

## **Appendix C. Biological Resources Background Information**

**Table 1.** Special-status Species and USFS Management Indicator Species and the Potential to Occur in the Action Area.

<i>Scientific Name</i> <i>Common Name</i>	Listing status (Federal/State/CDFW Rank)	Habitat	Potential to Occur in the Project Area
<b>Invertebrates</b>			
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT/-/-	Occurs only in the Central Valley of California, in association with blue elderberry ( <i>Sambucus mexicana</i> ). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	<b>Not Expected.</b> Suitable habitat is not present in the Project area. No elderberry shrubs were observed within the Project area. Two elderberry shrubs with greater than 1-inch diameter stems were observed in 2012 in areas >250 feet away from the Project area.
<i>Bombus crotchii</i> Crotch bumble bee	-/SCE/-	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	<b>Not expected.</b> Only two occurrences in the 9 quadrants touching the Project area. One was from 1927. However, another observation occurred in 2019 in a similar habitat along the Tuolumne River. Suitable food plant genera were present at the Project site. However, project activities are not anticipated to impact suitable habitat for this species.
<b>Fish</b>			
<i>Hypomesus transpacificus</i> Delta smelt	FT/-/-	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	<b>Absent.</b> The Project is outside of the range of this species.

Species Lists and Evaluation of Potential to Occur in the Action Area

<b>Scientific Name Common Name</b>	<b>Listing status (Federal/State/CDFW Rank)</b>	<b>Habitat</b>	<b>Potential to Occur in the Project Area</b>
<i>Oncorhynchus mykiss</i> Central Valley steelhead	FT/-/-	Sacramento River, San Joaquin River and their tributaries.	<b>Absent.</b> The Project is outside of the current range of this species due to physical barriers (i.e. dams).
<b>Amphibians and Reptiles</b>			
<i>Emys marmorata</i> Western pond turtle	S/-/SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.  Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	<b>Possible.</b> Suitable foraging habitat is present, and breeding habitat may be present near the Project area. Was spotted in 2016 less than 10 miles from the study area.
<i>Hydromantes brunus</i> Limestone salamander	S/ST/FP	Limestone outcrops in foothill pine-chaparral belt along the Merced River and its tributaries, from 800-2600 feet in elevation.  California buckeye is an indicator of optimal habitat. Seeks cover in limestone caverns, talus, rock fissures, surface objects.	<b>Absent.</b> The Project is outside of the range of this species.
<i>Pseudacris regilla</i> Pacific tree (chorus) frog	MIS/-/-	Associated with permanent or temporary water of all kinds in all California habitats, except dry desert types. Although not restricted to wetland habitats, this species always selects moist refuges	<b>Possible.</b> Suitable habitat is present.

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<b>Scientific Name Common Name</b>	<b>Listing status (Federal/State/CDFW Rank)</b>	<b>Habitat</b>	<b>Potential to Occur in the Project Area</b>
<i>Rana draytonii</i> California red-legged frog	FT/-/-	Usually occurs in the Sierra Nevada Range below 3936 feet in elevation. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	<b>Not expected.</b> The Project is outside of the current range of this species, and was last seen in Tuolumne County in 1975.
<i>Rana sierrae</i> Mountain yellow-legged frog	FT/-/-	Always encountered within a few feet of water. Tadpoles may require 2 - 4 years to complete their aquatic development.	<b>Absent.</b> The Project is outside of the current range. It occurs at higher elevations in eastern Tuolumne County (HT Harvey 2012).
<i>Rana boylei</i> Foothill yellow-legged frog	S,P/SE/SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	<b>Present.</b> This species was observed within the Project site in 2022.
<b>Mammals</b>			
<i>Antrozous pallidus</i> Pallid bat	-/-/SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	<b>Not Expected.</b> Suitable foraging habitat is present, and breeding habitat may be present near the Project area. Was acoustically detected within a five-mile radius of the project site in 1999. However, the human recreational activities of the camp may preclude roosting in the camp's vicinity.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	S/-/SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	<b>Not Expected.</b> Suitable foraging habitat is present, and breeding habitat may be present near the Project area. However, the human recreational activities of the camp may preclude roosting in the camp's vicinity.



Species Lists and Evaluation of Potential to Occur in the Action Area

<b>Scientific Name Common Name</b>	<b>Listing status (Federal/State/CDFW Rank)</b>	<b>Habitat</b>	<b>Potential to Occur in the Project Area</b>
<i>Euderma maculatum</i> Spotted bat	-/-/SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	<b>Not expected.</b> Suitable foraging habitat is present, but no suitable breeding habitat is present
<i>Eumops perotis californicus</i> Western mastiff bat	-/-/SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	<b>Not expected.</b> Suitable foraging habitat is present, but no suitable breeding habitat is present.
<i>Glaucomys sabrinus</i> northern flying squirrel	MIS/-/-	Locally common, yearlong resident of coniferous habitats from ponderosa pine through lodgepole pine forests (1500-2450 m; 5000-8000 ft) and riparian-deciduous forests of the North Coast, Klamath, Cascade, Sierra Nevada Ranges, and the Warner Mts.	<b>Not expected.</b> Marginally suitable habitat is present.
<i>Lasiurus blossevillii</i> Western red bat	-/-/SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	<b>Not expected.</b> Suitable foraging habitat is present, but no suitable breeding habitat is present.
<i>Martes caurina</i> Pacific marten	MIS, S/-/-	Several types of mixed evergreen forest, with large trees and snags.	<b>None.</b> The project area is below the known elevational limit for this species (Kucera et al. 1995), and it is not known to occur in the Project vicinity (CNDDDB 2023).

<b>Scientific Name Common Name</b>	<b>Listing status (Federal/State/CDFW Rank)</b>	<b>Habitat</b>	<b>Potential to Occur in the Project Area</b>
<i>Myotis thysanodes</i> fringed myotis	S/-/-	Found in all brush, woodland and forest habitats from sea level to about 9,000 ft. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	<b>Not Expected.</b> Suitable foraging habitat is present, and breeding habitat may be present near the Project area. However, the human recreational activities of the camp may preclude roosting in the camp's vicinity.
<i>Odocoileus hemionus</i> mule deer	MIS/-/-	Widespread distribution throughout most of California. Prefer a mosaic of various-aged vegetation that provides woody cover, meadow and shrubby openings, and free water.	<b>Possible.</b> Suitable habitat is present.
<i>Pekania pennanti</i> fisher - West Coast DPS	FC/-/-	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	<b>Absent.</b> Suitable denning habitat is not present in the Project area. This species is no longer known to occur in this portion of their range in Tuolumne County (CDFG 2010).
<i>Vulpes vulpes necator</i> Sierra Nevada red fox	FC/ST/-	Historically found from the Cascades down to the Sierra Nevada. Found in a variety of habitats from wet meadows to forested areas. Use dense vegetation and rocky areas for cover and den sites. Prefer forests interspersed with meadows or alpine fell-fields.	<b>Absent.</b> This species has been observed at higher elevations in Yosemite National Park. While historically present near the Project area, it is not currently known to occur at the Project elevations.
<b>Birds</b>			

Species Lists and Evaluation of Potential to Occur in the Action Area

<i>Scientific Name</i> <i>Common Name</i>	Listing status (Federal/State/CDFW Rank)	Habitat	Potential to Occur in the Project Area
<i>Cypseloides niger</i> Black Swift	BCC/-/-	Black Swifts nest on cliff ledges behind or near waterfalls and sea caves. They forage over forests and open areas. They occur across a wide range of elevations, from sea level to 7,500 feet	<b>Not expected.</b> The black swift may be present at the project site as a forager or migrant, but is not known to be present at the study area during its breeding season, as there is no suitable habitat available for nesting.
<i>Carpodacus cassinii</i> Cassin's Finch	BCC/-/-	Conifers in high mountains; lower levels in winter. Breeds mostly in mountain forests of conifers, especially spruce and fir, also in pine and Douglas-fir in some areas and sometimes in pinyon-juniper woods.	<b>Not expected.</b> May be present at the project site as a forager or migrant, but is not known to utilize the area for breeding, as they breed at higher elevations.
<i>Contopus cooperi</i> Olive-sided flycatcher	BCC/-/-	Olive-sided Flycatchers breed mostly in the boreal forest and in western coniferous forests, from sea level to over 10,000 feet elevation. In all nesting areas, they use openings or edges in the forest and are rarely found in deep, closed forest. They prefer meadows, rivers and streams, partially logged areas, recent burns, beaver ponds, bogs, and muskegs. Prefer dead or dying trees, which provide exposed perches for singing, foraging, and watching for predators and rivals. Nesting sites near water also provide a great abundance of aerial insects, their chief food.	<b>Possible.</b> Have been spotted in recent years near the study site (ebird, 2021) and suitable nesting habitat is available at the study site.
<i>Epidonax traillii</i> Willow Flycatcher	BCC/-/-	Bushes, willow thickets, brushy fields, upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes (especially in southern part of range).	<b>Not expected.</b> Marginally suitable habitat is present at the site.

Species Lists and Evaluation of Potential to Occur in the Action Area

<b>Scientific Name Common Name</b>	<b>Listing status (Federal/State/CDFW Rank)</b>	<b>Habitat</b>	<b>Potential to Occur in the Project Area</b>
<i>Chaetura vauxi</i> Vaux's swift	-/SSC/-	Nests in coniferous and mixed forest, mainly old-growth forest, including redwood, Douglas-fir, grand fir.	<b>Possible.</b> Have been spotted in recent years near the study site (ebird, 2021) and suitable nesting habitat is available at the study site.
<i>Oreortyx pictus</i> Mountain quail	MIS/-/-	Found seasonally in open, brushy stands of conifer and deciduous forest and woodland, and chaparral.	<b>Possible.</b> Suitable habitat is present near the project area.
<i>Passerella iliaca</i> fox sparrow	MIS/-/-	This species is found in chaparral.	<b>Possible.</b> Suitable habitat is present near the project area.
<i>Setophaga petechia</i> Yellow warbler	-/SSC/-	In the west, restricted to streamside thickets.	<b>Possible.</b> Have been spotted in recent years near the study site (ebird, 2023) and suitable nesting habitat is available at the study site.
<i>Falco mexicanus</i> Prairie falcon	-/-/WL	Inhabits dry, open terrain, either level or hilly.  Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	<b>Not expected.</b> Suitable nesting habitat is not present within the Project area. However, this species may occur on the site as an occasional migrant or forager.
<i>Falco peregrinus anatum</i> American peregrine falcon	S/-/FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.  Nest consists of a scrape or a depression or ledge in an open site.	<b>Not expected.</b> Suitable nesting habitat is not present within the Project area. However, this species may occur on the site as an occasional migrant or forager.

Species Lists and Evaluation of Potential to Occur in the Action Area

<b>Scientific Name Common Name</b>	<b>Listing status (Federal/State/CDFW Rank)</b>	<b>Habitat</b>	<b>Potential to Occur in the Project Area</b>
<i>Haliaeetus leucocephalus</i> Bald eagle	S/SE/FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	<b>Not expected.</b> While possible that bald eagles could utilize the area for foraging or in transit, there are not suitable trees at the study site for nesting. Additionally, the disturbance of human activity at SJFC precludes nesting near the recreational areas.
<i>Picoides villosus</i> hairy woodpecker	MIS/-/-	Medium and large snags in green forest	<b>Possible.</b> This species is known to occur nearby the Project area (ebird 2023).
<i>Strix nebulosa</i> Great gray owl	S/SE/-	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	<b>Not expected –</b> While possible that great gray owls could utilize the area for foraging or in transit, there are not suitable trees or hunting meadows at the study site for nesting. Additionally, the disturbance of human activity at SJFC precludes nesting near the recreational areas.
<i>Strix occidentalis occidentalis</i> California spotted owl	S/SSC/-	This owl breeds and roosts in forests and woodlands with large old trees and snags, high basal areas of trees and snags, dense canopies, multiple canopy layers, and downed woody debris. These characteristics typify old-growth or late-seral-stage habitat	<b>Not expected –</b> While possible that this species could utilize the area for foraging or in transit, there is not suitable nesting habitat. Additionally, the disturbance of human activity at SJFC precludes nesting near the recreational areas.
<b>Plants</b>			

Species Lists and Evaluation of Potential to Occur in the Action Area

<b>Scientific Name Common Name</b>	<b>Listing status (Federal/State/CDFW Rank)</b>	<b>Habitat</b>	<b>Potential to Occur in the Project Area</b>
<i>Alium tribracteatum</i> Three-bracted onion	-/-/1B.2	Chaparral, lower montane coniferous forest, upper montane coniferous forest. Volcanic slopes and ridges. 880-2835 meters (m).	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Alium tuolumnense</i> Rawhide Hill Onion	-/-/1B.2	Cismontane woodland. Restricted to serpentine soil, usually in grey pine chaparral. Steep, rocky, south-facing slopes or small drainages. 210-505 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Allium yosemitense</i> Yosemite onion	S/SR/1B.3	Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Found in pockets of wet soil or in wet cracks of metamorphic rock; also on slopes and walls; between 1749-6650 ft.	<b>Not expected.</b> While there is suitable habitat at the Project site, this species was last seen in 1989 at a location isolated from the study site by multiple ridges.
<i>Balsamorhiza macrolepis</i> Big-scale balsamroot	S/-/1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 35-1465 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Clarkia australis</i> Small's southern clarkia	S/-/1B.2	Cismontane woodland, lower montane coniferous forest. Open, rocky sites in conifer forest or oak woodland. 910-2075 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Clarkia biloba ssp. australis</i> Mariposa clarkia	S/-/1B.2	Chaparral, cismontane woodland. On serpentine. Several sites occur in the foothill woodland/riparian ecotone. 120-1480m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Clarkia lingulata</i> Merced clarkia	S/SE/-1B.1	Chaparral, cismontane woodland. Metamorphic gravels and talus and in red clay on north-facing slopes and in canyon bottoms. Found between elevations of 1395-1500 ft.	<b>Absent.</b> The Project site is at too high of an elevation for this species to occur.

Species Lists and Evaluation of Potential to Occur in the Action Area

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<i>Clarkia rostrata</i> Beaked clarkia	-/-/1B.3	Cismontane woodland, valley and foothill grassland. North-facing slopes; sometimes on sandstone. 60-915 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Cryptantha mariposae</i> Mariposa cryptantha	-/-/1B.3	Chaparral. On serpentine outcrops. 90-825 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Cryptantha spithamaea</i> Red Hills cryptantha	-/-/1B.3	Chaparral, cismontane woodland. Serpentinite, sometimes streambeds, sometimes openings. 270-550 m.	<b>Absent.</b> The Project site is at too high of an elevation for this species to occur.
<i>Diplacus pulchellus</i> Yellow-lip pansy monkeyflower	S/-/1B.2	Lower montane coniferous forest, meadows and seeps. Vernal wet sites. Soils can be clay, volcanic, or granitic. 670-1950 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Eriophyllum congdonii</i> Congdon's woolly sunflower	S/SR/1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. In cracks in rock outcroppings, and on talus; sometimes with <i>Quercus douglasii</i> , <i>Aesculus californica</i> . Found between 1590-6000 ft in elevation.	<b>Not Expected.</b> While there is suitable habitat at the Project site and it is located within the species elevation range, it was last seen in 1999 in an area separated by several ridges.
<i>Eriophyllum nubigenum</i> Yosemite woolly sunflower	S/-/1B.3	Chaparral, lower montane coniferous forest, upper montane coniferous forest. South-facing slopes on granitic slabs and domes; gravelly soils. 1520-2450 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	-/-/1B.2	Vernal pools, cismontane woodland, lower montane coniferous forest. Volcanic soils; vernal pools and mesic sites within other natural communities. 65-915 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.

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<i>Erythranthe filicaulis</i> Slender-stemmed monkeyflower	S/-/1B.2	Cismontane woodland, lower montane coniferous forest, meadows and seeps, upper montane coniferous forest. Within the transition zone of the Sierra Nevada; moist granitic sand and meadow edges; vernal mesic sites. 620-1685 m.	<b>Absent.</b> Suitable habitat is not present in the Project area.
<i>Erythronium taylorii</i> Pilot Ridge fawn lily	S/-/1B.2	Lower montane coniferous forest. Steep, metamorphic rock outcrops in Douglas-fir/mixed conifer/black oak forest. 1340-1400 m.	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Erythronium tuolumnense</i> Tuolumne fawn lily	S/-/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Often on clay soils; on cliffs and near drainages. 485-1405 m.	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Fritillaria agrestis</i> stinkbells	-/-/4.2	Cismontane woodland, chaparral, valley and foothill grassland, pinyon and juniper woodland. Sometimes on serpentine; mostly found in nonnative grassland or in grassy openings in clay soil. 10-1555 m.	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Horkelia parryi</i> Parry's horkelia	S/-/1B.2	Chaparral, cismontane woodland. Openings in chaparral or woodland; especially known from the lone formation in Amador County. 85-1115 m	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Lomatium congdonii</i> Congdon's lomatium	-/-/1B.2	Cismontane woodland, chaparral. Serpentine soils with serpentine chaparral plants and grey pines. 335-625 m.	<b>Absent.</b> Suitable habitat is not present in the Project area



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<i>Lupinus spectabilis</i> Shaggyhair lupine	-/-/1B.2	Chaparral, cismontane woodland. Open rocky slopes of serpentine. Mostly on serpentine chaparral surrounded by grey pine woodland. 300-825 m.	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Mielichhoferia elongata</i> Elongate copper moss	S/-/4.3	Cismontane woodland. Moss growing on very acidic, metamorphic rock or substrate; usually in higher portions in fens. Often on substrates naturally enriched with heavy metals (e.g. copper). 500-1300 m.	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Mielichhoferia shevockii</i> Shevock's copper moss	-/-/1B.2	Cismontane woodland. Moss on metamorphic rocks containing heavy metals; mesic sites. On rocks along roads, in same habitat as <i>Mielichhoferia elongata</i> . 750-1400 m.	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Navarretia miwukensis</i> Mi-Wuk navarretia	-/-/1B.2	Lower montane coniferous forest. Open, sparsely vegetated pyroclastic flows, often gently sloping terrain. 800-1500 m.	<b>Absent.</b> Suitable habitat is not present in the Project area
<i>Rhynchospora capitellata</i> Brownish beaked-rush	-/-/2B.2	Lower montane coniferous forest, meadows and seeps, marshes and swamps, upper montane coniferous forest. Mesic sites. 45-1710 m.	<b>Absent.</b> Suitable habitat is not present in the Project area

\* List of Abbreviations for Species

Status follow below:

**Federal Designations:**

FE = Federal endangered

FT = Federal threatened

FC = Federal candidate

P = Federal proposed

BCC = Bird of Conservation Concern  
(USFWS designation)

S = US Forest Service (USFS) Sensitive

MIS = USFS Management Indicator  
Species

**State Designations:**

SE = State endangered

ST = State threatened

SCE = State candidate endangered

SR = State rare

SSC = Species of Special Concern  
(CDFW Designation)

FP = Fully Protected (CDFW  
Designation)

WL = Watch List (CDFW Designation)

**California Rare Plant Rank Designations**

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

CRPR 2 = Plants rare, threatened, or endangered  
in California but more common elsewhere

CRPR 4 = Plants of limited distribution-a watch  
list

.1 = seriously threatened in California

.2 = moderately threatened in California

3 = not very threatened in California

California Department of Fish and Game. 2010. Report to the Fish and Game Commission: A status review of the fisher (*Martes pennanti*) in California. February 2010.

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eBird. 2023. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: <http://www.ebird.org>. (Accessed: March 7, 2023).

Audubon Guide to North American Birds. [Audubon.org/field-guide/bird](http://audubon.org/field-guide/bird). Accessed July, 2021.

H. T. Harvey & Associates. 2012. San José Family Camp Improvement Project Biological Resources Report. August.

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Project information

### NAME

San José Family Camp Storm Damage Repair Project

### LOCATION

Tuolumne County, California





### DESCRIPTION

Some(Repairing storm-related damage to the San Jose Family Camp.)

# Local office

Sacramento Fish And Wildlife Office

 (916) 414-6600

 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
  2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of

## Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Fisher <i>Pekania pennanti</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3651">https://ecos.fws.gov/ecp/species/3651</a>	Endangered

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).



For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p><b>Black Swift</b> <i>Cypseloides niger</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/8878">https://ecos.fws.gov/ecp/species/8878</a></p>	Breeds Jun 15 to Sep 10
<p><b>Black-throated Gray Warbler</b> <i>Dendroica nigrescens</i>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds May 1 to Jul 20
<p><b>California Thrasher</b> <i>Toxostoma redivivum</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jan 1 to Jul 31
<p><b>Cassin's Finch</b> <i>Carpodacus cassinii</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9462">https://ecos.fws.gov/ecp/species/9462</a></p>	Breeds May 15 to Jul 15
<p><b>Golden Eagle</b> <i>Aquila chrysaetos</i>            This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Dec 1 to Aug 31
<p><b>Lawrence's Goldfinch</b> <i>Carduelis lawrencei</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a></p>	Breeds Mar 20 to Sep 20
<p><b>Oak Titmouse</b> <i>Baeolophus inornatus</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9656">https://ecos.fws.gov/ecp/species/9656</a></p>	Breeds Mar 15 to Jul 15

**Olive-sided Flycatcher** *Contopus cooperi*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

**Wrentit** *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

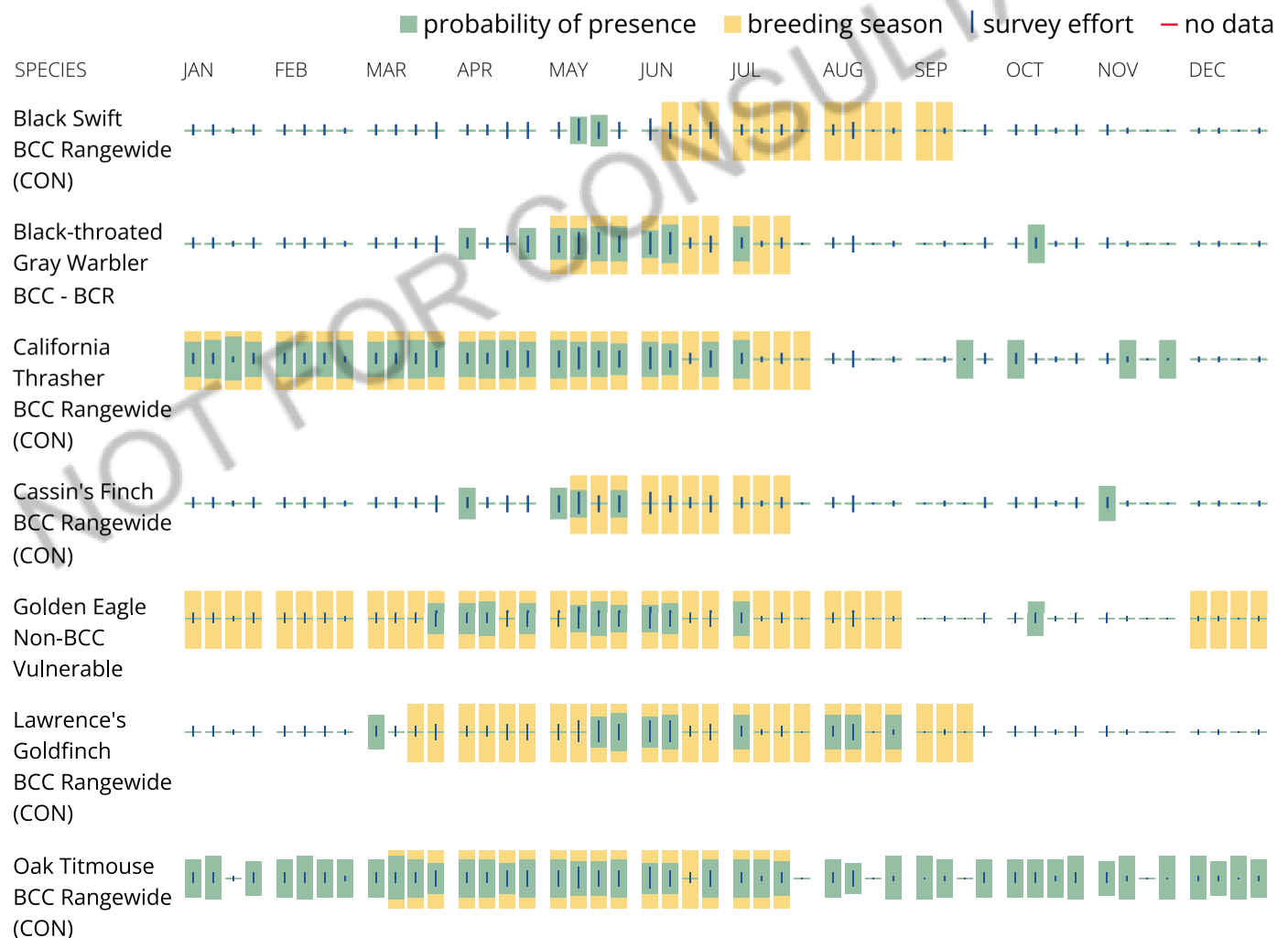
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

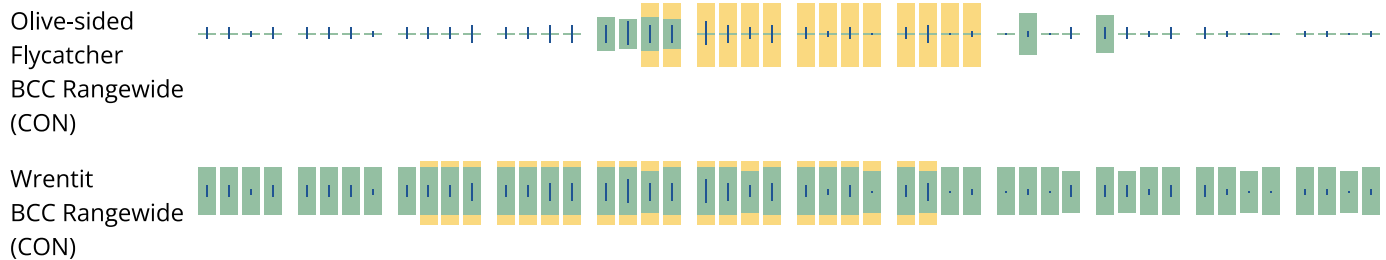
### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





## Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

## What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

## What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering or migrating in my area?



To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability

of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R5UBF](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should

seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION





# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Tuolumne) OR Duckwall Mtn. OR Cherry Lake South OR Groveland OR Jawbone Ridge OR Ascension Mtn. OR Coulterville OR Buckhorn Peak OR Kinsley

Table with 7 columns: Species, Element Code, Federal Status, State Status, Global Rank, State Rank, Rare Plant Rank/CDFW SSC or FP. Rows include species like Allium tuolumnense, Allium yosemitense, Antrozous pallidus, etc.



Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Eriophyllum congdonii</i></b> Congdon's woolly sunflower	PDAST3N030	None	Rare	G2	S2	1B.2
<b><i>Eriophyllum nubigenum</i></b> Yosemite woolly sunflower	PDAST3N0A0	None	None	G2	S2	1B.3
<b><i>Eryngium pinnatisectum</i></b> Tuolumne button-celery	PDAP10Z0P0	None	None	G2	S2	1B.2
<b><i>Erythranthe filicaulis</i></b> slender-stemmed monkeyflower	PDPHR012H0	None	None	G2	S2	1B.2
<b><i>Erythronium taylorii</i></b> Pilot Ridge fawn lily	PMLIL0U0S0	None	None	G1	S1	1B.2
<b><i>Erythronium tuolumnense</i></b> Tuolumne fawn lily	PMLIL0U0H0	None	None	G2G3	S2S3	1B.2
<b><i>Euderma maculatum</i></b> spotted bat	AMACC07010	None	None	G4	S3	SSC
<b><i>Eumops perotis californicus</i></b> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<b><i>Falco mexicanus</i></b> prairie falcon	ABNKD06090	None	None	G5	S4	WL
<b><i>Falco peregrinus anatum</i></b> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<b><i>Fritillaria agrestis</i></b> stinkbells	PMLIL0V010	None	None	G3	S3	4.2
<b><i>Haliaeetus leucocephalus</i></b> bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
<b><i>Helminthoglypta allynsmithi</i></b> Merced Canyon shoulderband	IMGASC2020	None	None	G1	S1	
<b><i>Horkelia parryi</i></b> Parry's horkelia	PDR0S0W0C0	None	None	G2	S2	1B.2
<b><i>Hydromantes brunus</i></b> limestone salamander	AAAAD09010	None	Threatened	G2G3	S2S3	FP
<b><i>Lasionycteris noctivagans</i></b> silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
<b><i>Lasiurus cinereus</i></b> hoary bat	AMACC05032	None	None	G3G4	S4	
<b><i>Lasiurus frantzii</i></b> western red bat	AMACC05080	None	None	G4	S3	SSC
<b><i>Lomatium congdonii</i></b> Congdon's lomatium	PDAP11B0B0	None	None	G2	S2	1B.2
<b><i>Lupinus spectabilis</i></b> shaggyhair lupine	PDFAB2B3P0	None	None	G2	S2	1B.2
<b><i>Margaritifera falcata</i></b> western pearlshell	IMBIV27020	None	None	G4G5	S1S2	



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b>Species</b>	<b>Element Code</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Global Rank</b>	<b>State Rank</b>	<b>Rare Plant Rank/CDFW SSC or FP</b>
<b><i>Mielichhoferia elongata</i></b> elongate copper moss	NBMUS4Q022	None	None	G5	S3S4	4.3
<b><i>Mielichhoferia shevockii</i></b> Shevock's copper moss	NBMUSA1010	None	None	G2	S2	1B.2
<b><i>Monadenia circumcarinata</i></b> keeled sideband	IMGASC7020	None	None	G3	S3	
<b><i>Monadenia tuolumneana</i></b> Tuolumne sideband	IMGASC7100	None	None	G1	S1	
<b><i>Monadenia yosemitensis</i></b> Yosemite sideband	IMGASZ3010	None	None	G1	S1S2	
<b><i>Myotis evotis</i></b> long-eared myotis	AMACC01070	None	None	G5	S3	
<b><i>Myotis thysanodes</i></b> fringed myotis	AMACC01090	None	None	G4	S3	
<b><i>Myotis volans</i></b> long-legged myotis	AMACC01110	None	None	G4G5	S3	
<b><i>Myotis yumanensis</i></b> Yuma myotis	AMACC01020	None	None	G5	S4	
<b><i>Navarretia miwukensis</i></b> Mi-Wuk navarretia	PDPLM0C210	None	None	G1G2	S1S2	1B.2
<b><i>Rana boylei pop. 5</i></b> foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	G3T2	S2	
<b><i>Rhynchospora capitellata</i></b> brownish beaked-rush	PMCYP0N080	None	None	G5	S1	2B.2
<b><i>Strix nebulosa</i></b> great gray owl	ABNSB12040	None	Endangered	G5	S1	
<b><i>Stygobromus harai</i></b> Hara's Cave amphipod	ICMAL05470	None	None	G1G2	S1	
<b><i>Stygobromus wengerorum</i></b> Wengerors' Cave amphipod	ICMAL05620	None	None	G1	S1	

**Record Count: 54**

Inventory of Rare and Endangered Plants of California



HOME ABOUT v CHANGES REVIEW HELP

Search: Simple  
Advanced

Search for species and Go

Search Results


Back Export Results

45 matches found. Click on scientific name for details



Search Criteria: Quad is one of [3712082,3712081,3711988,3712072,3712071,3711978,3712062,3712061,3711968]

Scientific Name
Common Name
Family
Lifeform
Blooming Period
Fed List
State List
Global Rank
State Rank  
CA Rare Plant Rank
General Habitats
Micro Habitats
Lowest Elevation
Highest Elevation
CA Endemic
Date Added
Photo

Search:

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<a href="#"><i>Allium sanbornii</i></a> <a href="#"><i>var. congdonii</i></a>	Congdon's onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	None	None	G4T3	S3	4.3	No Photo Available
<a href="#"><i>Allium sanbornii</i></a> <a href="#"><i>var. sanbornii</i></a>	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	None	None	G4T3T4	S3S4	4.2	No Photo Available
<a href="#"><i>Allium tribracteatum</i></a>	three-bracted onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	None	None	G2	S2	1B.2	No Photo Available
<a href="#"><i>Allium tuolumnense</i></a>	Rawhide Hill onion	Alliaceae	perennial bulbiferous herb	Mar-May	None	None	G2	S2	1B.2	No Photo Available
<a href="#"><i>Allium yosemitense</i></a>	Yosemite onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	None	CR	G3	S3	1B.3	No Photo Available
<a href="#"><i>Balsamorhiza macrolepis</i></a>	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	 ©1998 Dean Wm. Taylor
<a href="#"><i>Bolandra californica</i></a>	Sierra bolandra	Saxifragaceae	perennial herb	Jun-Jul	None	None	G4	S4	4.3	No Photo Available
<a href="#"><i>Calandrinia breweri</i></a>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2	No Photo Available
<a href="#"><i>Carex tompkinsii</i></a>	Tompkins' sedge	Cyperaceae	perennial rhizomatous herb	May-Jul	None	CR	G3G4	S3S4	4.3	No Photo Available
<a href="#"><i>Ceanothus frcnsensis</i></a>	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	(Apr)May-Jul	None	None	G4	S4	4.3	No Photo Available

Scientific Name	Common Name	Family	Life Form	Blooming	FED	STATE	GLOBAL	STATE	CA RARE PLANT	Availability
<u><a href="#">Clarkia australis</a></u>	Small southern clarkia	Onagraceae	annual herb	May-Aug	None	None	G2	S2	1B.2	No Photo Available
<u><a href="#">Clarkia biloba ssp. australis</a></u>	Mariposa clarkia	Onagraceae	annual herb	Apr-Jul	None	None	G4G5T3	S3	1B.2	No Photo Available
<u><a href="#">Clarkia lingulata</a></u>	Merced clarkia	Onagraceae	annual herb	May-Jun	None	CE	G1	S1	1B.1	No Photo Available
<u><a href="#">Clarkia rostrata</a></u>	beaked clarkia	Onagraceae	annual herb	Apr-May	None	None	G2G3	S2S3	1B.3	No Photo Available
<u><a href="#">Clarkia virgata</a></u>	Sierra clarkia	Onagraceae	annual herb	May-Aug	None	None	G3	S3	4.3	No Photo Available
<u><a href="#">Claytonia parviflora ssp. grandiflora</a></u>	streambank spring beauty	Montiaceae	annual herb	Feb-May	None	None	G5T3	S3	4.2	No Photo Available
<u><a href="#">Cryptantha mariposae</a></u>	Mariposa cryptantha	Boraginaceae	annual herb	Apr-Jun	None	None	G2G3	S2S3	1B.3	No Photo Available
<u><a href="#">Cryptantha spithamaea</a></u>	Red Hills cryptantha	Boraginaceae	annual herb	Apr-May	None	None	G2	S2	1B.3	No Photo Available
<u><a href="#">Cypripedium montanum</a></u>	mountain lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4	S4	4.2	 ©2021 Scot Loring
<u><a href="#">Diplacus pulchellus</a></u>	yellow-lip pansy monkeyflower	Phrymaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	No Photo Available
<u><a href="#">Eriogonum tripodum</a></u>	tripod buckwheat	Polygonaceae	perennial deciduous shrub	May-Jul	None	None	G4	S4	4.2	 ©2008 Steven Perry
<u><a href="#">Eriophyllum confertiflorum var. tanacetiflorum</a></u>	tansy-flowered woolly sunflower	Asteraceae	perennial shrub	May-Jul	None	None	G5T2?Q	S2?	4.3	No Photo Available
<u><a href="#">Eriophyllum congdonii</a></u>	Congdon's woolly sunflower	Asteraceae	annual herb	Apr-Jun	None	CR	G2	S2	1B.2	No Photo Available
<u><a href="#">Eriophyllum</a></u>	Yosemite woolly	Asteraceae	annual herb	May-Aug	None	None	G2	S2	1B.3	No Photo Available

<u><a href="#">nudi</a></u> <u><a href="#">genum</a></u>	suntlower										CA RARE PLANT	No Photo Available
▲ SCIENTIFIC				BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	RANK	PHOTO		
<u><a href="#">Eryngium</a></u>	Tuolumne	Apiaceae	annual perennial	May-Aug	None	None	G2	S2	1B.2			
<u><a href="#">pinnatisectum</a></u>	button-celery		herb									No Photo Available
<u><a href="#">Erythranthe filicaulis</a></u>	slender-stemmed monkeyflower	Phrymaceae	annual herb	Apr-Aug	None	None	G2	S2	1B.2			John Doyen, 2020
<u><a href="#">Erythranthe grayi</a></u>	Gray's monkeyflower	Phrymaceae	annual herb	May-Jul	None	None	G2G3Q	S2S3	4.3			No Photo Available
<u><a href="#">Erythranthe inconspicua</a></u>	small-flowered monkeyflower	Phrymaceae	annual herb	May-Jun	None	None	G4	S4	4.3			© 2017 Debra L. Cook
<u><a href="#">Erythronium taylorii</a></u>	Pilot Ridge fawn lily	Liliaceae	perennial bulbiferous herb	Apr-May	None	None	G1	S1	1B.2			No Photo Available
<u><a href="#">Erythronium tuolumnense</a></u>	Tuolumne fawn lily	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G2G3	S2S3	1B.2			No Photo Available
<u><a href="#">Fritillaria agrestis</a></u>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2			No Photo Available
<u><a href="#">Githopsis pulchella ssp. serpentinicola</a></u>	serpentine bluecup	Campanulaceae	annual herb	May-Jun	None	None	G4T3	S3	4.3			No Photo Available
<u><a href="#">Horkelia parryi</a></u>	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	None	None	G2	S2	1B.2			No Photo Available
<u><a href="#">Jepsonia heterandra</a></u>	foothill jepsonia	Saxifragaceae	perennial herb	Aug-Dec	None	None	G3	S3	4.3			No Photo Available
<u><a href="#">Lessingia hololeuca</a></u>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3			No Photo Available
<u><a href="#">Lomatium congdonii</a></u>	Congdon's lomatium	Apiaceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2			No Photo Available
<u><a href="#">Lupinus spectabilis</a></u>	shaggyhair lupine	Fabaceae	annual herb	Apr-May	None	None	G2	S2	1B.2			No Photo Available
<u><a href="#">Mielichhoferia elongata</a></u>	elongate copper moss	Mielichhoferiaceae	moss		None	None	G5	S3S4	4.3			No Photo Available

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	<u>FAMILY</u>	<u>LIFEFORM</u>	<u>BLOOMING PERIOD</u>	<u>NONE FED LIST</u>	<u>NONE STATE LIST</u>	<u>G2 GLOBAL RANK</u>	<u>S2 STATE RANK</u>	<u>CA RARE PLANT RANK</u>	<u>PHOTO</u>
<u><i>Mielichhoferia shevockii</i></u>	Shevock's copper moss	Mielichhoferiaceae	moss						1B.2	No Photo Available
<u><i>Navarretia miwukensis</i></u>	Mi-Wuk navarretia	Polemoniaceae	annual herb	May-Jun(Jul)	None	None	G1G2	S1S2	1B.2	No Photo Available
<u><i>Peltigera gowardii</i></u>	western waterfan lichen	Peltigeraceae	foliose lichen (aquatic)		None	None	G4?	S3	4.2	 © 2021 Scot Loring
<u><i>Perideridia bacigalupii</i></u>	Bacigalupi's yampah	Apiaceae	perennial herb	Jun-Aug	None	None	G3	S3	4.2	No Photo Available
<u><i>Piperia colemanii</i></u>	Coleman's rein orchid	Orchidaceae	perennial herb	Jun-Aug	None	None	G4	S4	4.3	No Photo Available
<u><i>Rhynchospora capitellata</i></u>	brownish beaked-rush	Cyperaceae	perennial herb	Jul-Aug	None	None	G5	S1	2B.2	No Photo Available
<u><i>Wyethia elata</i></u>	Hall's wyethia	Asteraceae	perennial herb	May-Aug	None	None	G4	S4	4.3	No Photo Available

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# **Aquatic Resource Delineation Report**

## **San José Family Camp**

**Tuolumne County, CA**

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## EXECUTIVE SUMMARY

The City of San José is proposing to restore storm-damaged facilities and provide accessibility improvements at the San José Family Camp, including repair of the pool area and play area retaining walls located in the Middle Fork of the Tuolumne River in Tuolumne County. As part of the Project, the City of San José would also update certain aspects of the Camp associated with these facilities to comply with the Americans with Disabilities Act. An aquatic resources delineation was conducted for a 3.72-acre study area, which includes the Project construction area and any areas that will be temporarily or permanently impacted by the Project. This delineation was conducted in accordance with the 1987 *Corps of Engineers Wetland Delineation Manual*, the 2010 *Western Mountains, Valleys, and Coast Regional Supplement*, and the 2014 *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Western Mountains, Valleys, and Coast Region of the Western United States*.

The study area contains 0.752 acres of potentially jurisdictional non-wetland waters of the U.S. (including culverted waters) and no potentially jurisdictional wetlands. Aquatic resources delineated consisted of riverine features and culverted waters.

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## ACRONYMS AND ABBREVIATIONS

CWA	Clean Water Act
DD	decimal degrees
GPS	Global Positioning System
msl	mean sea level
NRCS	National Resource Conservation Service
NWI	National Wetland Inventory
OHW	Ordinary High Water
OHWM	Ordinary High Water Mark
TNW	Traditional Navigable Waters
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
°F	degrees Fahrenheit

## 1.0 INTRODUCTION

This aquatic resource delineation report (report) presents the methods and results of a wetland delineation conducted for a 3.72-acre study area that encompasses a portion of the San José Family Camp property along the Middle Tuolumne River in Groveland, Tuolumne County, California, shown in **Figure 1**. Retaining walls along the Middle Tuolumne River have been damaged by high flows in the river. The City of San José is proposing to repair the retaining walls and associated structures and also make accessibility improvements to comply with the Americans with Disabilities Act (Project). The purpose of this investigation was to determine the presence and extent of areas within the study area which may be considered waters of the United States (U.S.), and therefore subject to regulation under Section 404 of the Clean Water Act (CWA).

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## 2.0 LOCATION & SETTING

The Project is located on both banks of the Middle Fork Tuolumne River in Tuolumne County, California as shown in **Figure 1**. The study area encompasses a portion of the Middle Fork Tuolumne River channel and includes all proposed access routes, staging areas, and footprint for construction. A detailed description of conditions in the study area is provided in Section 2.2 below. This portion of the Middle Fork Tuolumne River is not designated as Traditional Navigable Waters. Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Traditionally Navigable Waters include all of the navigable waters of the United States plus all other waters that are navigable-in-fact.

### 2.1 LOCATION & DRIVING DIRECTIONS

Specific locations and driving directions from San Francisco to the study area are provided below.

Waterbody	Middle Fork Tuolumne River
Tributary to and downstream waterbody	Tuolumne River South Fork, Tuolumne River, San Joaquin River, San Francisco Bay Delta, San Francisco Bay, Pacific Ocean
Latitude & Longitude (DD)	37.828569, -120.006628
Section, Township, Range	S28 T1S R18E
USGS Quadrangle	Jawbone Ridge
Street Address	11401 Cherry Lake Road Groveland, CA 95321
Directions	From Sacramento take I-5 South for 47 miles. Take exit 472 and merge onto CA-4 East. Continue for 35 miles. In Copperopolis, turn right on Main Street for 1 mile. Continue onto O'Byrnes Ferry Road for 12 miles. Turn left onto CA-120 and after 0.7 miles turn right to continue on CA-120 East for 34 miles. Turn left onto Cherry Lake Road, then turn left at the hotel parking lot, take a slight right, then take a left. The destination is at the bottom of the hill.
Assess Restrictions	Please contact the City of San José to arrange access.
Size of Study Area	3.72 acres

### 2.2 SETTING & SITE CHARACTERIZATION

The study area is located along the Middle Tuolumne River and includes a portion of the river channel, banks, riparian corridor, and a staging area outside of the riparian corridor (west study area). Adjacent land uses include camping facilities, picnic areas, and undeveloped areas. The San José Family Camp is located on both sides of the river within the study area. This reach of the Middle Fork Tuolumne River is relatively confined by camp facilities and roads. Photographs of the study area are provided in **Appendix A**.

#### 2.2.1 Climate

The study area has a Mediterranean climate characterized by cool, wet winters and hot, dry summers. Average temperatures range from a low of 31 degrees Fahrenheit (°F) in February to a

high of 89°F in July (AgACIS 2019). The average annual precipitation near the study area is approximately 47.5 inches, with most of the precipitation occurring November through April (WRCC 2016). The average snowfall is approximately 118.7 inches per year. The Climate Analysis for Wetlands Tables (WETS Table) present monthly summaries and probability analyses of temperature and precipitation, as well as growing season information and are provided in **Appendix B**.

### 2.2.2 Topography

The study area is located along the banks of the Middle Fork Tuolumne River. Much of the upland portion of the study area is relatively flat with developed gravel terraces. Beyond these terraces, the slope becomes steeper. The staging area slopes gently downwards towards the river channel to the north. Elevations in the study area range from approximately 2,900 feet (NAVD 88) along the top of the staging area to 2,853 feet along the riverbed.

### 2.2.3 Hydrology

The Middle Fork Tuolumne River flows east to west through the study area. The bank repair locations are located on the inside bend (left bank) of a meander where the river curves south and about 50 feet downstream of the bend on the right bank. The Middle Tuolumne River is perennial with mean flows ranging from 294 cubic feet per second (cfs) in May to 2.7 cfs in September (USGS 2002). The confluence with Tuolumne South Fork is located about 1.07 miles downstream of the study area.

To establish baseline hydrologic conditions within the study area, precipitation and growing season analyses were conducted. Current conditions were compared with long-term climate data maintained by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) National Water and Climate Center (Climate Center). The Climate Analysis for Wetlands Tables (WETS Tables) present monthly summaries and probability analyses of temperature and precipitation, as well as growing season information. **Tables 1 and 2** summarize this information for the study area from the nearest WETS station, located at Cherry Valley Dam. These data are provided in **Appendix B**. Approximate growing season dates are represented by the median dates (50 percent probability of occurrence) of 28°F air temperatures, as described in the WETS tables (USACE 2005). The result of the WETS table indicates that conditions in the study area have been wetter than usual, as the May and June results were more than the 70th percentile of average historical precipitation for those months.

**Table 1. Growing Season Analysis**

Station and Period of Record	Relative Location to Project	Elevation (Feet)	Average Annual Rainfall (Inches)	Rainfall November through April	>28°F Growing Season (50% probability)	Number of Days
Cherry Valley Dam 1971 - 2019	11 miles northeast of the Project	4765 feet	47.75	85%	4/23 to 11/16	207

Source: AgACIS 2019

**Table 2. NRCS Precipitation Analysis for the Cherry Valley Dam (2019)\***

Month	Total (Observed)	Precipitation Average	30 <sup>th</sup> Percentile	70 <sup>th</sup> Percentile	Condition <sup>1</sup>	Condition Weight Factor <sup>2</sup>	Month Weight Factor	Product
April	1.67	3.73	1.95	4.56	Dry	1	1	1
May	8.23	2.07	0.85	2.48	Wet	3	2	6
June	0.96	0.69	0.22	0.71	Wet	3	3	9
<b>Sum<sup>3</sup></b>								<b>16</b>
<b>Notes:</b>								
* Data presented in inches.								
<sup>1</sup> If Total (Observed) is between 30th percentile and 70th percentile values, Condition = Normal; if Total (Observed) is less than 30th percentile, Condition = Dry; if Total (Observed) is more than 70th percentile, Condition = Wet.								
<sup>2</sup> Dry = 1; Normal = 2; Wet = 3.								
<sup>3</sup> A sum of 6 to 9 is drier than normal; 10 to 14 is normal; 15 to 18 is wetter than normal.								

Source: AgACIS 2019

## 2.2.4 Soils

Soils mapped in the study area by the National Resource Conservation Service (NRCS) are Holland family (130), deep to moderately deep complex, 5 to 35 percent slopes, as shown in **Figure 2** (NRCS 2019a). This soil unit is a well-drained soil derived from residuum weathered from granite and composed of loam to sandy loam in the upper profile (NRCS 2019a). The Holland family soil unit is not considered a hydric soil (NRCS 2019b).

## 2.2.5 National Wetlands Inventory

Classifications of waters mapped in the study area by the National Wetlands Inventory (NWI) are presented in **Figure 3** (USFWS 2019). Waters as mapped by the NWI are located in the northwest study area and are limited to the Middle Fork Tuolumne River channel. The mapped portion of the Middle Fork Tuolumne River is classified as: riverine, unknown perennial, unconsolidated bottom, semipermanently flooded (Cowardin Code: R5UBF) (Cowardin et al. 1979). USFWS



mapped the NWI wetlands within the study area were developed using aerial photography from 1973 (USFWS 2019).

### 2.2.6 Biological Conditions

This section describes habitats and land covers present within the study area. Vegetation within the study area was surveyed during delineation field-work, and vegetation categories are based on the classification presented in *A Manual of California Vegetation* (Sawyer et al. 2009). A Biological Resources Report by H.T. Harvey & Associates conducted for the study area in 2012 was also referenced (H.T. Harvey 2012). Botanical nomenclature follows the second edition of *The Jepson Manual* (Baldwin et al. 2012), except where synonyms are used by Lichvar et al. (2016). A list of all plants observed in the study area is included in **Appendix C**.

This site supports several habitats including: riverine, white alder riparian, and Ponderosa pine/black oak forest, mixed chaparral, and ruderal/ disturbed/landscape (Appendix A, Photos 1 through 4). Descriptions of biotic habitats in the study area are provided below.

#### ***Aquatic Habitats***

##### **Riverine**

Riverine habitat is generally characterized by intermittent or continually running non-tidal water associated with rivers and streams. Riverine habitat in the study area includes the open water of the Middle Fork Tuolumne River shown in **Figure 2**, and a small tributary. The Middle Fork Tuolumne River riverine habitat had rapid flow, clear cold water, and was close in stage height to the OWHM during the site visit. The tributary is much smaller with seasonal flow from the steep slopes north of the Middle Fork Tuolumne River.

Various dams, the largest of which is located at the Don Pedro Reservoir prevent the Middle Fork Tuolumne River from being accessible to anadromous fish species. Fish species that are found in the river include California roach (*Lavinia symmetricus*), rainbow trout (*Oncorhynchus mykiss*), and riffle sculpin (*Cottus gulosus*) (H.T. Harvey 2012). Other aquatic species such as foothill yellow-legged frog (*Rana boylei*), Sierran treefrog (*Pseudacris sierra*), and bullfrog (*Lithobates catesbeianus*) may use this habitat. Other wildlife species that utilize the river include various bat and bird species.

##### **White Alder Riparian**

Riparian habitat is located in the interface between uplands and a river or stream, and white alder riparian habitat in the study area is dominated by trees with sparse shrubs and herbs. White alder riparian habitat was located along the riparian corridor adjacent to the Middle Fork Tuolumne River. This habitat is dominated by a mix of white alder (*Alnus rhombifolia*), black oak (*Quercus kelloggii*), ponderosa pine (*Pinus ponderosa*), and incense cedar (*Calocedrus decurrens*) in the canopy stratum. These species extended into the wetted channel during the field visit in June. The understory is sparsely vegetated by shrubs and herbs including lupin (*Lupinus* sp.) and Himalayan blackberry (*Rubus armeniacus*).

Wildlife species that may be found in white alder riparian habitat include amphibian species found in the open water habitat, and western garter snake (*Thamnophis elegans*), ringneck snake

(*Diadophis punctatus*), slender salamander (*Batrachoseps* sp.), Pacific-slope flycatcher (*Empidonax difficilis*), belted kingfisher (*Ceryle alcyon*) and western red bats (*Lasiurus blossevillii*) (H.T. Harvey 2012).

### ***Terrestrial Habitats***

#### **Ponderosa Pine/Black Oak Forest**

Ponderosa Pine/Black Oak Forest is located on the undeveloped lower slopes in the valley. This habitat is dominated by a mix of mature conifer and deciduous trees. Ponderosa pine/black oak forest habitat is scattered throughout the campgrounds (i.e., in picnic areas, between campsites, and along roads). This habitat is dominated by Ponderosa pine and black oak creating a loosely to moderately spaced canopy. To a lesser extent, the overstory also includes incense cedar. The understory has low vegetation cover composed of a mix of saplings, shrubs, and herbs such as mountain misery (*Chamaebatia foliolosa*), Himalayan blackberry and lupine. The shrub and herb strata are sparser due to compaction and frequent foot traffic in camp facility areas. Wildlife species that may be found in the area are similar to those found in white alder riparian habitat.

#### **Mixed Chaparral/Grassland**

Mixed chaparral/grassland habitat dominates the undisturbed portions of the staging area (western study area). This habitat consists primarily of woody shrubs and herbs with patches of grassland. Dominant species include buck brush (*Ceanothus cuneatus*), mariposa manzanita (*Arctostaphylos viscida*), gumweed (*Grindelia* sp.), and Yerba santa (*Eriodictyon californicum*). The grassland patches are composed of soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), and other ruderal species, with winecup clarkia (*Clarkia purpurea*) also present. Occasional trees shade the understory in this habitat, these include Jeffrey pine (*Pinus jeffreyi*) and black oak.

Wildlife species that may be found in this habitat include amphibians and reptiles from adjacent Ponderosa pine/black oak forest and others such as the rubber boa (*Charina bottae*), common kingsnake (*Lampropeltis getula*), and common garter snake (*Thamnophis sirtalis*) (H.T. Harvey 2012). Mammals that may be found in this habitat include pinyon mouse (*Peromyscus truei*), Botta's pocket gopher (*Thomomys bottae*), brush rabbit (*Sylvilagus bachmani*), and mule deer (*Odocoileus hemionus*). Bird species that nest and forage in this habitat include fox sparrow (*Passerella iliaca*), green-tailed towhee (*Pipilo chlorurus*), western bluebird (*Sialia mexicana*), and California quail (*Callipepla californica*) (T.H. Harvey 2012).

---

### **Ruderal/Developed**

Much of the study area consists of ruderal areas supporting primarily herbaceous, non-native vegetation such as dogtail grass (*Cynosurus echinatus*), Italian thistle (*Carduus pycnocephalus*), and Himalayan blackberry. Ruderal plants are adapted to disturbance. Developed and barren areas (i.e., active dirt roads, playground, and picnic areas) are grouped into this habitat as well. Ruderal/developed habitat is located both in the family camp along the Middle Fork Tuolumne River and in the staging area (west study area).

This habitat type provides variable habitat value for wildlife in the study area. Frequent disturbance from human activity occurs in this area; however, some degree of foraging may occur from species found in other adjacent habitat types. In addition, wildlife species adapted for more urban environments, such as common raven (*Corvus corax*), sparrows, house mice (*Mus musculus*), and some bats may inhabit and/or forage in ruderal/developed land cover in the study area.

### 3.0 METHODS

A routine wetland delineation was conducted in accordance with the *1987 Corps of Engineers Wetland Delineation Manual* (USACE 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0)* (USACE 2010), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Western Mountains, Valleys, and Coast Region of the Western United States* (USACE 2014).

#### 3.1 BACKGROUND INFORMATION

The following information was reviewed prior to conducting the delineation:

- NRCS Soil Survey Data (NRCS 2019a);
- NRCS National Hydric Soils List (NRCS 2019b); and
- U.S. Fish and Wildlife Service (USFWS) NWI data (USFWS 2019).

#### 3.2 DATA COLLECTION

Field data collection for this delineation was conducted on June 18, 2019, by Robin Hunter and Viktoria Kuehn of Horizon. The surveyors searched the study area for evidence of wetland indicators such as hydrophytic vegetation, ponding, or saturated conditions. Soil conditions were investigated in locations that could potentially support wetlands (e.g., streambank, floodplain, drainage areas). Evidence of the OHWM (e.g., presence of bed/banks, scour lines, change in vegetative cover, changes in soils texture, presence of leaf litter, and debris deposits) were mapped along the river channel. The OHWM was used to determine the extents of potentially jurisdictional non-wetland waters of the U.S.

The locations of sample points and OHWM were mapped using a Trimble GeoXT Global Positioning System (GPS) receiver with sub-meter accuracy. GPS data were imported into ESRI ArcGIS 10.3 software for developing aquatic resource maps. Georeferenced, high-resolution aerial photographs, and elevation data were used in ArcGIS to interpret wetland boundaries in conjunction with field-collected data.

## 4.0 AQUATIC RESOURCES

The results of the delineation are presented in this section and summarized in **Table 3**. **Figure 4** provides the aquatic resources delineation map. The delineation data forms are included in **Appendix D**.

### 4.1 POTENTIALLY JURISDICTIONAL NON-WETLAND WATERS OF THE U.S.

A total of 0.751 acres of non-wetland waters and 0.001 acre of culverted waters of the U.S. were delineated within the study area as listed in **Table 3** and shown on **Figure 4**. These features are classified as Riverine, Upper Perennial, Unconsolidated Bottom, (Cowardin Code: R3UB) and Riverine, intermittent, Streambed (Cowardin Code: R4SB).

**Table 3. Aquatic Resources in the Study Areas**

Aquatic Resources Classification			Location (DD)		Aquatic Resource Size (acres)
Aquatic Resource Code	Type	Cowardin Code	Latitude	Longitude	
<i>Potentially Jurisdictional Non-Wetland Waters</i>					
W-1	Waters	R3UB	37.828569	-120.006628	0.747
W-2	Waters	R4SB	37.829026	-120.006629	0.004
<b>Total</b>					<b>0.751</b>
<i>Potentially Jurisdictional Culverted Waters</i>					
CW-1	Culverted Waters	NA	37.828927	-120.006577	0.001
<b>Total</b>					<b>0.752</b>

These features were delineated using the following OHW indicators: water staining on exposed rocks, change in vegetation cover, change in vegetation composition, and change in sediment texture. The portion of the Middle Fork Tuolumne River that is upstream of the dam structure is confined to the concrete/rock walls on both banks (see **Appendix A**, Photo 1). Downstream of the dam, the river split into two channels and has gradually sloped earthen banks (see Appendix A, Photo 2).

### 4.2 POTENTIAL WETLANDS

No wetlands were delineated within the study area. No wetlands were identified above the OHWM of the Middle Tuolumne River or in other portions of the study area.

## 5.0 SUMMARY

A wetland delineation was conducted for a 3.72-acre study area within and adjacent to the Middle Tuolumne River on the San José Family Camp property in Tuolumne County, California. A total of 0.752 acre of potential non-wetland waters (including culverted waters) was delineated within the study area. No potentially jurisdictional wetlands were delineated. Aquatic resources mapped in the study area are summarized in **Table 1**, shown in **Figure 4**, and provided in the **Electronic Appendix**.

## 6.0 REFERENCES

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# Appendix A

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## Site Photographs

# Appendix A. Site Photographs

<b>Photo No. 1</b>	<b>Date</b> 06/18/2019	
<b>Site Name:</b> Middle Tuolumne River (W-1)		
<b>Aspect (facing):</b> West; downstream		
Typical conditions within Middle Tuolumne River in the Study Area. Picnic and recreation areas are directly adjacent to the channel. The channel boundaries are confined to the retaining walls of the pool in this portion of the River.		
<b>Photo No. 2</b>	<b>Date</b> 06/18/2019	
<b>Site Name:</b> Middle Tuolumne River (W-1)		
<b>Aspect (facing):</b> Northeast; upstream		
Downstream of the flash board dam where the OHW data point was taken (yellow arrow). The failing concrete wall is visible on the left.		



## Appendix A. Site Photographs

<b>Photo No. 3</b>	<b>Date</b> 06/18/2019	
<b>Site Name:</b> W-2		
<b>Aspect (facing):</b> North; upstream		
<p>Photo of the tributary to Middle Tuolumne River (W-2). The water-stained boulders that indicate the OHWM are visible.</p>		
<b>Photo No. 4</b>	<b>Date</b> 06/18/2019	
<b>Site Name:</b> Staging area (west study area)		
<b>Aspect (facing):</b> West		
<p>Photo taken from the existing part of the staging area (western study area). The mixed chaparral/grassland and ruderal/disturbed habitat is shown. No wetlands or waters were found in this location.</p>		

# Appendix B

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WETS Table

WETS Table

WETS Station: CHERRY VALLEY DAM, CA								
Requested years: 1971 - 2019								
Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall
Jan	48.8	30.0	39.4	8.73	3.37	10.57	8	23.0
Feb	50.4	29.8	40.1	8.58	4.18	10.48	8	25.1
Mar	54.1	31.9	43.0	7.31	3.38	8.93	8	23.3
Apr	60.4	35.7	48.1	3.73	1.95	4.56	6	9.1
May	69.0	42.9	56.0	2.07	0.85	2.48	4	1.1
Jun	79.5	50.6	65.0	0.69	0.22	0.71	2	0.0
Jul	87.7	57.0	72.4	0.22	0.00	0.11	0	0.0
Aug	87.1	56.2	71.6	0.18	0.00	0.11	0	0.0
Sep	80.1	51.2	65.7	0.81	0.17	0.70	2	0.0
Oct	68.6	43.2	55.9	2.87	1.07	3.24	3	0.5
Nov	55.4	34.9	45.1	5.54	2.39	6.75	6	7.4
Dec	48.3	30.1	39.2	7.02	3.11	8.32	7	18.3
Annual:					39.37	55.62		
Average	65.8	41.1	53.5	-	-	-	-	-
Total	-	-	-	47.75			53	107.9

GROWING SEASON DATES

Years with missing data:	24 deg = 10	28 deg = 9	32 deg = 7
Years with no occurrence:	24 deg = 0	28 deg = 0	32 deg = 0
Data years used:	24 deg = 39	28 deg = 40	32 deg = 42
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent *	3/23 to 11/30: 252 days	4/23 to 11/16: 207 days	5/13 to 10/27: 167 days
70 percent *	3/12 to 12/11: 274 days	4/16 to 11/23: 221 days	5/7 to 11/2: 179 days

\* Percent chance of the growing season occurring between the Beginning and Ending dates.

STATS TABLE - total precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1955										M0.27	5.55	35.31	41.13
1956	15.39	3.81	0.48	4.61	4.24	0.07	T	0.00	0.55	4.42	0.05	2.42	36.04
1957	7.42	8.50	6.75	3.39	6.31	M0.17	0.10	0.00	0.11	3.01	3.04	7.26	46.06
1958	7.82	10.60	14.50	9.07	1.72	1.41	0.12	0.05	1.70	0.05	1.46	1.81	50.31
1959	10.16	9.33	1.48	2.86	0.73	0.00	T	M0.03	6.56	T	T	2.48	33.63
1960	6.72	12.79	7.35	3.27	0.57	0.00	0.06	0.03	0.54	0.69	6.10	2.46	40.58
1961	2.01	2.84	5.28	1.97	1.67	0.82	0.28	1.71	0.95	0.81	3.66	4.57	26.57
1962	4.46	21.08	7.65	1.53	1.70	0.08	0.06	0.11	M0.25	2.73	0.88	3.34	43.87

1963	10.26	12.73	6.90	9.83	3.56	1.69	0.00	0.00	0.80	2.30	10.12	0.78	58.97
1964	7.77	0.16	5.36	2.56	2.95	2.15	T	0.00	0.70	2.08	10.36	25.92	60.01
1965	8.38	2.33	3.15	5.80	0.68	0.32	0.01	0.68	0.04	0.47	16.72	6.57	45.15
1966	2.16	1.94	0.97	2.58	0.32	0.03	0.03	0.00	0.12	0.00	8.14	13.91	30.20
1967	11.75	1.10	12.62	12.54	1.53	2.02	0.00	0.15	1.06	0.27	3.63	6.39	53.06
1968	5.83	6.31	5.11	1.13	1.54	0.35		1.20	0.00	3.04	8.05	10.03	42.59
1969	28.54	12.76	4.89	5.32	0.01	1.17	0.02	T	0.25	5.47	2.24	9.03	69.70
1970	21.25	3.24	4.33	4.22	0.00	1.90	T	0.00	0.00	0.99	11.76	14.07	61.76
1971	4.62	1.91	5.41	0.98	1.76	0.44	0.00	0.09	1.01	0.74	6.81	11.56	35.33
1972	2.99	3.35	0.17	5.12		0.80	T	0.03	0.59	1.56	5.45	8.11	28.17
1973	9.90	7.45	5.45	0.87		0.39	0.00	0.15	0.12	3.24	12.18	10.34	50.09
1974	7.07	1.43	10.89	6.81	0.44	T	1.26	T	0.00	3.70	2.13	4.28	38.01
1975	4.23	13.70	11.12	5.79	0.93	0.75	0.04	1.15	0.09	8.07	2.83	0.85	49.55
1976	M0.16	4.21	4.13	2.64	1.03	0.16		2.42	1.01	0.85	1.43	0.26	18.30
1977	3.22	3.29	2.30	1.04	3.64		0.00	0.00	0.62	0.40	6.98		21.49
1978				9.12	0.02	0.25	0.02	0.17	4.33	0.06		4.86	18.83
1979	10.34	10.49	5.59	1.08	2.04	T		0.16	T	4.47	4.44	6.53	45.14
1980	22.62	15.41	4.55	3.28	2.79	0.61	0.68	0.02	0.05	1.12	1.02	3.39	55.54
1981	9.73	2.91	6.63	2.07	0.79	0.00	0.04	0.00	0.44	6.12	11.98	11.82	52.53
1982	15.55	9.55	16.73	7.81	0.45	1.54	0.00	0.18	5.48	M7.26	M16.22	M9.05	89.82
1983	11.96	16.13	16.68	6.96	0.87	0.22	0.00	1.14	2.77	2.08	19.00	M17.67	95.48
1984	0.30	5.66	3.71	2.80	0.72	1.45	0.06	0.04	0.22	4.28	11.82	2.25	33.31
1985	1.06	5.20	9.56	1.12	T	0.29	0.20	0.16	2.03	2.82	10.47	5.79	38.70
1986	5.87	30.96	10.69	2.45	1.25	0.00	0.36	T	3.49	0.50	0.26	1.07	56.90
1987	3.73	7.66	5.42	1.01	1.09	0.38	0.00	0.00	T	3.22	2.52	M6.36	31.39
1988	7.11	0.88	1.53	4.11	2.02	0.51	0.00	0.04	T	0.00	8.95	7.97	33.12
1989	M1.66	4.15	12.21	1.27	1.22	0.38	0.00	0.25	3.50	5.10	M3.17	0.00	32.91
1990	M5.68	4.14	2.58	2.08	3.16	0.57	T	0.00	0.63	0.22	1.88	1.86	22.80
1991	0.55	2.07	22.52	1.53	1.56	0.72	0.04	0.02	0.05	6.24	1.88	3.35	40.53
1992	2.33	10.00	4.21	0.59	0.67	2.08	2.30	0.06	T	4.99	0.25	13.75	41.23
1993	18.37	9.67	6.99	2.48	1.17	3.72	0.00	0.00	0.00	2.19	2.12	M1.33	48.04
1994	2.51	8.52	1.47	3.97	1.83	0.00	0.00	0.00	0.77	2.55	9.99	M4.40	36.01
1995	21.59	1.33	M20.30	M8.43	6.48	1.30	0.02	0.00	0.00	0.00	0.15	11.18	70.78
1996	14.47	M14.55	7.18	4.04	5.43	0.77	0.00	0.03	0.07	2.76	11.36		60.66

1997	31.33	0.62	0.35	1.06	0.78	1.56	0.11	0.00	0.36	0.97	4.32	4.79	46.25
1998	16.46	18.45	8.15	5.05	5.81	2.64	0.00	0.00	2.81	0.55	6.91	2.66	69.49
1999	13.40	14.13	3.12	3.57	0.95	1.05	0.00	0.02	0.60	1.20	4.00	0.38	42.42
2000	19.50	16.41	2.81	3.31	2.99	0.76	T	0.04	1.28	4.30	1.85	1.41	54.66
2001	5.11	7.15	3.77	7.19	0.03	0.02	0.34	0.00	0.52	2.07	8.96	12.29	47.45
2002	4.13	3.28	6.46	2.17	2.26	0.15	0.00	0.00	0.14	0.00	9.70	13.87	42.16
2003	1.34	2.48	3.98	10.29	3.11	0.00	0.16	1.34	0.00	0.00	4.67	13.90	41.27
2004	4.47	9.68	1.72	0.52	0.82	0.00	0.00	0.00	0.12	13.05	1.70	9.71	41.79
2005	14.77	7.09	11.48	3.00	6.56	0.83	0.00	0.18	0.95	1.84	2.79	22.78	72.27
2006	11.06	3.55	12.76	9.80	1.50	0.13	0.37	0.01	0.00	1.40	2.44	5.46	48.48
2007	1.70	11.09	1.30	2.91	1.48	0.02	0.11	0.04	0.93	1.34	0.62	6.09	27.63
2008	11.14	13.78	0.64	0.31	1.43	0.03	0.04	0.00	T	2.01	4.77	7.94	42.09
2009	7.18	11.38	7.59	2.24	4.66	1.01	T	0.39	0.08	6.13	0.96	9.51	51.13
2010	9.12	7.35	5.68	7.92	3.15	0.01	0.00	0.00	0.01	10.01	M9.27	21.05	73.57
2011	3.54	8.78	17.77	M2.14	4.34	M3.60	M0.00	M0.00	M0.70	M3.12	M1.71	M0.00	45.70
2012	M9.54	M2.68	7.22	M6.06	M0.24	0.95	0.06	M0.20	M0.05	M1.47	M4.74		33.21
2013								M0.00	M0.48	0.75	1.14	1.60	3.97
2014	2.14	8.66	5.29	4.19	0.88	0.23	2.00	0.09	0.97	0.08	4.33	6.26	35.12
2015	0.13	6.14	0.83	3.69	1.75	0.54	1.64	0.08	0.10	1.49	5.73	M12.30	34.42
2016	M11.61	1.71	11.01	2.90	M1.95	0.40	0.00	0.00	0.07	10.42	M3.13	M12.05	55.25
2017	M29.92	25.79	5.53	8.34	0.57	0.31	0.00	0.07	1.50	0.53	M8.43	M0.37	81.36
2018	M5.50	M1.27	18.91	3.68	M0.58	0.00	M0.08	M0.00	M0.00	0.42	8.92	3.29	42.65
2019	9.53	21.07	9.33	1.67	8.23	0.96							50.79

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2016-07-22

# Appendix C

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## Plant Species List



## Appendix C. Plant Species Observed



Scientific name	Common name	Indicator Status	Native?
<b>DICOTS</b>			
<b>ANACARDIACEAE</b>			
<i>Toxicodendron diversilobum</i>	poison oak	FACU	Yes
<b>ASTERACEAE</b>			
<i>Artemisia douglasiana</i>	California mugwort	FACW	Yes
<i>Carduus pycnocephalus</i>	Italian thistle	NL	No
<i>Grindelia</i> sp.	gumplant	-	-
<b>BETULACEAE</b>			
<i>Alnus rhombifolia</i>	white alder	FACW	No
<b>BERBERIDACEAE</b>			
<i>Berberis aquifolium</i>	Oregon grape	FACU	Yes
<b>BORAGINACEAE</b>			
<i>Eriodictyon californicum</i>	Yerba santa	NL	Yes
<b>CAPRIFOLIACEAE</b>			
<i>Lonicera</i> sp.	honeysuckle	-	-
<b>CUCURBITACEAE</b>			
<i>Marah watsonii</i>	manroot	NL	Yes
<b>ERICACEAE</b>			
<i>Arctostaphylos viscida</i>	mariposa manzanita	NL	Yes
<i>Rhododendron occidentale</i>	western azalea	FAC	Yes
<b>FABACEAE</b>			
<i>Lupinus</i> sp.	lupine	-	Yes
<i>Lupinus bicolor</i>	bicolored lupine	NL	Yes
<b>FAGACEAE</b>			
<i>Quercus kelloggii</i>	black oak	NL	Yes
<b>OLEACEAE</b>			
<i>Fraxinus latifolia</i>	Oregon ash	FACW	Yes
<b>ONAGRACEAE</b>			
<i>Clarkia</i> sp.	clarkia	-	-
<b>PLANTAGINACEAE</b>			
<i>Plantago lanceolata</i>	English plantain	FACU	No
<b>RHAMNACEAE</b>			
<i>Ceanothus cuneatus</i>	wedgeleaf ceanothus	NL	Yes
<i>Ceanothus</i> sp.		-	-
<b>PHRYMACEAE</b>			
<i>Erythranthe guttata</i>	yellow monkey flower	FAC	Yes
<b>ROSACEAE</b>			
<i>Chamaebatia foliosa</i>	mountain misery	NL	Yes
<i>Heteromeles arbutifolia</i>	toyon	NL	Yes
<i>Potentilla</i> sp.	cinquefoil	-	Yes
<i>Rosa</i> sp.	unknown shrub	-	-

## Appendix C. Plant Species Observed



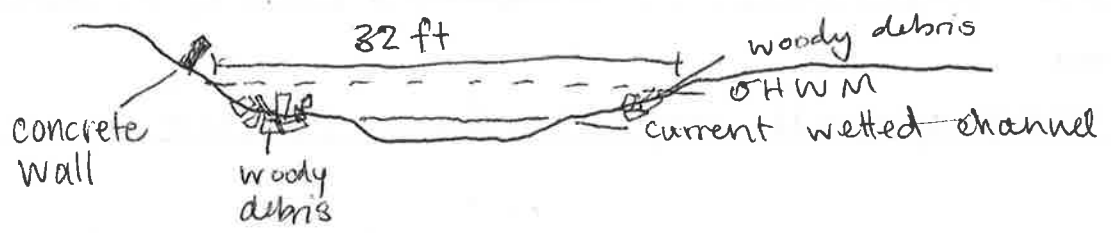
<i>Rubus armeniacus</i>	Himalayan blackberry	-	No
<i>Rubus spectabilis</i>	Salmonberry	-	Yes
<b>SALICACEAE</b>			
<i>Salix</i> sp.	willow	-	Yes
<b>SCROPHULARIACEAE</b>			
<i>Verbascum</i> sp.	mullein	-	-
<b>GYMNOSPERM</b>			
<b>PINACEAE</b>			
<i>Pinus jeffreyi</i>	Jeffery pine	NL	Yes
<i>Pinus ponderosa</i>	Ponderosa pine	FACU	Yes
<i>Pseudotsuga menziesii</i>	Douglas fir	FACU	Yes
<b>CUPRESSACEAE</b>			
<i>Calocedrus decurrens</i>	incense cedar	NL	Yes
<b>MONOCOTS</b>			
<b>CYPERACEAE</b>			
<i>Carex</i> sp.	sedge	OBL	Yes
<b>POACEAE</b>			
<i>Bromus diandrus</i>	ripgut brome	NL	No
<i>Bromus hordeaceus</i>	soft chess	FACU	No
<i>Cynosurus echinatus</i>	dogtail grass	NL	No
<b>JUNCACEAE</b>			
<i>Juncus balticus</i>	Baltic rush	FACW	Yes
<b>THEMIDACEAE</b>			
<i>Triteleia laxa</i>	Ithuriel's spear	NL	Yes
<b>PTERIDOPHYE</b>			
<b>EQUISETACEAE</b>			
<i>Equisetum hyemale</i>	scouringrush horsetail	FACW	Yes
<b>PTERIDACEAE</b>			
<i>Pentagramma triangularis</i>	bracken fern	NL	Yes

# Appendix D

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## Ordinary High Water Datasheets

**Transect (cross-section) drawing:** (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



**FAUNA UP STREAM**

**Break in Slope at OHWM:**  Sharp (> 60°) |  Moderate (30-60°) |  Gentle (< 30°) |  None

Notes/Description: Break in slope consistent <sup>~15°</sup> on right bank and more gentle on left bank

**Sediment Texture:** Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 - 2mm	Gravel 2mm - 1cm	Cobbles 1 - 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	20	80	—	—	—	N
Below OHWM	5	<del>45</del> 45	—	50	—	N

Notes/Description: Cobbles may have been placed in center of stream

**Vegetation:** Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	30	<del>90</del> 0	20	75
Below OHWM	50	<del>4</del> 0	2	95

Notes/Description: Some large trees located in channel, more tree canopy cover above channel. Some grass and Equisetum in channel, upland herb is

**Other Evidence:** List/describe any additional field evidence and/or lines of reasoning used to support your delineation  
~~mostly~~ has blackberry as dominant species.

clear shift in sediment texture, change in vegetation species composition and vegetation cover, break in bank slope, drift deposit along banks.

Project: San Jose Family Camp Date: 5/18/2019

Location: Below dam/pool Investigator(s): V. Kuehn, R. Hunter

Project Description:

Repair retaining wall, improve dam structure

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

Riprap along right bank, woody debris along right & left bank, trees on at bank toe, retaining concrete wall (failed) at ~1 foot above OHWM on right bank

Off-site Information

Remotely sensed image(s) acquired? [X] Yes [ ] No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? [X] Yes [ ] No [If yes, attach information to datasheet(s) and describe below.] Description: NWI

List and describe any other supporting information received/acquired:

NRCS Soils

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Project: San Jose Family Camp Date: 5/18/2019Location: tributary to river Investigator(s): V. Kuehn, R. Hunter**Project Description:**

Repair retaining walls, improve dam structure

**Describe the river or stream's condition (disturbances, in-stream structures, etc.):**

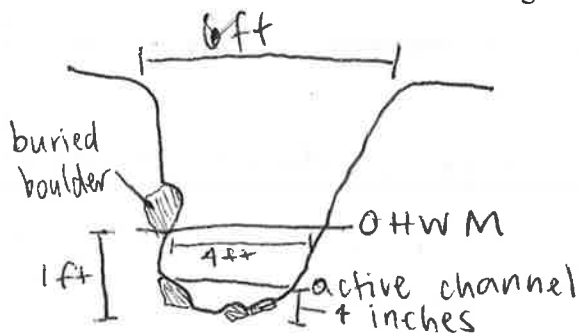
Rip rap / large boulders along bank

**Off-site Information****Remotely sensed image(s) acquired?**  Yes  No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:**Hydrologic/hydraulic information acquired?**  Yes  No [If yes, attach information to datasheet(s) and describe below.] Description:**List and describe any other supporting information received/acquired:**

NRCS Soils

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

**Transect (cross-section) drawing:** (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



FAUNG UPSTREAM

**Break in Slope at OHWM:**  Sharp (> 60°) |  Moderate (30-60°) |  Gentle (< 30°) |  None

Notes/Description: Steep Eroded bank walls

**Sediment Texture:** Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 - 2mm	Gravel 2mm - 1cm	Cobbles 1 - 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	20	80	0	0	5	N
Below OHWM	20	60	0	10	10	N

Notes/Description: Erosion on steep walls, boulder(s) embedded in soil.

**Vegetation:** Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	50	0	60	35
Below OHWM	50	0	5	95

Notes/Description: No tree trunks below OHWM, one rush located below OHW.

**Other Evidence:** List/describe any additional field evidence and/or lines of reasoning used to support your delineation

Water staining on ~~rip~~ boulders, exposed roots on eroded stream banks, change in vegetative cover, change in vegetation type

# Appendix E

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ORM Upload Sheet



Appendix E: ORM Upload Sheet

Waters_Name	State	Cowardin_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude
W-1	CALIFORNIA	R3UB	Area	0.747	ACRE	TNWW	37.828569	-120.006628
W-2	CALIFORNIA	R4SB	Area	0.004	ACRE	TNWW	37.829026	-120.006629
CW-1	CALIFORNIA		Area	0.001	ACRE	TNWW	37.828927	-120.006577

# Figures

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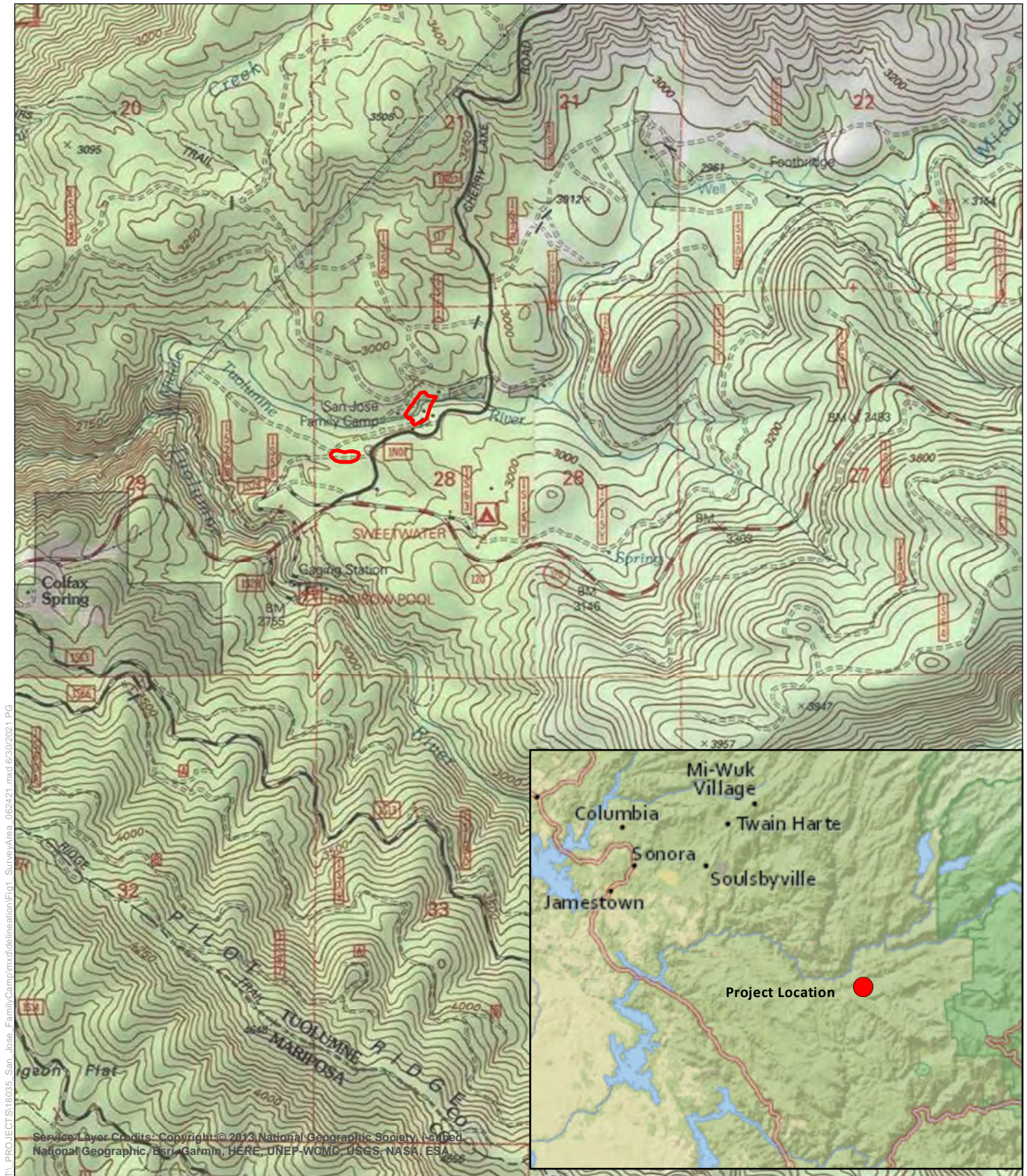
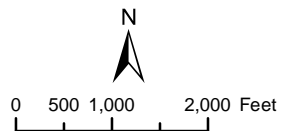


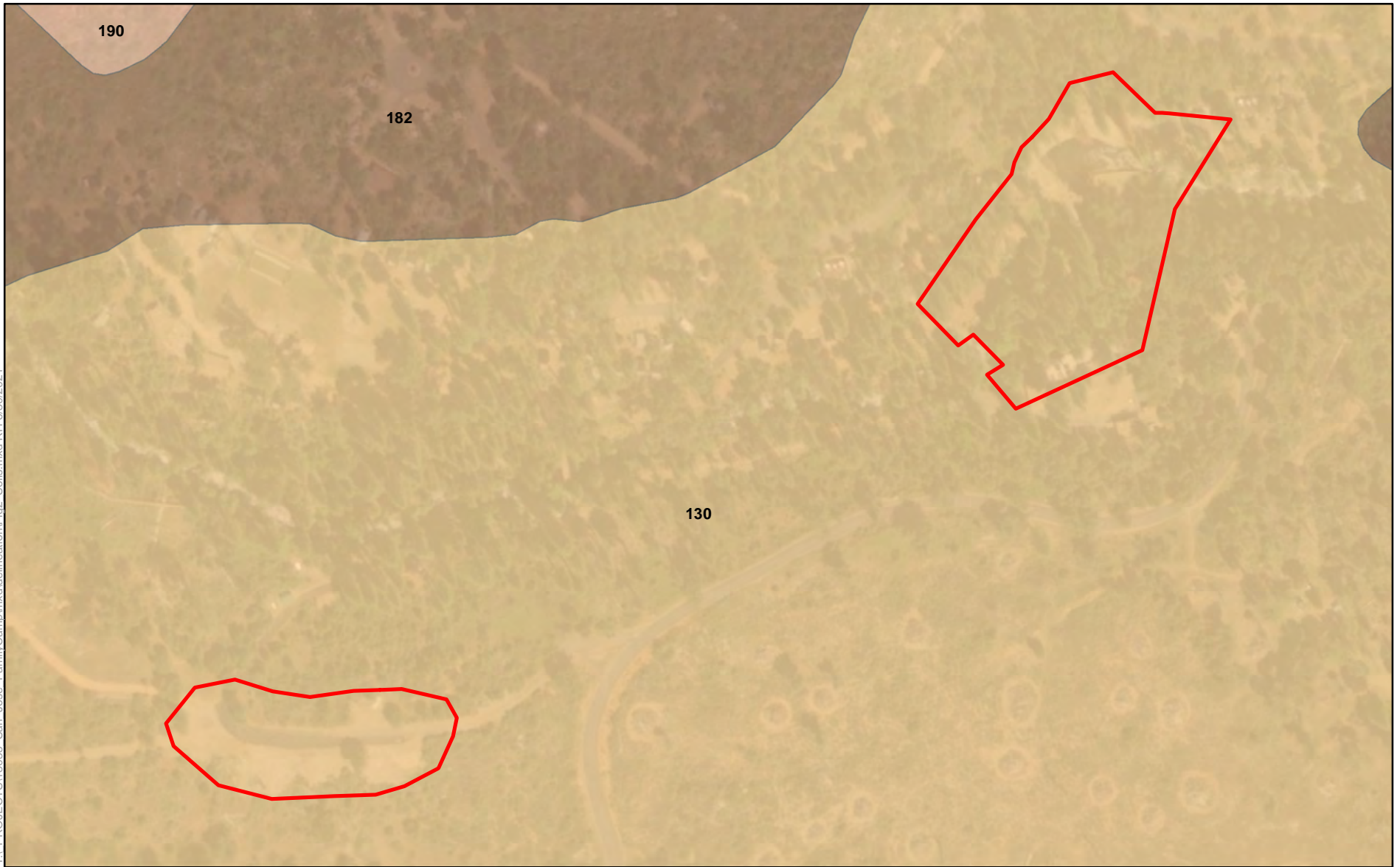
Figure 1

Project Location

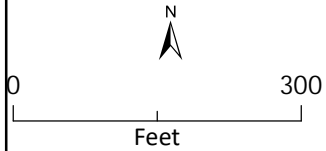





T:\PROJECTS\18035\_San\_Jose\_FamilyCamp\mxd\delineation\Fig2\_Soils.mxd RH 6/30/2021






Data Source: ESRI 2019, USDA-NRCS 2019



 Survey Area

**Soil Type**

-  130 - Holland family, deep-Moderately deep complex, 5 to 35 % slopes
-  182 - Pinole-Holland, deep families association, 5 to 35 % slopes
-  190 - Ultic Haploxerafls-Red Bluff family complex, 35 to 60 % slopes

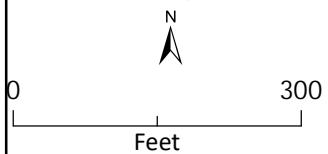
**Figure 2**  
**NRCS Soils**

San Jose Family Camp



T:\PROJECTS\18035\_San\_Jose\_FamilyCamp\mxd\delineation\Fig3\_NWI\_mxd RH 6/30/2021



Data Source: ESRI 2019, USFWS 2019



**Wetland Type**

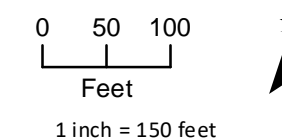
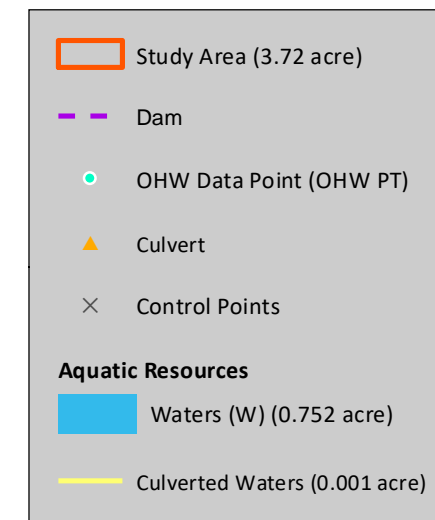
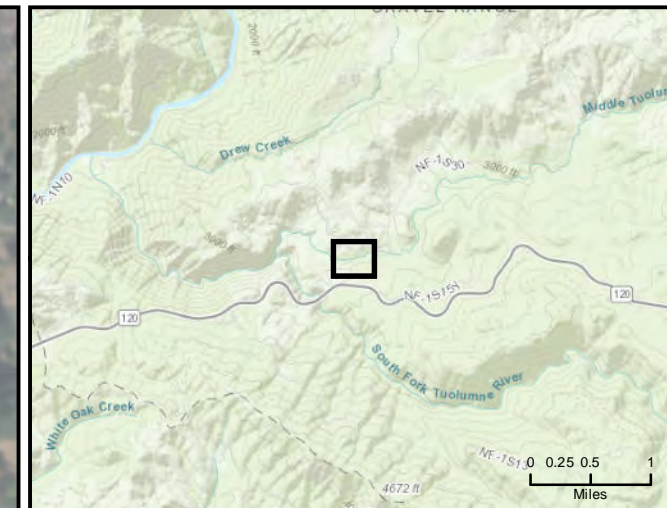
-  Survey Area
-  Riverine

**Figure 3**  
**National Wetland Inventory**

San Jose Family Camp



TA PROJECTS:18035\_San\_Jose\_FamilyCamp\mxd\delimitation\Figure\_4\_Delimitation\_SJ\_FamilyCamp\_062121.mxd 9/14/2021 PG



Spatial Reference System: California State Plane Zone 3, feet (NAD83)  
Imagery Source: 2014 NAIP

<b>PREPARED BY:</b> 	266 Grand Ave Suite 210 Oakland CA 94612 510-986-1850	<b>PREPARED FOR:</b> City of San Jose 200 E. Santa Clara St. San Jose, CA 95113 (408) 535-8404
<b>DRAWN BY:</b> R. Hunter <b>DELINEATION BY:</b> R. Hunter, V. Kuehn <b>DATE OF FIELD WORK:</b> June 18, 2019	<b>USACE REGULATORY FILE:</b> <b>VERIFIED BY:</b> <b>DATE OF VERIFICATION:</b>	
<b>REVISIONS</b>		
DATE	DESCRIPTION	BY

**Figure 4**  
**Aquatic Resources**

San Jose Family Camp