State Species of Special Concern
- American badger – State Species of Special Concern
- Sierra Nevada red fox – Federal Candidate and State Threatened

California red-legged frog and Sierra Nevada yellow-legged frog would be limited to the northern parcel where the intermittent drainage and wetland provides suitable habitat. Pallid bats would also be expected to be limited to the northern parcel due to their high sensitivity to disturbance. Northern goshawk would also be expected to be limited to the northern parcel where the tree canopy is denser. The remaining species could occur on the northern and southern parcels.

The potential for any of these species to occur on-site and be impacted by the Project is low due to human presence and tree thinning activities around the community for wildlife management and to address recent tree mortality; however, the Project site could still provide suitable habitat for each of these species.

Despite the Project's location within the historic range of the Sierra Nevada red fox and the presence of suitable habitat on-site is currently only know from populations well to the north of the Project site. It is highly unlikely that the species would be present and impacted by the Project; as such, the species is assumed to not occur and will not be discussed further.

Direct impacts to these species could include injury or mortality of individuals during construction activities and loss of suitable habitat. Loss of habitat could also cause indirect impacts by reducing the overall amount of available suitable habitat needed to sustain populations, both locally and range wide. Other indirect impacts may include long-term changes to habitat composition due to introduction of invasive species and reduced suitability due to increased human presence following construction of the Project.

The Sierra Nevada yellow-legged frog has a restricted range within California and, as such, direct and indirect impacts could be significant as they could threaten population viability. California red-legged frogs and fishers each have a reasonable wide distribution across the state; however, impacts to this species could be significant for local populations.

For other more widely distributed species such as the pallid bat, western red bat, western mastiff bat, and American badger, impacts due to development to the Project site would not threaten the viability of their populations.

Nesting Birds

The Project site and surrounding area contains suitable habitat that could support a wide variety of nesting bird species protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Project activities adjacent to nesting birds could result in direct impacts to the nests from noise and vibration caused by construction activities.

Indirect impacts could result following removal of trees, creating greater competition for resources.

Avoidance, Minimization, and Mitigation Measures

Locally, large portions of the ranges for each of these species overlaps federally- and State-owned lands which would not be subject to intense and wide-spread development, thus buffering impacts the proposed Project may cause. The following avoidance and minimization measures would further help to reduce the impact of the Project on special-status animal species.

BIO-MM-2 **Pre-Activity Surveys for the California Red-Legged Frog and Sierra Nevada Yellow-Legged Frog – Northern Parcel.** This measure applies to the northern parcel only. Within 14 days prior to the start of ground or vegetation disturbance within the northern parcel, a qualified biologist, knowledgeable of the all life stages of the California red-legged frog and the Sierra Nevada yellow-legged frog, should conduct two survey events in accordance with USFWS protocols. Each survey should consist of one day-time survey and one night-time survey, and each survey event should be conducted with at least five (5) days between them. The survey effort should be phased with construction of the Project. If no California red-legged frogs or Sierra Nevada yellow-legged frogs are detected during both survey events, no further action is required.

If either frog species is detected during the pre-activity surveys, construction activities will need to be postponed in the location where the frogs are detected until the frogs leave the site on their own. Once the biologist has determined that the frogs have left the site, work may resume. An exclusion fence should be constructed between occupied habitat and the construction area to prevent the species from re-entering the construction area. The location and design of the exclusion fencing would be determined by the qualified biologist. Construction of the Project may proceed with caution under the direct supervision of the biologist. The biologist should have the ability to halt work at any time to avoid injury or death to either frog species. Alternatively, California red-legged frogs and Sierra Nevada yellow-legged frogs may be relocated from the Project site prior to the start of construction, but relocation could only occur with permission from the USFWS and CDFW, which would typically require an Incidental Take Permit.

BIO-MM-3 **Pre-Activity Survey for Nesting Bird Species (including Northern Goshawk).** This measure applies to the Project regardless of location. If Project activities must occur during the nesting season (March to August), pre-activity nesting bird surveys should be conducted within seven (7) days prior to the start of construction at the construction site plus a 250-foot buffer for songbirds and a 500-foot buffer for raptors. These surveys will be required even if the Project activities have started outside the nesting season to ensure that ongoing

construction activities avoid impacting new nests. The survey effort should be phased with construction of the Project. If no active nests are found, no further action is required.

If active nests are found during the survey or at any time during construction of the Project, an avoidance buffer ranging from 50 feet to 350 feet may be required, as determined by a qualified biologist. The avoidance buffer will remain in place until the biologist has determined that the young are no longer reliant on the nest. Work may occur within the avoidance buffer under the approval and guidance of the biologist. The biologist should have the ability to stop construction if nesting adults show signs of distress.

BIO-MM-4 Roosting Bat Avoidance and Minimization. This measure applies to the Project regardless of location. Within 14 days prior to construction activities, a qualified biologist should conduct a survey prior to implementing Project activities, including a daytime inspection and a flyout inspection at dusk. The survey effort should be phased with construction of the Project. If no bats are detected, the no further action is required.

If bats are detected, then acoustical sampling should be conducted to determine species. If pallid bats, western mastiff bats, or western red bats are identified to be roosting in the trees on-site, work will not commence until:

- Relocation of bats may not be performed during the breeding season (March 1 to September 15). Bats have been passively excluded from the tree by installing one-way doors or other exclusion devices. Electronic bat aversion devices may also be used in addition to the one-way doors.

BIO-MM-5 Pre-Activity Surveys for the Fisher and American Badger. This measure applies to the northern and southern parcels. Within 14 days of the start of Project activities in any specific area, a pre-activity survey should be conducted by a qualified biologist knowledgeable in the identification of these species. The surveys should cover the Project site plus a 500-foot buffer. Pedestrian surveys achieving 100% visual coverage should be conducted. The survey effort should be phased with construction of the Project. If no evidence of these species is detected, no further action is required. If dens that any of these species could use are detected during the survey, an ESA buffer of at least 500 feet will be implemented between construction and the den.

If the den must be removed for construction of the Project, the den will be monitored for a minimum of five (5) days and nights with trail cameras to determine if the den is in use. If no animal activity is detected, the dens may be carefully dismantled and demolished under the direct supervision of a qualified biologist until the terminus of every tunnel is clearly visible, and then backfilled. If at any time during den removal one of these species is encountered, den removal will cease immediately, and the animal will be

allowed to leave on its own as determined by the biologist before den removal can resume.

BIO-MM-6 Worker Environmental Awareness Training. Prior to construction activities on any undeveloped parcel, all personnel should attend a Construction Personnel Environmental Awareness Training and Education Program. The program should be developed by a qualified biologist.

- The program should include information on the life history of all of the special-status species determined herein to have potential to occur on-site, including migratory birds and raptors.
- The program should discuss each species' legal protection, status, the definition of "take" under the Endangered Species Act, measures the Project operator must implement to protect the species, reporting requirements, specific measures that each worker should employ to avoid take of wildlife species, and penalties for violation of the State and federal ESAs.
- The program should provide information on how and where to bring injured wildlife for treatment in the case any animals are injured on the Project site, and how to document wildlife mortalities and injuries.
- An attendance form signed by each worker indicating that environmental training has been completed will be kept on record.

BIO-MM-7 Best Management Practices. The following best management practices should be implemented to avoid and minimize impacts to special-status biological resources:

- Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all Project areas, except on county roads and State and Federal highways. Night-time construction speed limits should be 10-mph.
- Off-road traffic outside of designated Project areas should be prohibited.
- All Project activities should occur during daylight hours.
- To prevent inadvertent entrapment of animals during construction of the Project, all excavated, steep-walled holes or trenches more than two (2) feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks should be installed.
- Before holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured special-status animal species is discovered, the USFWS and the CDFW, as appropriate, should be contacted before proceeding with the work.
- In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS/CDFW should be contacted for guidance.

- All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe should not be moved until the qualified biologist has identified the species and determined if consultation with the USFWS/CDFW is required. If the species is not protected under the federal or state ESAs or is State Fully Protected, the animal may be retrieved by the biologist and relocated to suitable habitat out of harm's way. All such relocations should be carefully documented, including photos/descriptions of condition of the animal and relocation site.
- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or Project site.
- No firearms should be allowed on the Project site.
- No pets, such as dogs or cats, should be permitted on the Project site.
- Use of rodenticides and herbicides in Project areas should be restricted.
- Upon completion of the Project, all areas subject to temporary ground disturbances (including storage and staging areas, temporary roads, pipeline corridors, etc.) should be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the Project, but after Project completion will not be subject to further disturbance and has the potential to be revegetated.
- Any Project personnel who are responsible for inadvertently killing or injuring a special-status species should immediately report the incident to the qualified biologist. The biologist will notify the appropriate agencies within 24 hours.
- New sightings of all special-status species should be reported to the CNDDB.

Significance After Mitigation. Implementation of the measures above would reduce Project impacts to special-status animals to a less than significant level.

6.2 - Sensitive Natural Communities and Critical Habitat

The proposed project would have a significant effect on biological resources if it would:

b) Have a substantial adverse impact 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 US Fish and Wildlife Service.

The BSA does not overlap any critical habitat and there are no designated sensitive natural communities present on-site. The Project would have no impacts to designated sensitive natural communities or critical habitats and no measures are required.

6.3 - Jurisdictional Aquatic Resources

The proposed project would have a significant effect on biological resources if it would:

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

Four streams are present found within the Project site, one intermittent stream and three ephemeral streams. In addition, two wetlands were identified during the reconnaissance site visit. All waters on-site would be considered waters of the State under various state laws including the Porter-Cologne Water Quality Control Act. The streams may also fall under the jurisdiction of the federal Clean Water Act and may be regulated under Section 1600 *et seq*. of the California Fish and Game Code.

Impacts to these features are not likely to be significant given the very small acreage and apparently isolated nature of these features; however, the loss of aquatic feature acreage and quality of aquatic features throughout the state continue to decline and impacts to the features on-site would contribute to that decline.

Avoidance, Minimization, and Mitigation Measures

The following measure are recommended to reduce the level of impact to sensitive habitats. Please note that each regulatory agency may require additional measure under their respective laws beyond CEQA.

BIO-MM-8 Aquatic Resources Delineation. Prior to start of construction an aquatic resources delineation should be conducted for the entire Project site to identify the extent of potential state and federal jurisdiction over these resources. The delineation should be conducted according to current USACE and Regional Water Quality Control Board minimum standards. The delineation should include the Project site plus a minimum 100-foot buffer. An Aquatic Resources Delineation Report should be prepared in accordance with USACE minimum standards and should include potential jurisdictional extents for State agencies.

BIO-MM-9 Avoidance and Minimization of Impacts to Aquatic Resources. The following are BMPs focused on aquatic features:

- All aquatic features should be avoided to the greatest extent feasible. Aquatic features that can be avoided should have ESA buffers of at least 50 feet established to limit indirect impacts. ESA buffers should be marked with high visibility fencing or other type of marking so that construction workers are aware of the buffer.
- Staging and storage areas for equipment, materials, fuels, lubricants, and solvents should be located outside as far from aquatic features as possible.

Vehicles and equipment should be moved away from the aquatic features prior to refueling and lubrication.
- Any material used as rip rap or rock slope protection should be composed of cleaned, natural rock that is free of concrete, asphalt, and other materials that are deleterious to fish and wildlife.
- A Stormwater Pollution Prevention Plan should be developed to address potential sources of erosion and water quality degradation during construction.
- Upon completion of the Project, all disturbed soils should be stabilized to prevent erosion into aquatic features.

Significance After Mitigation. Implementation of the measures above would reduce Project impacts to sensitive natural communities to a less than significant level.

6.4 - Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

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

The Project site does not intersect with any identified regional or local wildlife movement corridors, nor does it support an important wildlife nursery site. No impacts to wildlife movement or nursery sites would occur.

6.5 - Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

The Mariposa County General plan explains the County's priorities around conserving and maintaining the scenic character of the region. A significant portion of Mariposa County is rugged and difficult terrain which precludes urban development in most cases. This, coupled with the fact that 52% percent of Mariposa county is federally controlled, means much of county is untouched, pristine habitat. In order to maintain the diverse natural resources in the area, proper management practices should be implemented to achieve this.

The County recognizes that many wildlife and plant species are known to occur in Mariposa County. To address the potential impacts that future human development might cause to these resources, the county has implemented an Environmental Conservation Program that included the development of standards and programs to conserve, protect, and mitigate impacts to sensitive habitats, breeding areas, and known occurrence of special-status plant and animal species. Surveys for rare or special-status species, in compliance with State and Federal regulations, should be conducted as part of the County's environmental review

process. This policy also requires that the removal of native trees and groves of trees be minimized as much as possible during grading. In addition, the county requires that all invasive species that threaten natural or agricultural area be reduced or eradicated.

Mariposa County also requires that erosion and loss of soils be minimized to the greatest extent possible during grading and site development.

A list of relevant goals, policies, and implementation measures for the Mariposa County General Plan can be found in Table A-1.

Implementation of measures BIO-MM-1 through BIO-MM-9 would facilitate compliance with local policies and ordinance. No additional measures are recommended.

6.6 - Adopted or Approved Plans

The proposed project would have a significant effect on biological resources if it would:

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

The Project site is not located within the boundaries of any HCP or NCCP. The BSA is located within the Southern Sierra Fisher Conservation Area administered by the USFS and its partners (Spencer et al. 2016); however, the Project site is privately owned and not subject to USFS programs. No measures are required.

SECTION 7 - LIMITATIONS, ASSUMPTIONS, AND USE RELIANCE

This Biological Analysis Report has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, and specified historical and literature sources. The biological investigation is limited by the scope of work performed. A reconnaissance level biological survey for certain taxa was conducted as part of this assessment but was not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile animal species could occupy the site on a transient basis or re-establish populations in the future. No other guarantees or warranties, expressed or implied, are provided.

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APPENDIX A

REGULATORY SETTING
SCENIC WONDERS PROJECT

Regulatory Setting

Federal Laws and Regulations

Federal Endangered Species Act of 1973 (USC, Title 16, Sections 1531 -1543)

The federal Endangered Species Act (FESA) and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. The FESA defines species as threatened or endangered and provides regulatory protection for listed species. The FESA provides a program for the conservation and recovery of threatened and endangered species as well as the protection of designated critical habitat that USFWS determines is required for the survival and recovery of listed species.

Section 9 lists actions that are prohibited under the FESA. Although take of a listed species is prohibited, it is allowed when it is incidental to an otherwise legal activity. Section 9 prohibits take of listed species of fish, wildlife, and plants without special exemption. The definition of "harm" includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. "Harass" is defined as actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly.

Section 7 of the FESA requires federal agencies, in consultation with and assistance from the Secretary of the Interior or the Secretary of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction of adverse modification of critical habitat for these species. The USFWS and National Marine Fisheries Service (NMFS) share responsibilities for administering the FESA. Regulations governing interagency cooperation under Section 7 are found in California Code of Regulations (CCR) Title 50, Part 402. If an activity could result in "take" of a listed species as an incident of an otherwise lawful activity, then a biological opinion can be issued with an incidental take statement that exempts the activity from FESA's take prohibitions.

Section 10 provides a means whereby a nonfederal action with the potential to result in take of a listed species can be allowed under an incidental take permit. Application procedures are found at CFR Title 50, Sections 13 and 17 for species under the jurisdiction of USFWS and CFR, Title 50, Sections 217, 220, and 222 for species under the jurisdiction of NMFS. Section 10 would apply to the Project if take of a species (as defined in Section 9) were determined to occur.

Section 4(a)(3) and (b)(2) of the FESA requires the designation of critical habitat to the maximum extent possible and prudent based on the best available scientific data and after considering the economic impacts of any designations. Critical habitat is defined in section 3(5)(A) of the FESA: 1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (physical and biological features) essential to the conservation of the species, thus warranting special

management consideration or protection; and 2) areas outside of the geographic range of a species at the time of listing but that are considered essential to the conservation of the species.

Migratory Bird Treaty Act (USC, Title 16, Sections 703 - 711)

The MBTA, first enacted in 1918, is a series of treaties that the United State has with Great Britain (on behalf of Canada), Mexico, Japan, and the former Soviet Union that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds. The act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird" (U.S. Code Title 16, Section 703). The MBTA currently includes several hundred species and includes all native birds.

BALD AND GOLDEN EAGLE PROTECTION ACT OF 1940 (USC, TITLE 16, SECTION *668)*

The Bald and Golden Eagle Protection Act (BGEPA) of 1940 protects bald eagles (*Haliaeetus leucoephalus*) and golden eagle (*Aquila chrysaetos*) by prohibiting the taking, possession, and commerce of these species and established civil penalties for violation of this act. Take of bald and golden eagles includes to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." To disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially inferring with normal breeding, feeding, or sheltering behavior. (Federal Register [FR], volume 72, page 31132; 50 CFR 22.3).

Federal Clean Water Act (USC, Title 33, Sections 1521 - 1376)

The Federal Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires that a Project applicant that is pursuing a federal license or permit allowing a discharge to waters of the U.S. to obtain State Certification of Water Quality, thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S. Section 404 establishes a permit program administered by the United States Army Corps of Engineers (USACE) that regulates the discharge of the dredged or fill material into waters of the U.S., including wetlands. The USACA implementing regulations are found in CFR, Title 33, Sections 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the United States Environmental Protection Agency (EPA) in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Applicable State Laws and Regulations

California Environmental Quality Act (California Public Resources Code, Sections 21000 - 21178, and Title 14 CCR, Section 753, and Chapter 3, Sections 15000 - 15387)

The California Environmental Quality Act (CEQA) is California's broadest environmental law. CEQA helps guide the issuance of permits and approval of projects. Courts have interpreted CEQA to afford the fullest protection of the environment within the reasonable scope of the statutes. CEQA applies to all discretionary projects proposed to be conducted or approved by a State, County, or City agency, including private projects requiring discretionary government approval.

The purpose of CEQA is to disclose to the public the significant environmental effects of a proposed discretionary project; prevent or minimize damage to the environment through development of project alternatives, mitigation measures, and mitigation monitoring; disclose to the public the agency decision making process to approve discretionary projects; enhance public participation in the environmental review process; and improve interagency coordination.

State CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or State list of protected species nonetheless may be considered rare or endangered for purposed of CEQA if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals.

California Endangered Species Act (California Fish and Game Code Section 2050 et seq.)

The California Endangered Species Act (CESA) establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve Projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For Projects that would result in take of a species listed under the CESA, a project proponent would need to obtain a take permit under Section 2081(b). Alternatively, the CDFW has the option of issuing a Consistency Determination (Section 2080.1) for Projects that would affect a species listed under both the CESA and the FESA, as long as compliance with the FESA would satisfy the "fully mitigate" standard of CESA, and other applicable conditions.

Porter-Cologne Water Quality Control Act

Under Section 401 of the CWA, the RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet State water quality standards. The RWQCB regulates waters of the State under the authority of the Porter-Cologne Water Quality Control Act (Porter Cologne Act). The RWQCB requires Projects to avoid impacts to wetlands whenever feasible and requires that Projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. The RWQCB typically requires compensatory mitigation for impacts to wetlands and/or waters of the State. The RWQCB has jurisdiction over waters

deemed 'isolated' or not subject to Section 404 jurisdiction under the Solid Waste Agency of Northern Cook County (SWANCC) decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste into waters of the State, and such discharges are authorized through an Order of Waste Discharge (or waiver of discharge) from the RWQCB.

Various Sections of the California State and Fish and Game Code

SECTION 460 AND SECTIONS 4000-4003

Chapter 5 of the California Fish and Game Code (FGC) describes regulations concerning the take of furbearing mammals, including defining methods of take, seasons of take, bag and possession limits, and areas of the State where take is allowed. Section 4000-4003 defines furbearing mammals, and the issuance of permits by the Department. Sections 460 and 4000 identifies fisher, marten, river otter, desert kit fox and red fox as furbearing mammals, and Section 460 prohibits take of these species at any time. This section of the California Fish and Game Code (FGC) has historically been interpreted to apply to restriction on furbearer trapping permit but has recently been expanded by CDFW to apply to any forms of take and treated as if these species were listed under CESA.

SECTIONS 1600 THROUGH 1616

Under these sections of the FGC, a Project operator is required to notify CDFW prior to any Project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the California Code of Regulations, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports of has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events. Preliminary notification and Project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable Project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement.

SECTIONS 3511, 4700, 5050, AND 5515

The protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the FGC. These statues prohibit take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species, except as allowed for in an approved Natural Communities Conservation Plan (NCCP), or through direct legislative action.

SECTIONS 1900 THROUGH 1913 - NATIVE PLANT PROTECTION ACT

California's Native Plant Protection Act (NPPA) requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provision of

the NPPA prohibit that taking of listed plants from the wild and require notification of CDFW at least ten days in advance of any change in land use. This allows CDFW to salvage listed plant species that otherwise would be destroyed. A Project proponent is required to conduct botanical inventories and consult with CDFW during Project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

Local and Regional Laws, Regulations, and Policies

Mariposa County General Plan

Mariposa County's General Plan includes goals, policies, and implementation programs for the preservation of the natural resources and scenic character of the region.

Table A-1
Chapter 11.2 – General Plan Implementation

Goals	
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.
Goal 11-2:	Protect and manage the use of Mariposa County's limited water resources.
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.
Goal 11-5:	Avoid erosion and loss of soils due to development activities.
Policies	
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.
Policy 11-2a	Conserve water to accommodate County growth and sustainable agriculture.
Policy 11-2b	Preserve surface and sub-surface water quality
Policy 11-2c	Preserve the existing or potential sources of a sustainable water supply.
Policy 11-2d	Conserve water sources for water-dependent species and the continuity of riparian communities.
Policy 11-4a	Conserve the diversity of native ecosystems, plant communities, wildlife habitat, and plant and animal species in the County.
Policy 11-5a	Minimize impacts of grading activities.

Implementation Measures	
Measure 11-1a (1):	The County shall establish guidelines to ensure development complementary to the scenic aspects of the County's rural character.
Measure 11-1a (2):	The County shall develop subdivision design standards for placement of structures on ridgelines and open hillsides.
Measure 11-1a (3):	Develop flexible site development and clustering to conserve designated scenic routes, views, and viewsheds.
Measure 11-1a (4):	The County shall develop guidelines for non-single-family development within County highway corridors to preserve scenic resources. The guidelines will be developed into a scenic views plan for the preservation of visual quality along the County's highways. The plan will identify resources, views, and programs, while protecting the rights of property owners.
Measure 11-1b (1):	The County should participate in conservation management planning with Federal and State and other public and private agencies.
Measure 11-2a (1):	Implement standards for water conservation that are consistent with State guidelines, including requirements for the installation and use of low-flow plumbing fixtures in all new construction, and for the use of drip irrigation systems and drought-tolerant or low water using landscaping (including retention of existing native plant material) in all multi-family, commercial, resort, industrial and public developments.
Measure 11-2a (2):	Cooperate with the Mariposa Public Utility District and other wastewater generators in implementing programs for reuse of treated wastewater
Measure 11-2a (3):	Cooperate with the domestic water system operators and public water purveyors in implementing programs to eliminate water loss due to leakage in pipes, ditches or other conveyance facilities.
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.
Measure 11-2c (1):	Outside Town Planning Areas and Rural Centers, maintain low intensities of development in order to protect the capacity of watersheds.
Measure 11-2c (2):	Designate watershed areas of surface water systems where such systems and their proposed watershed areas serve or are capable of serving as a potable water source.
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.
Measure 11-2d (2):	Provide for clustering of development that protects and avoids impacts to significant water resources.
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:
Measure 11-4a (2):	Site development and grading review should minimize the removal of native trees and groves of trees.
Measure 11-4a (3):	The County shall develop and enforce standards that reduce or eradicate invasive species affecting the agricultural and natural ecosystems.
Measure 11-4a (4):	The County shall publish landscaping guidelines for the use of site-appropriate native plant species.
Measure 11-4a (5):	The County shall utilize collaborative planning efforts to coordinate local efforts to eradicate invasive plant species.
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.
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.
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; • 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.
Measure 11-5a (1):	Review and amend the County Grading Ordinance provisions for erosion control on all development projects.
Measure 11-5a (2):	Review and update the provisions of the County Grading Ordinance as needed.

Source: (Mariposa County 2006)

Local Ordinances

Mariposa County does not have local ordinances regarding the protection of natural resources.

APPENDIX B

REPRESENTATIVE PHOTOGRAPHS OF THE *SCENIC WONDERS PROJECT*



Photograph 1: Logged area in BSA, southeast of southern parcel.
37.645344, -119.712483, facing northeast
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 2: Logged area in BSA, southeast of southern parcel.
37.645344, -119.712483, facing northwest
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 3: View of several trees with cavities and loose bark along the edge of the logged area in southern parcel
37.646458, -119.714572, facing south
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 4: View downslope (north) of fire damaged forest in BSA
37.651044, -119.716119, facing north
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 5: View of mapped wetland area in BSA in the northern parcel
37.648889, -119.714103, facing east
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 6: Photo of the creek, facing downslope, from the headwaters in BSA near a small wetland area between northern and southern parcels
37.650394, -119.714256, facing north
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 7: Pooled area along the creek in northern parcel
37.650394, -119.713683, facing northwest
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 8: Downslope view of the creek in northern parcel
37.650044, -119.714358, facing north
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 9: Upslope view of creek in the northern parcel
37.650044, -119.714358, facing south
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 10: View of creek with burnt/fallen woody debris in northern parcel
37.650708, -119.714772, facing north
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 11: View of burnt habitat on east side of creek in northern parcel
37.650711, -119.714772, facing east
Photograph taken by Theresa Brickley on July 26, 2019



Photograph 12: View of habitat on west side of creek in northern parcel
37.650711, -119.714772, facing west
Photograph taken by Theresa Brickley on July 26, 2019

APPENDIX C

PLANT AND ANIMAL SPECIES OBSERVED WITHIN THE BIOLOGICAL STUDY AREA
SCENIC WONDERS PROJECT

Table C-1
Plant Species Observed within the Biological Study Area on July 26, 2019.
Scenic Wonders Project, Mariposa County, California

Scientific Name	Common Name	Status	Native or Introduced
Trees			
Abies concolor	white fir	None	Native
Abies magnifica var. *magnifica*	red fir	None	Native
Calocedrus decurrens	incense cedar	None	Native
Cornus sericea	dogwood	None	Native
Pinus jeffreyi	Jeffrey pine	None	Native
Pinus lambertiana	sugar pine	None	Native
Pinus ponderosa	ponderosa pine	None	Native
Quercus kelloggii	black oak	None	Native
Shrubs			
Arctostaphylos patula	green leaf manzanita	None	Native
Ceanothus cordulatus	mountain whitethorn	None	Native
Chrysolepis sempervirens	bush chinquapin	None	Native
Cornus nuttallii	pacific dogwood	None	Native
Frangula californica	California buckthorn	None	Native
Rhamnus rubra	sierra coffeeberry	None	Native
Rhododendron occidentale	western azalea	None	Native
Rubus parviflorus	thimbleberry	None	Native
Sambucus mexicana	blue elderberry	None	Native
Herbs			
Achillea millefolium	common yarrow	None	Native
Aquilegia formosa	western columbine	None	Native
Asyneuma prenanthoides	California harebell	None	Native
Calyptridium monospermum	sierra pussypaws	None	Native
Carex nervina	sierra sedge	None	Native
Castilleja applegatei	Indian paintbrush	None	Native
Cirsium vulgare	bull thistle	None	Non-native; Invasive; Cal-IPC: moderate
Collomia grandiflora	large flowered collomia	None	Native
Corylus cornuta ssp. *californica*	hazelnut	None	Native
Diplacus layneae	Layne's monkeyflower	None	Native
Drymocallis glandulosa	sticky cinquefoil	None	Native
Epilobium ciliatum	slender willow-herb	None	Native
Eriogonum nudum ssp. *nudum*	nude buckwheat	None	Native
Erysimum capitatum ssp. *capitatum*	Douglas's wallflower	None	Native
Erythranthe guttata	yellow monkey flower	None	Native

Scientific Name	Common Name	Status	Native or Introduced
Fragaria californica	California strawberry	None	Native
Galium aparine	catchweed bedstraw	None	Native
Gayophytum diffusum ssp. *parviflorum*	gayophytum	None	Native
Hieracium albiflorum	hawkweed	None	Native
Hosackia oblongifolia var. *oblongifolia*	narrow leaved lotus	None	Native
Iris sp.	Iris sp.	Unknown	Native
Juncus effusus ssp. *pacificus*	pacific rush	None	Native
Lepidium densiflorum	common peppergrass	None	Native
Lilium parvum	sierra tiger lily	None	Native
Lupinus albifrons	silver bush lupine	None	Native
Luzula comosa	wood rush	None	Native
Maianthemum racemosum	feathery false lily of the valley	None	Native
Osmorhiza berteroi	sweet cicely	None	Native
Penstemon laetus	mountain blue penstemon	None	Native
Phacelia heterophylla var. *virgata*	varied leaf phacelia	None	Native
Phleum alpinum	alpine timothy	None	Native
Platanthera dilatata var. *leucostachys*	sierra bog orchid	None	Native
Pteridium aquilinum var. *pubescens*	western bracken fern	None	Native
Pyrola picta	white-vein wintergreen	None	Native
Ribes nevadense	sierra current	None	Native
Ribes roezlii	sierra gooseberry	None	Native
Rumex acetosella	common sorrel	None	Non-native; Invasive; Cal-IPC: moderate
Senecio triangularis	arrowleaf groundsel	None	Native
Solidago elongata	west coast Canada goldenrod	None	Native
Verbascum thapsus	wooly mullein	None	Non-native; Invasive; Cal-IPC: limited
Zeltnera venusta	charming centaury	None	Native
Grasses			
Agrostis idahoensis	Idaho bentgrass	None	Native
Elymus elymoides	squirrel tail	None	Native
Festuca arundinacea	common fescue	None	Non-native; Invasive; Cal-IPC: moderate

*Cal-IPC = California Invasive Plant Council.

Rating system: **High** = several ecological impacts; **Moderate** = substantial but not severe ecological impacts; **Limited** = minor ecological impacts or not enough information to justify higher score; **Alert** = species ranked as High or Moderate with limited distribution, but potential to spread; **Watch** = could pose a high risk of becoming invasive in the future.

Table C-2
Animal Species Observed within the Biological Study Area on 7/26/19.
Scenic Wonders Project, Mariposa County, California

Scientific Name	Common Name	Status	Native or Introduced
Birds			
Buteo jamaicensis	Red-tailed hawk	None	Native
Colaptes auratus	Northern flicker	None	Native
Corvid corax	Common raven	None	Native
Cyanocitta stelleri	Stellar's Jay	None	Native
Junco hyemalis	Dark-eyed junco	None	Native
Poecile gambeli	Mountain chickadee	None	Native
Sitta canadensis	Red breasted nuthatch	None	Native
Spinus psaltria	Lesser goldfinch	None	Native
Turdus migratorius	American robin	None	Native
Mammals			
Neotamias sp.	Chipmunk	None	Native
Odocoileus hemionus	Mule deer	None	Native
Tamiasciurus douglasii	Douglas tree squirrel	None	Native

APPENDIX D

SPECIAL-STATUS SPECIES DATABASE SEARCH RESULTS FOR THE *SCENIC WONDERS PROJECT*

Table D-1
Special-Status Plant Species in the Regional Vicinity of the Project Site
Scenic Wonders Project, Mariposa County, California

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Plants				
Agrostis humilis mountain bent grass	--/-- 2B.3	Perennial herb; blooms Jul – Sept; occurs usually in wetlands, meadows and seeps, alpine boulder and rock fields; subalpine coniferous forest, alpine fell-fields, and wetland-riparian communities; sometimes in carbonate soil; elevation ~8,760 – 10,499 feet; documented in high-elevation Sierra Nevada north of Fresno and east of Visalia	None	Species is known to occur in high-elevation alpine and subalpine habitats that are not present on-site.
Allium yosemitense Yosemite onion	--/-- 1B.3/SR	Perennial bulbiferous herb; blooms Apr – Jul; occurs in pockets of wet soil or in wet cracks of metamorphic rock, also on slopes and walls; broad-leafed upland forest (yellow pine and evergreen forests), chaparral, foothill woodland, lower montane coniferous forest; rocky metamorphic or granitic soils; endemic to California; elevation ~1,755-7,217 feet	Yes	There is a stream that goes through the site and there is a possibility for the species to occur hear there. There are 13 CNDDB records of this species within 10 miles of the Project. The closest record is located 2.9 miles southwest of the Project site.
Balsamorhiza macrolepis big-scale balsamroot	--/-- 1B.2	Perennial herb; blooms Mar – Jun; occurs in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentinite soils; elevation ~147-5,101 feet; threatened by grazing and potentially residential, recreational, and energy development; occurrences are scattered along lower foothill and mountain regions along perimeter of Sacramento Valley.	None	Species associated with lower elevation habitats, and not associated with forest habitat.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Boechera tularensis Tulare rockcress	--/-- 1B.3	Perennial herb; blooms May – Aug; rocky slopes and sometimes roadsides; subalpine coniferous forest, upper montane coniferous forest; endemic to the Sierra Nevada; elevation from ~5,985 – 10,990 feet.	Yes	Suitable habitat is present.
Botrychium tunux moosewort	--/-- 2B.1	Perennial rhizomatous herb; blooms Aug – Sept; calcareous soils; well-drained, rocky meadows; alpine boulder and rock field; elevation ~10,005 - 11,811 feet; only known from Mt. Hoffman in Yosemite National Park.	None	Occurs in alpine habitat, which is not present on-site.
Camissonia sierrae ssp. *alticola* Mono Hot Springs evening-primrose	--/-- 1B.2	Annual herb; blooms May – Aug; California endemic; occurs in the lower montane coniferous forest, upper montane coniferous forest; in sand or gravel over granite; elevation from ~3,396 - 7,907 feet.	None	No suitable soils present.
Carex arcta northern clustered sedge	--/-- 2B.2	Perennial herb; blooms Jun – Sept; occurs in wetlands/riparian areas, bogs, and fens, North Coast coniferous forest (mesic), Douglas-Fir Forest; elevation from ~197 – 4,595 feet.	None	No suitable aquatic habitats present.
Carex limosa mud sedge	--/-- 2B.2	Perennial rhizomatous herb; blooms Jun – Aug; occurs in floating bogs and soggy meadows and edges of lakes; bogs and fens, meadows and seeps, marshes and swamps, upper and lower montane coniferous forest; elevation from ~4,495 - 9154 feet	None	There is no habitat on the Project site that could support this species. There are no marshes, bogs, or swamp-like areas.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Carex tompkinsii Tompkins' sedge	--/-- 4.3/SR	Perennial rhizomatous herb; blooms May – Jul; occurs in chaparral, cismontane woodland, and lower and upper montane conifer forests; sometimes on granitic soils; elevation ~1,377 – 6,000 ft; California endemic; known from limited populations in the Sierra Nevada in Fresno, Mariposa, and Tuolumne counties.	Yes	Suitable habitat is present.
Cinna bolanderi Bolander's woodreed	--/-- 1B.2	Perennial herb; blooms Jul – Sept; occurs in mesic soils, stream sides, wetlands, meadows and seeps in upper montane coniferous forest; elevation from ~5,479 – 8,005 feet	Yes	There is a small stream going through the Project site that could possibly support this species. There are five CNDDB records located within 10 miles of the Project site. The closest one is 5.24 miles north of the Project site.
Clarkia australis Small's southern clarkia	--/-- 1B.2	Annual herb; blooms May – Aug; occurs in open, rocky sites in conifer forest or oak woodland; cismontane woodland, lower montane coniferous forest; California endemic; elevation from ~2,986 – 6,808 feet	None	There are no open rocky sites that occur within the Project area. There are three CNDDB records located within 10 miles of the Project site. The closest one is 8.1 miles northwest of the Project site.
Clarkia biloba ssp. *australis* Mariposa clarkia	--/-- 1B.2	Annual herb; blooms Apr – Jul; occurs in serpentinite soils, and in chaparral and foothill woodlands sometimes with riparian areas as well as large talus rockslides; California endemic; elevation from ~984 to 4,790 feet	None	No serpentine soils present.
Clarkia lingulata Merced clarkia	--/SE 1B.1	Annual herb; blooms May – Jun; occurs metamorphic gravels, talus, and in red clay in chaparral and cismontane woodlands and closed-cone pine forest, usually on north-facing slopes; California endemic; elevation from ~1,312 to 1,493 feet	None	No suitable soils present.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Claytonia megarhiza fell-fields claytonia	--/-- 2B.3	Perennial herb; blooms Jul – Sept; occurs in crevices between rocks on alpine boulders and rock fields, and rocky or gravelly soils in subalpine coniferous forest, and alpine fell-fields; elevation from ~8,530 to 11,587 feet.	None	Project is located below alpine and subalpine habitats.
Cuscuta jepsonii Jepson's dodder	--/-- 1B.2	Annual vine (parasitic); blooms (Jun) Jul – Sept; Host species are *Ceanothus diversifolius and C. prostrates;* occurs in broad-leafed upland forest, lower and upper montane coniferous forest; California endemic; elevation from ~3,937 to 7,546 feet.	None	Host plants were not observed and would have been identifiable during site visit.
Diplacus pulchellus yellow-lip pansy monkeyflower	--/-- 1B.2	Annual herb; blooms Apr – Jul; occurs in vernally wet and often disturbed areas; on clay, volcanic, or granitic soils; lower montane coniferous forest, meadows and seeps; California endemic; elevation from ~1,969 to 6,562 feet.	None	There are no vernally wet areas on the Project site.
Erigeron aequifolius Hall's daisy	--/-- 1B.3	Perennial rhizomatous herb; blooms Jun – Aug; occurs in rocky, granitic soils; broad-leafed upland forest, lower montane coniferous forest, Pinyon-juniper woodland, upper montane coniferous forest; California endemic; elevation from ~4,921 to 8,005 feet.	Yes	Suitable soils and habitat present.
Eriophyllum congdonii Congdon's woolly sunflower	--/-- 1B.2/SR	Annual herb; blooms Apr – Jun; occurs in cracks in rocky outcroppings, and on talus; sometimes with *Quercus douglasii*; rocky and metamorphic soils; chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland; California endemic; elevation from ~1,640 to 6,234 feet.	None	No suitable soils or habitat present.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Eriophyllum nubigenum Yosemite woolly sunflower	--/-- 1B.3	Annual herb; blooms May – Aug; occurs on gravely soils on south-facing slopes on granitic slabs, and domes; Chaparral, upper and lower montane coniferous forest; California endemic; elevation from ~5,003 to 9,022 feet.	None	There are no granitic slabs or domes located within the Project limits. There are two CNDDB records located within 10 miles of the Project site. The closest occurrence is 7.8 miles southeast of the Project.
Erythranthe filicaulis slender-stemmed monkeyflower	--/-- 1B.2	Annual herb; blooms Apr – Aug; moist granitic sand and meadow edges and seeps; vernally mesic sites; cismontane woodland, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest; California endemic; elevation from ~2,953 to 5,742 feet.	None	Suitable mesic sites are not present on-site.
Erythranthe gracilipes slender-stalked monkeyflower	--/-- 1B.2	Annual herb; blooms Apr – Jun; occurs often in burned or disturbed areas; also on thin granitic soil in cracks in large granite rocks; chaparral, cismontane woodland, lower montane coniferous forest; California endemic; elevation from ~1,640 to 4,265 feet.	None	Portions of the site have burned but suitable decomposed granite and granite rocks not present. Only known from an old USFS report as occurring in the Wawona area.
Horkelia parryi Parry's horkelia	--/-- 1B.2	Perennial herb; blooms Apr – Sept; occurs in Ione formation and other soils (has been observed in fuel break); chaparral, cismontane woodland; California endemic; elevation from ~262 to 3,511 feet.	None	No Ione soils present and not found in conifer forests.
Hulsea brevifolia short-leaved hulsea	--/-- 1B.2	Perennial herb; blooms May – Aug; occurs in granitic or volcanic, gravely or sandy soils of forest openings and road cuts; upper and lower montane coniferous forest; red fir forest; California endemic; elevation from ~4,921 to 10,499 feet.	Yes	The site does include granitic soils that could provide habitat for the species. There could be small forest openings where the species could occur. There are 13 CNDDB records within 10 miles of the Project site. The nearest one is 2.2 miles northeast of the Project.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Lewisia congdonii Congdon's lewisia	--/-- 1B.3/SR	Perennial herb; blooms Apr – Jun; occurs on northern exposures and in crevices on slopes among rocks; on granitic, or metamorphic, rocky, and mesic substrates; chaparral, valley and foothill grassland, upper and lower montane coniferous forest, cismontane woodland; California endemic; elevation from ~1,640 to 9,186 feet.	None	There are no rock slopes or crevices that would provide habitat for this species. There are seven CNDDB records within 10 miles of the Project site. The nearest one is 3.1 miles northeast of the Project.
Lewisia disepala Yosemite lewisia	--/-- 1B.2	Perennial herb; blooms May – Jun; occurs on granitic, sandy soils, and fine gravel on rock outcrops, ridges, or domes; upper and lower montane coniferous forest, pinyon and juniper woodland; California endemic; elevation from ~3,396 to 11,483 feet.	None	There are no rock outcrops, ridges, or domes located within the Project limits. There are two CNDDB records located within 10 miles of the Project site. The closest occurrence is 4.4 miles north of the Project.
Lupinus gracilentus slender lupine	--/-- 1B.3	Perennial herb; blooms Jul – Aug; occurs in open, semi-moist, shaded areas; subalpine coniferous forest; California endemic; elevation from ~8,202 to 11,483 feet.	None	Project is not located in subalpine habitat.
Orthotrichum holzingeri Holzinger's orthotrichum moss	--/-- 1B.3	Moss; occurs usually on rock in and among streams, rarely on tree limbs; cismontane woodland, lower montane coniferous forest, upper montane coniferous forest, pinyon-juniper woodland; elevation from ~2,346 to 5,906 feet.	Yes	Moss observed on rocks along a stream on-site may be this species.
Plagiobothrys torreyi var. *torreyi* Yosemite popcornflower	--/-- 1B.2	Annual herb; blooms Apr – Jun; occurs in lower montane coniferous forest, meadows, seeps, and wetlands; California endemic; elevation from ~3,937 to 4,495 feet.	None	No suitable moist habitats present.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Platanthera yosemitensis Yosemite bog orchid	--/-- 1B.2	Perennial herb; blooms Jul – Aug; occurs in mesic, montane, and granitic soils; meadows and seeps; usually in wetlands, occasionally not; California endemic; elevation from ~6,890 to 7,497 feet.	None	No suitable mesic sites present.
Potamogeton epihydrus Nuttall's ribbon-leaved pondweed	--/-- 2B.2	Perennial rhizomatous herb (aquatic); blooms (Jun) Jul – Sept; occurs in marshes and swamps, shallow water, ponds, lakes, streams, and irrigation ditches; elevation from ~1,211 to 7,126 feet.	None	Not suitable aquatic habitat on-site. Stream within the BSA does not provide sufficient water depths.
Potamogeton robbinsii Robbins' pondweed	--/-- 2B.3	Perennial rhizomatous herb (aquatic); blooms Jul – Aug; occurs freshwater wetland, marshes and seeps, in deep water, lakes; elevation from ~5,020 to 10,827 feet.	None	Not suitable aquatic habitat on-site. Stream within the BSA does not provide sufficient water depths.
Rhynchospora alba white beaked-rush	--/-- 2B.2	Perennial rhizomatous herb; blooms Jun – Aug; bogs and fens, meadows and seeps, freshwater marshes, sphagnum bogs, and swamps; elevation from ~197 to 6,693 feet.	Yes	The larger wetland within the BSA between the two parcels could provide habitat for this species.
Stuckenia filiformis ssp. *alpina* slender-leaved pondweed	--/-- 2B.2	Perennial rhizomatous herb (aquatic); blooms May – Jul; occurs in shallow, clear water of lakes and drainage channels; freshwater wetland, wetland-riparian; elevation from ~984 to 7,054 feet.	None	There are no suitable freshwater wetlands, lakes, or channels that could provide habitat for this species.
Trifolium bolanderi Bolander's clover	--/-- 1B.2	Perennial herb; blooms Jun – Aug; occurs in moist mountain meadows (mesic soils); wetlands, riparian areas, lower montane coniferous forest, upper montane coniferous forest; red fir forest, yellow pine forest; California endemic; elevation from ~6,690 to 8,530 feet.	None	No suitable mesic sites present.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Utricularia intermedia flat-leaved bladderwort	--/-- 2B.2	Perennial stoloniferous herb (carnivorous) (aquatic); blooms (Jun) Jul – Aug; occurs in mesic meadows and seeps, lake margins, bogs and fens, marshes and swamps, vernal pools; elevation from ~3,937 to 8,858 feet.	None	There are no suitable meadows, lakes, bogs, or swamps that could provide suitable habitat for this species.
Viburnum ellipticum oval-leaved viburnum	--/-- 2B.3	Perennial deciduous shrub; blooms May – Jun; occurs in chaparral, cismontane woodland, lower montane coniferous forest, yellow pine forest; elevation from ~705 to 4,593 feet.	None	Not observed and would have been identifiable if present.
Viola pinetorum ssp. *grisea* grey-leaved violet	--/-- 1B.2	Perennial herb; blooms Apr – Jul; occurs on dry mountain peaks and slopes; subalpine coniferous forest, upper montane coniferous forest, lodgepole forest, red fir forest, meadows and seeps; California endemic; elevation from ~4,921 to 11,155 feet.	None	The Project site does not have dry mountain peaks with meadows and seeps that would provide habitat for this species.
Fish				
Hypomesus transpacificus Delta Smelt	FT/SE -	Small fish endemic to the San Francisco Estuary and the larger Sacramento-San Joaquin Delta; moves between freshwater and low salinity water throughout year; most spawning happens in tidally influenced backwater sloughs and channel edgewaters; historical distribution did not extend beyond Mossdale on the San Joaquin River and Sacramento on the Sacramento River.	None	Outside species known range and does not occur in mountains.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Oncorhynchus clarkii henshawi Lahontan cutthroat trout	FT/- -	This species occurs in streams characterized by clear, cold water with silt-free substrate and a 1:1 pool-riffle ratio. Streams should have a variety of habitats including areas with slow deep water, abundant instream cover (i.e., large woody debris, boulders, undercut banks), and relatively stable streamflow and temperature regimes. Streambanks should be well vegetated to provide cover, shade, and bank stabilization. Lacustrine populations have adapted to a wide variety of lake habitats from oligotrophic alpine lakes to large, productive desert terminal lakes.	None	No suitable aquatic habitat present.
Oncorhynchus clarkii seleniris Paiute cutthroat trout	FT/- -	This species is endemic to California. Current known populations are limited to montane streams in eastern California and western Nevada. Require cool, well oxygenated waters and can be found in lakes and stream pool habitat in low gradient meadows with undercut or overhanging banks and abundant riparian vegetation.	None	No suitable aquatic habitat present.
Amphibians				
Anaxyrus canorus Yosemite toad	FT/- SSC	This species occurs in montane wet meadows and seasonal ponds associated with lodgepole pine and subalpine conifer forests. Found in wet meadows and forests at elevations between 4,800 to 12,000 feet.	Yes	The wetland habitats within the BSA could support this species.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Hydromantes brunus limestone salamander	-/SE SFP	This species is found in mossy limestone crevices and talus in the grey pine, oak, buckeye, and chaparral belt of the lower Merced River Canyon, typically on steep slopes. Seeks out cover under woody debris or limestone rocks in habitats where they exist.	None	Suitable habitat absent. Limestone derived substrates do not exist on-site.
Hydromantes platycephalus Mount Lyell salamander	-/- WL	This species occurs in the subalpine coniferous forest, upper montane coniferous forest, meadows and seeps, and wetlands. Found in areas with spraying or dripping water (seeps, waterfalls, drips). Known to hunt on surface of water only when spraying or dripping water present. Occurs mostly in coniferous forests associated with large rock areas. Looks for cover inside and underneath rocks and crevices.	None	Suitable aquatic habitat not present.
Rana boylii Foothill yellow-legged frog	-/SCT SSC	Found in streams and rivers with rocky substrates and open, sunny banks, and sometimes isolated pools, vegetation backwaters, and deep, shaded spring-fed pools; forests, chaparral, woodlands; lays eggs on downstream side of rocks in shallow, slow-moving water; current distribution includes north coast, northern Sierra Nevada, foothills of southern Sierra Nevada mountains (almost extinct); elevation from sea level to 6,000 feet.	None	No suitable aquatic habitat on-site.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Rana draytonii California red-legged frog	FT/- SSC	Occurs primarily in and near ponds in forests, woodlands, grasslands, coastal scrub, and stream sides with plant cover; mostly in lower elevations; breeding habitat may be permanent or ephemeral; estivates in animal burrows or other moist refuges when ephemeral habitat is dry; endemic to California and northern Baja California; found throughout coastal California from Mendocino County south; inland distribution includes northern Sacramento Valley and foothills of Sierra Nevada south to Tulare County (possibly Kern County); elevation from sea level to 5,000 feet.	Yes	Streams on-site could provide limited suitable aquatic habitat.
Rana sierrae Sierra Nevada yellow-legged frog	FE/ST WL	This species occurs in streams, lakes and ponds in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Highly aquatic species that is always found within a couple meters of the edge of water. Breeding can begin late winter to April or even as late as June or July in lower elevations. Elevational range is from 4,500 to 12,000 feet but can occur as low as 3,500 feet. Breeding occurs in aquatic habitats, eggs are attached to debris or left unattached based on velocity of water. Egg-laying site must be connected to permanent pond or lake that does not freeze completely to the bottom during winter.	Yes	Streams on-site could provide limited suitable aquatic habitat.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Reptiles				
Emys marmorata western pond turtle	-/- SSC	Highly aquatic and diurnally active; found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with vegetation and rocky/muddy bottoms; wide variety of habitats; need basking areas near water (logs, rocks, vegetation mats, banks); may enter brackish water and even seawater; digs nest on land near water; range from north of San Francisco Bay area south, including Central Valley.	None	Aquatic habitats are too small, depth of water features inadequate, limited basking opportunities. There are 2 CNDDB species records within 10 miles of the Project Site. The closest record is 6.62 miles southwest of the Project Site
Birds				
Accipiter gentilis Northern goshawk	-/- SSC	This species occurs in north coast, subalpine, and upper montane conifer forests at middle and higher elevations with mature, dense canopies; may utilize lower elevation riparian and pinyon-juniper habitats during the winter. Feeds in wooded areas mostly on birds; nests in large, live trees, sometimes on old nests, often on north-facing slopes near water.	Yes	Unburned forest habitat on in the northern portion of the BSA provide suitable habitat.
Empidonax traillii willow flycatcher	-/SE -	This species most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows. It is a rare to locally common, summer resident that occurs in wet meadow and montane riparian habitats in the Sierra Nevada and Cascade Range.	None	No suitable riparian habitat present.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Strix nebulosa great gray owl	-/SE -	This species occurs in a wide range of habitats and elevations but prefer forests and meadow associations across their range. Requires large diameter snags in forests with high canopy closure. Generally, occurs from 4500 to 7500 feet in the Sierra Nevada from the vicinity of Quincy, Plumos Co. south to the Yosemite region. Most recent records are from the Merced and Tuolumne River drainages of Yosemite National park. It is occasionally reported in northwestern California in the winter and in the Warner Mountains in the summer. It breeds in old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows.	No	No old-growth or suitable snags present on-site and canopy density is lower than this species prefers due to tree thinning for wildfire management and to address recent tree die-off. No suitable meadow habitats close to the site.
Strix occidentalis California spotted owl	-/- SSC	Occurs in mixed conifer forest with a dense canopy and an understory of deciduous hardwoods, often black oak from sea level to ~7,600 ft; prefers deep-shaded canyons and north-facing slopes; usually within ~985 ft of water; usually nests in tree or snag cavity or in broken top of large tree.	No	No old-growth or suitable snags present on-site and canopy density is lower than this species prefers due to tree thinning for wildfire management and to address recent tree die-off. No suitable meadow habitats close to the site.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Mammals				
Antrozous pallidus pallid bat	-/- SSC	Occurs throughout California in wide variety of habitats: grasslands, shrublands, woodlands, forests up through mixed conifer; most common in open, dry habitats with rocky areas for roosting; yearlong resident; feeds mainly on insects and arachnids on the ground or by gleaning; day roosts in caves, crevices, mines, and occasionally hollow trees and buildings, including bridges; night roosts in more open sites; maternity colonies form early April with young flying by July or August; needs water; very sensitive to disturbance of roosting sites.	Yes	Within species range and habitat type. Appropriate natural and manmade refugia available on-site. There are 6 CNDDB species records within 10 miles of the Project Site. The closest record is 5.1 miles north of the Project Site
Aplodontia rufa californica Sierra Nevada mountain beaver	-/- SSC	Found throughout Cascade, Klamath, and Sierra Nevada ranges. This species is limited to moist microenvironments, with most subspecies occurring only in regions with minimal snowfall and cool winters. Typical habitat in Sierra Nevada range is montane riparian with intermediate canopy coverage and dense understory near water sources. Friable soils required for excavating burrows.	None	No suitable dense understory or moist soils present.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Corynorhinus townsendii Townsend's big-eared bat	-/- SSC	This species occurs in coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Distribution is correlated with the availability of caves and cave-like roosting habitat, occurring in areas dominated by exposed, cavity forming rock and/or historic mining districts. It prefers open roosting areas in large areas and do not tuck themselves into cracks and crevices like many bat species do. Extremely sensitive to human disturbance.	None	No suitable cave-like habitats present, and human presence would discourage their occurrence.
Euderma maculatum spotted bat	-/- SSC	This species occurs in a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. It feeds over water and along washes. It also feeds almost entirely on moths. This species needs rock crevices in cliffs or caves for roosting.	None	Suitable roosting habitat absent and foraging habitat on-site is very marginal.
Eumops perotis californicus western mastiff bat	-/- SSC	Occurs in open, semi-arid to arid habitats throughout southeastern San Joaquin Valley and Coast Ranges from Monterey County southward; also in urban areas; feeds on insects captured in flight; roosts in cliff faces, high buildings, trees, and tunnels; nursery roosts most often in tight rock crevices or crevices in buildings; maternity season begins in March with young flying on their own by September.	Yes	Trees may offer suitable roost habitat.

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Gulo gulo California wolverine	FPT/ST SFP	Found in the north coast mountains and the Sierra Nevada in a wide variety of habitats including alpine and subalpine habitats; montane dwarf scrub and coniferous forests, riparian forests, meadows & seeps, and wetlands; needs water source; uses caves, logs, burrows, for cover and pup rearing; preys on small mammals and scavenges; most observations at elevations from 1,600 to 4,800 ft but occurs as high as 7,300 ft in the northern Sierra Nevada and 10,800 ft in the southern Sierra Nevada; prefer areas with low human disturbance.	Yes	Suitable habitat present, though presence may be deterred by human disturbance.
Lasiurus blossevillii western red bat	-/- SSC	Locally common in areas from Shasta County to Mexican border, west of the Sierra Nevada/Cascade crests; migrates between summer and winter ranges; roosts in forests and woodlands from sea level up through mixed conifer forests; not in deserts; feeds on insects over grasslands, shrublands, open woodlands and forests, and croplands; roosts primarily in trees on edge habitats near streams, fields, or urban areas, less often in shrubs; requires water; maternity season from late May through early July; usually does not roost with other bats; rabies is common in this species.	Yes	There is 1 CNDDB species record within 10 miles of the Project Site. The closest record is 8.07 miles northeast of the Project Site

Scientific Name Common Name	Status Fed/State ESA CRPR/CDFW	Habitat Requirements	Potential to Occur	Rationale
Pekania pennanti fisher - West Coast DPS	-/FT SSC	Found in large areas of mature, dense north coast conifer forests, old growth, and riparian forest with intermediate to large tree stages with high percent canopy closure; uses cavities, snags, logs, and rocky areas for cover and denning; carnivorous, focusing on rabbits and hares but will eat other prey.	Yes	Suitable habitat is present on-site and project is within known range.
Taxidea taxus American badger	-/- SSC	Occurs mostly in open, drier stages of shrub, forest, and herbaceous habitats, with friable soils; feeds mostly on fossorial rodents; digs burrows for cover and reproduction; can dig new den each night; litters born mostly in March and April; somewhat tolerant of human activities but avoids cultivated agricultural habitats.	Yes	Suitable habitat present.
Vulpes vulpes necator Sierra Nevada red fox	FC/ST -	Found in a wide variety of habitats Cascades down through the Sierra Nevada; prefers habitat mosaics with open meadows interspersed within forests, using dense vegetation and rocky areas for cover and dens; range appears to be restricted due to human disturbance; may interbreed with other red fox subspecies.	Yes	Suitable habitat on-site.

CRPR (California Rare Plant Rank):
- 1A Presumed Extinct in California
- 1B Rare, Threatened, or Endangered in California and elsewhere
- 2A Plants presumed extirpated in California, but more common elsewhere
- 2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension:
- .1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 Fairly endangered in California (20-80% occurrences threatened)
- .3 Not very endangered in California (<20% of occurrences threatened)

FE	Federally Endangered
FT	Federally Threatened
FC	Federal Candidate Species
FPT	Federally Proposed Threatened
SE	State Endangered
ST	State Threatened
SCT	State Candidate Threatened
SSC	State Species of Special Concern
SFP	State Fully Protected
SR	State Rare
WL	Watch List