APPENDIX B

BIOLOGICAL RESOURCES DOCUMENTATION

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Yreka Fish And Wildlife Office
1829 South Oregon Street
Yreka, CA 96097-3446
Phone: (530) 842-5763 Fax: (530) 842-4517

In Reply Refer To: February 17, 2021
Consultation Code: 08EYRE00-2021-SLI-0042
Event Code: 08EYRE00-2021-E-00145
Project Name: Callahan

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies federally threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that this list does not reflect State listed species or fulfill requirements related to any California Department of Fish and Wildlife consultation. Additionally, this list does not include species covered by the National Marine Fisheries Service (NMFS). For NMFS species please see the related website at the following link:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

If your project does not involve Federal funding or permits and does not occur on Federal land, we recommend you review this list and determine if any of these species or critical habitat may be affected. If you determine that there will be no effects to federally listed or proposed species or critical habitat, there is no need to coordinate with the Service. If you think or know that there will be effects, please contact our office for further guidance. We can assist you in incorporating measures to avoid or minimize impacts, and discuss whether permits are needed.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential effects to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and

implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

If wetlands, springs, or streams are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html).

Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

The table below outlines lead Service field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project. Please send any documentation regarding your project to that office. Please note that the lead Service field office for your consultation may not be the office listed above in the letterhead. Please visit the following link to view a map of Service field office jurisdictional boundaries:

http://www.fws.gov/yreka/specieslist/JurisdictionalBoundaryES_R8_20150313.pdf

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of the letter you submit to our office along with any request for consultation or correspondence about your project.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*
Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO
Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO

El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO
Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO

Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
Napa	All ownerships but tidal/estuarine	All	SFWO
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)
Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO

San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO
San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO
Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO

Siskiyou	Shasta Trinity National Forest	All	YFWO
Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)
Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO

Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

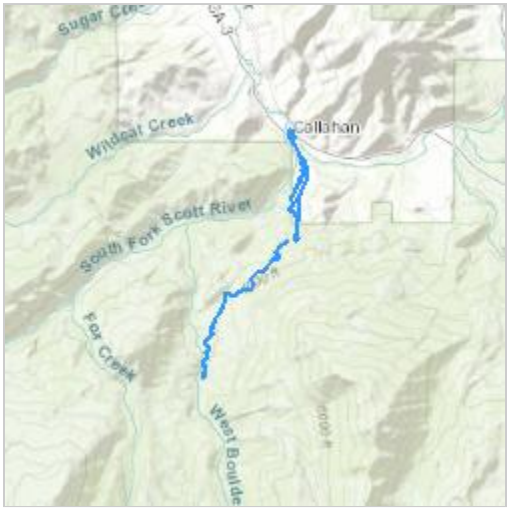
This species list is provided by:

Yreka Fish And Wildlife Office
1829 South Oregon Street
Yreka, CA 96097-3446
(530) 842-5763

Project Summary

Consultation Code: 08EYRE00-2021-SLI-0042
Event Code: 08EYRE00-2021-E-00145
Project Name: Callahan
Project Type: WATER SUPPLY / DELIVERY
Project Description: 635-01
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.30057585,-122.79950683479495,14z



Counties: Siskiyou County, California

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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

Birds

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Amphibians

NAME	STATUS
Oregon Spotted Frog *Rana pretiosa* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6633	Threatened

Fishes

NAME	STATUS
Lost River Sucker *Deltistes luxatus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5604	Endangered
Shortnose Sucker *Chasmistes brevirostris* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7160	Endangered

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Gentner's Fritillary *Fritillaria gentneri* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8120	Endangered
Mcdonald's Rock-cress *Arabis macdonaldiana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6849	Endangered
Yreka Phlox *Phlox hirsuta* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8243	Endangered

Critical habitats

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

National Marine Fisheries Service Species List

Callahan Water District Water Improvement Project

February 19, 2021

Quad Name **Callahan**
Quad Number **41122-C7**

ESA Anadromous Fish

SONCC Coho ESU (T) - **X**
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat - **X**
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH - X
Chinook Salmon EFH - X
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

CNDDB Report Summary

Five-Mile Radius of Project Area
February 2021

Listed Element	Quadrangle [1]							Status [2]
	BP	**CL**	DP	EP	GM	SM	TBL	
ANIMALS								
California wolverine				•		•		ST, SFP
Cascades frog	•	•	•	•		•	•	SCE, SSSC
Fisher-west coast DPS				•				SSSC
Foothill yellow-legged frog			•	•		•		SE, SSSC
Pacific marten		•						None
Pacific tailed frog	•	•	•	•		•		SSSC
Prairie falcon					•			WL
Southern long-toed salamander	•							SSSC
Suckley's cuckoo bumble bee						•		SCE
Western bumble bee		•				•		SCE
PLANTS								
Engelmann spruce				•				2B.2
Klamath manzanita						•	•	1B.2
Modoc green-gentian						•		2B.3
Mt. Shasta sky pilot		•						1B.2
Oregon sedge						•		2B.3
Pickering's ivesia		•				•		1B.2
Scott Mountain bedstraw	•	•	•			•		1B.2
Scott Mountain howellanthus						•	•	4.3
Scott Mountain sandwort				•		•		1B.3
Scott Valley phacelia		•				•		1B.2
Showy raillardella	•						•	1B.2
Silky balsamroot		•				•		1B.3
Siskiyou fireweed	•							1B.3
Siskiyou phacelia	•							1B.3
Subalpine fir	•			•				2B.3
Woolly balsamroot		•						1B.2
NATURAL COMMUNITIES								
Darlington Seep	•	•				•		None

Highlighting denotes the quadrangle in which the project site is located

[1]QUADRANGLE CODE

BP	Billys Peak
CL	Callahan
DP	Deadman Peak
EP	Eaton Peak
GM	Gazelle Mtn.
SM	Scott Mountain
TBL	Tangle Blue Lake

[2]STATUS CODES

Federal

FE	Federally Listed – Endangered
FT	Federally Listed – Threatened
FC	Federal Candidate Species
FP	Federal Proposed Species
FD	Federally Delisted
FSC	Federal Species of Concern

State

SFP	State Fully Protected
SR	State Rare
SE	State Listed – Endangered
ST	State Listed – Threatened
SC	State Candidate Species
SD	State Delisted
SSSC	State Species of Special Concern
WL	Watch List

Rare Plant Rank

1A Plants Presumed Extinct in California and either Rare or Extinct Elsewhere
1B Plants Rare, Threatened or Endangered in California and Elsewhere
2A Plants Presumed Extinct in California but Common Elsewhere
2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3 Review List: Plants About Which More Information is Needed
4 Watch List: Plants of Limited Distribution

Rare Plant Threat Ranks

0.1 Seriously Threatened in California
0.2 Fairly Threatened in California
0.3 Not Very Threatened in California

TABLE 2
California Native Plant Society
Inventory of Rare and Endangered Plants
U.S. Geological Survey's Callahan 7.5-minute Quadrangle

Common Name	Scientific Name	CA Rare Plant Rank	Blooming Period	State Listing Status	Federal Listing Status
California pitcherplant	*Darlingtonia californica*	4.2	Apr-Aug	None	None
Engelmann's lomatium	*Lomatium engelmannii*	4.3	May-Aug	None	None
Greene's buckwheat	*Eriogonum strictum var. greenei*	4.3	Jul-Sep	None	None
Modoc green-gentian	*Frasera albicaulis var. modocensis*	2B.3	May-Jul	None	None
Mountain lady's-slipper	*Cypripedium montanum*	4.2	Mar-Aug	None	None
Mt. Shasta sky pilot	*Polemonium pulcherrimum var. shastense*	1B.2	Jun-Sep	None	None
Pickering's ivesia	*Ivesia pickeringii*	1B.2	June- Aug (Oct)	None	None
Red-stemmed cryptantha	*Cryptantha rostellata*	4.2	Apr-Jun	None	None
Scott Mountain bedstraw	*Galium serpenticum ssp. scotticum*	1B.2	May-Aug	None	None
Scott Mountain sandwort	*Sabulina stolonifera*	1B.3	May-Aug	None	None
Scott Valley phacelia	*Phacelia greenei*	1B.2	Apr-Jun	None	None
Silky balsamroot	*Balsamorhiza sericea*	1B.3	Apr-May (Jun-Jul)	None	None
Siskiyou onion	*Allium siskiyouense*	4.3	(Apr) May-Jul	None	None
Tracy's collomia	*Collomia tracyi*	4.3	Jun-Jul	None	None
Woolly balsamroot	*Balsamorhiza lanata*	1B.2	Apr-Jun	None	None

Rare Plant Rank	
1A	Plants presumed extinct in California and either rare or extinct elsewhere
1B	Plants rare, threatened or endangered in California and elsewhere
2A	Plants presumed extinct in California but common elsewhere
2B	Plants rare, threatened, or endangered in California but common elsewhere
3	Review List: Plants about which more information is needed (generally not considered special-status, unless unusual circumstances warrant)
4	Watch List: Plants of limited distribution (generally not considered special-status, unless unusual circumstances warrant)
Rare Plant Threat Rank	
0.1	Seriously threatened in California
0.2	Moderately threatened in California
0.3	Not very threatened in California

Source: *California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). http://www.rareplants.cnps.org. Accessed February 2021.*

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
PLANTS							
Engelmann spruce	*Picea engelmannii*	2B.2	Engelmann spruce, a perennial evergreen tree, occurs in cool, moist habitats in upper montane coniferous forests between 3,500 and 7,000 feet in elevation. The species grows to mature heights of 80 to 130 feet.	No	No	No	Engelmann spruce was not observed during the botanical surveys and is not expected to be present.
Gentner's fritillary	*Fritillaria gentneri*	FE, 1B.1	Gentner's fritillary is a perennial bulbiferous herb that occurs in chaparral and cismontane woodland habitats, sometimes in serpentine soils. The species is found between 3,200 and 3,700 feet in elevation. The flowering period is April through May.	No	No	No	Gentner's fritillary is known from only two locations in California, both near the Oregon border; the nearest population is ±42 miles away. Gentner's fritillary was not observed during the botanical surveys and is not expected to be present.
Klamath manzanita	*Arctostaphylos klamathensis*	1B.2	Klamath manzanita, a perennial evergreen shrub, occurs on rocky serpentine and gabbro soils in montane coniferous and subalpine forests. The species is reported between 4,900 and 7,100 feet in elevation. The flowering period is May through August.	No	No	No	The project site is below the elevational range for Klamath manzanita. Klamath manzanita was not observed during the botanical surveys and is not expected to be present.
McDonald's rock-cress	*Arabis macdonaldiana*	FE, SE, 1B.1	McDonald's rock-cress is a perennial herb that occurs on rocky outcrops, ridges, slopes, and flats in lower and upper montane coniferous forest on serpentine soils. The species is reported between 450 and 5,900 feet in elevation. The flowering period is May to July.	Yes	No	No	Although marginally suitable habitat for McDonald's rock-cress is present on the project site, the species was not observed during the botanical surveys and is not expected to be present.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Modoc green-gentian	*Frasera albicaulis* var. *modocensis*	2B.3	Modoc green-gentian is a perennial herb that occurs in openings in Great Basin scrub and upper montane coniferous forests. The species is reported between 3,000 and 6,000 feet in elevation. The flowering period is May to July.	Yes	No	No	According to CNDDB records, the closest reported occurrence of Modoc green-gentian is approximately two miles northeast of the project site. Although marginally suitable habitat for Modoc green-gentian is present in the project site, the species was not observed during the botanical surveys and is not expected to be present.
Mt. Shasta sky pilot	*Polemonium pulcherrimum* var. *shastense*	1B.2	Mt. Shasta sky pilot, a perennial herb, occurs on alpine boulders and rock fields, subalpine coniferous forests, and upper montane coniferous forest, and sometimes volcanic habitats. The species is reported between 7,100 and 12,800 feet in elevation. The flowering period is June to September.	No	No	No	The project site is well below the known elevational range of Mt. Shasta sky pilot. Mt. Shasta sky pilot was not observed during the botanical surveys and is not expected to be present.
Oregon sedge	*Carex halliana*	2B.3	Oregon sedge is a perennial herb that occurs in meadows and seeps, subalpine coniferous forests, and upper montane coniferous forests, and often on pumice. The species is reported between 4,200 and 6,900 feet in elevation. The flowering period is July to September.	Yes	No	No	According to CNDDB records, the nearest occurrence of Oregon sedge, reported in 1956, is approximately 5 miles southeast of the project site. Although marginally suitable habitat is present, Oregon sedge was not observed during the botanical surveys.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Pickering's ivesia	*Ivesia pickeringii*	1B.2	Pickering's ivesia occurs in hanging bogs on serpentine ledges between 2,500 and 4,500 feet above sea level in Siskiyou and Trinity counties. The flowering period is June through October.	No	No	No	According to CNDDB records, the closest reported occurrence of Pickering's ivesia is approximately 2 miles west of the project site. However, no potentially suitable habitat for Pickering's ivesia is present on the project site. Pickering's ivesia was not observed during the botanical surveys and is not expected to be present.
Scott Mountain bedstraw	*Galium serpenticum* ssp. *scotticum*	1B.2	Scott Mountain bedstraw is a perennial herb that occurs in lower montane coniferous forest, generally on north-facing slopes on serpentine soils. The species is reported between 3,200 and 6,800 feet above sea level. The flowering period is May through August.	Yes	No	No	According to CNDDB records, the closest reported occurrences of Scott Mountain bedstraw are approximately 0.5 miles and 0.8 miles east of the project site. Although potentially suitable habitat for Scott Mountain bedstraw occurs in the project site, the species was not observed during the botanical surveys.
Scott Mountain sandwort	*Sabulina stolonifera*	1B.3	Scott Mountain sandwort is a perennial herb that occurs in lower montane coniferous forest/Jeffrey pine forest in serpentine soils, often on rock slopes and cutbanks. The species is reported between 4,100 and 5,300 feet in elevation. The flowering period is May through August.	Yes	No	No	According to CNDDB records, the closest reported occurrence of Scott Mountain sandwort is approximately 2.5 miles west of the project site. Although potentially suitable habitat is present, Scott Mountain sandwort was not observed during the botanical surveys.
Scott Valley phacelia	*Phacelia greenei*	1B.2	Scott Valley phacelia generally occurs on bare, gravelly serpentine ridges and slopes in montane coniferous forests. The species is reported between 2,600 and 8,000 feet in elevation. The flowering period is April through June.	No	No	No	No potentially suitable habitat for Scott Valley phacelia is present on the project site. The species was not observed during the botanical surveys and is not expected to be present.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Showy raillardella	*Raillardella pringlei*	1B.2	Showy raillardella associates with streams, bogs, fens, meadows, and seeps on serpentine soils in the Trinity Alps and Shasta-Trinity Divide. The species is reported between 4,000 and 7,500 feet in elevation. The flowering period is July through September.	No	No	No	No potentially suitable habitat for showy raillardella is present on the project site. The species was not observed during the botanical surveys and is not expected to be present.
Silky balsamroot	*Balsamorhiza sericea*	1B.3	Silky balsamroot, a dicot, occurs in lower montane coniferous forests on serpentine soils. The species is reported between 2,700 and 7,000 feet in elevation. The flowering period is generally April through May, although the species is known to flower in June and July.	Yes	No	No	According to CNDDB records, the closest reported occurrence of silky balsamroot is approximately 2 miles northwest of the project site. Although marginally suitable habitat for silky balsamroot is present in the project site, the species was not observed during the botanical surveys.
Siskiyou fireweed	*Epilobium siskiyouense*	1B.3	Siskiyou fireweed occurs on slopes in gravel or serpentine soils in upper montane coniferous forest and subalpine coniferous forests. The species is reported between 5,600 and 8,200 feet in elevation. The flowering period is July through September.	No	No	No	No potentially suitable habitat for Siskiyou fireweed is present on the project site, and the project site is well below the elevational range for the species. Siskiyou fireweed was not observed during the botanical surveys and is not expected to be present.
Siskiyou phacelia	*Phacelia leonis*	1B.3	Siskiyou phacelia, an annual herb, occurs on serpentine soils in rocky to sandy openings within montane coniferous forests, often near meadows and seeps. The species is reported between 3,500 and 7,200 feet in elevation. The flowering period is June through August.	Yes	No	No	According to CNDDB records, the closest reported occurrence of Siskiyou phacelia is approximately 5 miles southeast of the project site. Although marginally suitable habitat for Siskiyou phacelia is present in the project site, the species was not observed during the botanical surveys.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Subalpine fir	*Abies lasiocarpa* var. *lasiocarpa*	2B.3	Subalpine fir occurs in meadows and seeps, subalpine coniferous forests, and upper montane coniferous forests. A medium sized tree is typically 65 to 115 feet tall, and can grow to 165 feet tall. The species is found between 4,000 and 7,200 feet in elevation, and, in California, is known only from Siskiyou County.	No	No	No	No potentially suitable habitat for subalpine fir is present on the project site. The species was not observed during the botanical surveys and is not expected to be present.
Woolly balsamroot	*Balsamorhiza lanata*	1B.2	Woolly balsamroot, a perennial herb, occurs in open areas and grassy slopes in cismontane woodland in Siskiyou County. The species is reported between 2,600 and 6,300 feet. The flowering period is April through June.	Yes	No	No	According to CNDDB records, woolly balsamroot was reported in the general vicinity of Callahan one time in 1951 and is broadly mapped to include the project site. Although potentially suitable habitat for woolly balsamroot is present in the project site, the species was not observed during the botanical surveys and is not expected to be present.
Yreka phlox	*Phlox hirsuta*	FE, SE, 1B.2	Yreka phlox, a low-growing perennial plant, is known from only five locations in Siskiyou County. Suitable habitat consists of dry, rocky, serpentine ridges and upper slopes with southerly to westerly aspects in juniper and Jeffrey pine communities. The species is reported between 2,400 and 4,400 feet in elevation. The flowering period is April through June.	No	No	No	No potentially suitable habitat for Yreka phlox is present on the project site. The species is not expected to be present.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
INVERTEBRATES							
Suckley's cuckoo bumble bee	*Bombus suckleyi*	SCE	In California, Suckley cuckoo bumble bees are limited to the Klamath Mountains. The bee is a social parasite, that has only been documented to reproduce successfully in colonies of western bumble bees. Females emerge in late May, forage primarily on species of composites, and search for a suitable host bumble bee nest. Upon finding a nest, invading female kills the queen, "enslaves" the workers, and lays her eggs in the nest. All offspring are reproductive. Males patrol circuits in search of females. Once mated, females seek a place to overwinter. Very little is known about overwintering sites utilized by the species, although generally, bumble bee females overwinter in soft, disturbed soil or under leaf litter or other debris.	Yes	No	Pot.	According to CNDDB records, Suckley cuckoo bumble bee has been reported in three locations in Siskiyou County. The closest reported occurrence was in July 2009, ±2.5 miles east of the project area near Highway 3.
Western bumble bee	*Bombus occidentalis occidentalis*	SCE	Western bumble bees are found in meadows and grasslands with abundant floral resources. In California, the species is largely confined to high-elevation sites in the Sierra Nevada and scattered sites on the coast. The flight period is generally from early February to late November. Nests are primarily in underground cavities on open west-southwest slopes bordered by trees, although a few aboveground nests have been reported. Very little is known about overwintering site; however, the species has been reported in overwintering sites that were two inches deep in a "steep west slope of the mound of earth."	Yes	No	Pot.	According to CNDDB records, western bumble bee has been reported in several locations in Siskiyou County. In 1934, the species was reported in the project area along the Scott River; this occurrence is broadly mapped by CNDDB to include the community of Callahan.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Conservancy fairy shrimp	*Branchinecta conservatio*	FE	Conservancy fairy shrimp inhabit large, cool-water vernal pools with moderately turbid water.	No	No	No	No vernal pools or other potentially suitable habitats for Conservancy fairy shrimp are present in the project site. Conservancy fairy shrimp would thus not be present.
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	Vernal pool fairy shrimp inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump or basalt-flow depression pools.	No	No	No	No vernal pools or other potentially suitable habitats for vernal pool fairy shrimp are present in the project site. Vernal pool fairy shrimp would thus not be present.
Vernal pool tadpole shrimp	*Lepidurus packardi*	FE	Vernal pool tadpole shrimp occur in vernal pools in California's Central Valley and in the surrounding foothills.	No	No	No	No vernal pools or other potentially suitable habitats for vernal pool tadpole shrimp are present in the project site. Vernal pool tadpole shrimp would thus not be present.
BIRDS							
Northern spotted owl	*Strix occidentalis caurina*	FT, ST	Northern spotted owls inhabit dense, old-growth coniferous forest stands with large trees and a complex array of vegetation types, sizes, and ages. Nesting occurs in dense forests, well protected from open sky. The species may use a broken-off treetop or tree-trunk hollow, a mistletoe tangle, or an old nest left behind by a squirrel or a bird of prey. The species is reported from sea level to approximately 7,600 feet in elevation.	Yes	Yes	Pot.	According to U.S. Fish and Wildlife records, critical habitat for northern spotted owl has been designated approximately 0.3 miles southeast, 0.75 miles south, and 0.8 miles west of the water intake. Critical habitat is also mapped approximately one mile southeast of the proposed water tank site. Because suitable habitat is present in the project area, there is a moderate potential for northern spotted owl to be present.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Prairie falcon	*Falco mexicanus*	WL	Prairie falcons are an uncommon winter resident and utilize a variety of habitats from annual grasslands to alpine meadows. Prairie falcons forage in open terrain near canyons, cliffs, escarpments, and rock outcrops. Nests are constructed on a sheltered ledge or a cliff overlooking a large open area.	No	No	No	No suitable nesting habitat for the prairie falcon is present on the project site. Thus, prairie falcons would not nest on the project site.
Yellow-billed cuckoo	*Coccyzus americanus*	FT, SE	Yellow-billed cuckoos inhabit and nest in extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of the vegetation.	No	No	No	According to CNDDB records, yellow-billed cuckoo has been reported in two locations in Siskiyou County. The closest reported occurrence is approximately 23 miles east of the project area. No suitable nesting habitat for the yellow-billed cuckoo is present on the project site. Thus, yellow-billed cuckoo would not nest on the project site.
AMPHIBIANS							
Cascades frog	*Rana cascadae*	SCE, SSSC	In the Klamath Mountains and southern Cascades of Northern California, the Cascades frog is typically found above 5,000 feet in elevation, but may occur as low as 4,000 feet. Cascades frogs inhabit alpine lakes, inlet and outlet streams to mountain lakes, ponds, and meadows. Breeding occurs between March and mid-August in standing water lacking predatory fish. Adults are typically found in open, sunny areas along shorelines that provide basking and foraging opportunities; they can occasionally move between basins by crossing over mountain ridges.	Yes	No	Pot.	According to CNDDB records, the closest reported occurrence of Cascades frog is in East Boulder Creek, approximately 1.3 miles southeast of the project site at an elevation of 5,700 feet. Although Cascades frogs are typically found at higher elevations and no suitable breeding pools were observed in the project area, adults and juveniles could potentially utilize the project site.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Foothill yellow-legged frog	*Rana boylii*	SE, SSSC	Foothill yellow-legged frogs are typically found in shallow, partly-shaded, perennial streams in areas with riffles and rocky substrates. This frog needs at least some cobble-sized substrate for egg-laying. Foothill yellow-legged frogs generally prefer low- to moderate-gradient streams, especially for breeding and egg-laying, although juvenile and adult frogs may utilize moderate- to steep-gradient streams during summer and early fall.	Yes	No	Pot.	According to CNDDB records, the closest reported occurrences of foothill yellow-legged frogs are in the South Fork Scott River ±3 miles west of the project site, and at the confluence of Grouse Creek and the Carmen Creeks, ±4.5 miles east of the project site. Boulder Creek in the vicinity of the water intake provides potentially suitable habitat for foothill yellow-legged frogs; the species could potentially be present in the project site.
Oregon spotted frog	*Rana pretiosa*	FT, SSSC	Oregon spotted frogs are typically found in or near a perennial body of water that includes zones of shallow water and abundant emergent or floating aquatic plants, which the frogs use as basking sites and for escape cover. The frog prefers large, warm marshes (minimum size of ±9 acres), and is thought to be extirpated from California.	No	No	No	No suitable habitat for the Oregon spotted frog is present on the project site. The Oregon spotted frog would thus not be present on the project site.
Pacific tailed frog	*Ascaphus truei*	SSSC	In California, the Pacific tailed frog occurs in permanent streams of low temperatures in conifer-dominated habitats, including coast redwood, Douglas-fir, Klamath mixed-conifer, and ponderosa pine habitats. This frog also occurs in montane hardwood-conifer habitats. Pacific tailed frogs occur more often in mature or late-successional stands than in younger stands. During the day, adults seek cover under submerged rocks and logs in the stream or occasionally under similar surface objects close to the stream.	Yes	No	Pot.	According to CNDDB records, Pacific tailed frog has been reported in East Boulder Creek approximately 0.3 miles east of the water intake. Potentially suitable habitat for Pacific tailed frog is present in the project site, and the species has a moderate potential to be present.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Southern long-toed salamander	*Ambystoma macrodactylum sigillatum*	SSSC	The southern long-toed salamander is found primarily in yellow pine, mixed conifer and red fir forests associated with mountain meadows. Adults spend most of their life underground in mammal burrows or rock fissures. Adults migrate seasonally to and from breeding ponds and may then be found under bark, rocks, and rotting wood near the breeding ponds. The breeding period is dependent on snowpack, but generally occurs in late May and July. Larvae metamorphose prior to the drying of temporary breeding ponds, but at high elevations, may overwinter in permanent ponds.	No	No	No	CNDDB records identify 37 occurrences of southern long-toed salamander in Siskiyou County, with all but two being at elevations of 4500 feet or higher. The nearest occurrences are at Telephone Lake, ±3.4 miles southeast of the project site and in West Boulder Creek, ±3.8 miles south of the project site. The species is not expected to be present due to the absence of mountain meadows and breeding ponds.
FISH							
Lost River sucker	*Deltistes luxatus*	FE, SE	The Lost River sucker is native to the Lost River and Upper Klamath River, and is adapted to lakes within these watersheds. In lakes and reservoirs, adult suckers prefer shallow water with vegetation. Spawning occurs from late February to early May. Lake populations spawn in tributary streams, or around springs near the shoreline. River populations spawn in riffles or runs with gravel or cobble substrate, moderate flow, and at depths less than four feet.	No	No	No	The project site is well outside the range of the Lost River sucker; thus, the species would not be present.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Shortnose sucker	*Chasmistes brevirostris*	FE, SE	The shortnose sucker is known to inhabit Upper Klamath Lake and its tributaries, the Lost River, Clear Lake, Gerber Reservoir, the Tule Lake sump, and the Klamath River upstream of Keno. Spawning occurs from early April to early May. Lake populations spawn in tributary streams, or around springs near the shoreline. River populations spawn in riffles or runs with gravel or cobble substrate, moderate flow, and at depths less than four feet.	No	No	No	The project site is located well outside the range of the shortnose sucker; thus, the species would not be present.
Southern Oregon/Northern California Coast (SONCC) Coho Evolutionary Significant Unit (ESU)	*Oncorhynchus kisutch pop. 2*	FT	Coho salmon are anadromous fish that, in California, may be found in many of the short, coastal drainages from the Oregon border south to Monterey Bay. In larger coastal drainages, coho salmon are found primarily in the lower sections. Spawning migrations begin after heavy, late autumn or winter rains encourage the returning adults to leave the ocean and move upstream. Spawning occurs in gravel/pebble substrate in cold, well-oxygenated water. Juvenile rearing usually occurs in tributary streams with a gradient of 3 percent or less. Typical juvenile rearing habitat consists of slow moving, complex pool habitat commonly found within small, heavily forested tributary streams.	Yes	Yes	Yes	According to the NOAA Fisheries *Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon* (2014), the South Fork Scott River, East Fork Scott River, and Boulder Creek are identified as "key streams" in which SONCC coho salmon have been observed since 2001. Critical habitat and essential fish habitat for the species also occur in the USGS Callahan quadrangle. CDFW staff has confirmed that steelhead, trout and salmon are present in Boulder Creek.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
MAMMALS							
California wolverine/ North American wolverine	*Gulo gulo/ Gulo gulo luscus*	ST, SFP	Wolverines are dependent on areas in high mountains, near the tree-line, where conditions are cold year-round and snow cover persists well into May. Females use birthing dens that are excavated in snow. Persistent, stable snow greater than 1.5 meters deep appears to be a requirement for birthing dens. Birthing dens consist of tunnels that contain well-used runways and bed sites and may incorporate shrubs, rocks, and downed logs as part of their structure. Birthing dens may occur on rocky sites, such as north-facing boulder talus or subalpine cirques. Wolverines are very sensitive to human activities and often abandon den sites in response to human disturbance.	No	No	No	According to CNDDB records, the nearest reported occurrences of the California wolverine are approximately 3.7 miles west and 3.8 miles east of the project site. Although undocumented reports of wolverine in Siskiyou County were made in the 1980s, no occurrences were documented in California between 1922 and 2008. A single male was detected near Truckee in 2008 and in subsequent years. Wolverines have not been observed in Siskiyou County for decades, it is not anticipated that the species would be present.
Fisher - West Coast DPS	*Pekania pennanti*	SSSC*	Fishers inhabit mixed-conifer forests dominated by Douglas-fir, as well as higher elevation fir and pine forests, and mixed evergreen/broadleaf forests. Suitable habitat for fishers consists of large areas of mature, dense forest stands with greater than 50 percent canopy closure; high canopy cover, large diameter trees, large snags, and large downed logs are important habitat elements. Fishers den in cavities in large trees, snags, logs, rocky areas, or shelters provided by slash or brush piles. Fishers are very sensitive to human activities. Den sites are most often found in areas with no human disturbance.	No	No	No	According to CNDDB records, the closest reported occurrence of the fisher is approximately 3.8 miles southwest of the project site. However, the project site lacks the late-seral forest habitat elements preferred/required by fishers. No suitable habitat for the fisher is present in the project site. The species would thus not be present.

Potential for Special-Status Species to Occur on the Project Site

February 2021

COMMON NAME	SCIENTIFIC NAME	STATUS [1]	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
Gray wolf	*Canis lupus*	FD, SE	Gray wolves are habitat generalists and populations can be found in any type of habitat in the Northern Hemisphere from about 20° latitude to the polar ice pack. Key components of preferred wolf habitat include a year-round abundance of natural prey, secluded denning and rendezvous sites, and sufficient space with minimal human disturbance. Den sites are often near water, and are usually elevated. Wolf packs establish and defend territories that may range from 20 to 400 square miles. Wolves travel over large areas to hunt, and may cover as much as 30 miles in a day. Young wolves may disperse several hundred miles to seek out a mate or to establish their own pack.	No	No	No	A gray wolf pack, known as the "Shasta Pack" became established in southeastern Siskiyou County in 2015, but is not currently thought to exist. According to CDFW (July 2019), known resident gray wolf territories are presently limited to Lassen and Plumas counties. Therefore, it is highly unlikely that gray wolves would be present in the project area.

* The West Coast Distinct Population Segment (DPS) of fishers has recently been split into a Southern Sierra Nevada DPS and a Northern California/Southern Oregon DPS. The former is now state and federally listed, while the latter is a State Species of Concern.

[1] Status Codes

Federal:

FE	Federally Listed – Endangered
FT	Federally Listed – Threatened
FC	Federal Candidate Species
FP	Federal Proposed Species
FD	Federal Delisted

State:

SFP	State Fully Protected
SR	State Rare
SE	State Listed - Endangered
ST	State Listed - Threatened
SC	State Candidate Species
SCE	Sate Candidate Endangered
SSSC	State Species of Special Concern
WL	Watch List

Rare Plant Rank

1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened or Endangered in California and Elsewhere
2A	Presumed Extirpated in California, but More Common Elsewhere
2B	Rare or Endangered in California, but More Common Elsewhere

Rare Plant Threat Rank

0.1	Seriously Threatened in California
0.2	Fairly Threatened in California
0.3	Not Very Threatened in California

LIST OF VASCULAR PLANT SPECIES OBSERVED

Callahan Water District

May 27, June 8, and July 28, 2019

Adoxaceae	**Muskroot Family**
Sambucus nigra subsp. *caerulea*	Blue elderberry
Agavaceae	**Century-plant Family**
Hastingsia serpentinicola	Siskiyou hastingsia
Alliaceae	**Onion Family**
Allium bolanderi var. *bolanderi*	Bolander's onion
Anacardiaceae	**Sumac Family**
Toxicodendron diversilobum	Poison-oak
Apiaceae	**Carrot Family**
Anthriscus caucalis	Bur-chervil
Lomatium engelmannii	Engelmann's lomatium
Lomatium nudicaule	Pestle lomatium
Osmorhiza berteroi	Mountain sweet-cicely
Apocynaceae	**Dogbane Family**
Asclepias eriocarpa	Indian milkweed
Vinca major	Greater periwinkle
Asteraceae	**Sunflower Family**
Achillea millefolium	Common yarrow
Adenocaulon bicolor	Trailplant
Agoseris sp.	Agoseris
Agoseris heterophylla	Annual agoseris
Antennaria argentea	Silver pussytoes
Artemisia douglasiana	Mugwort
Balsamorhiza deltoidea	Deltoid balsamroot
Centaurea cyanus	Bachelor's button
Cichorium intybus	Chicory
Crepis occidentalis ssp. p*umila*	Western hawks-beard
Ericameria nauseosa	White-stemmed rabbitbrush
Erigeron inornatus var. *inornatus*	California rayless fleabane
Eriophyllum lanatum	Woolly sunflower
Hieraceum sp.	Hawkweed
Hieracium albiflorum	White-flowered hawkweed
Leucanthemum vulgare	Ox-eye daisy
Madia citriodora	Lemon-scented tarweed
Madia exigua	Thread-stemmed madia
Matricaria discoidea	Pineapple weed
Micropus californicus var. *californicus*	Slender cottonweed
Taraxacum officinale	Dandelion
Tragopogon dubius	Goat’s beard
Berberidaceae	**Barberry Family**
Berberis aquifolium	Barberry
Betulaceae	**Birch Family**
Alnus rhombifolia	White alder

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

Callahan Water District

Boraginaceae	**Borage Family**
Amsinckia menziesii	Menzie's fiddleneck
Cryptantha simulans	Pine cryptantha
Myosotis discolor	Yellow scorpion-grass
Nemophila parviflora	Small-flowered nemophila
Pectocarya pusilla	Little pectocarya
Plagiobothrys tenellus	Slender popcorn-flower
Brassicaceae	**Mustard Family**
Athysanus pusillus	Petty athysanus
Boechera pinetorum	Woodland rockcress
Draba verna	Whitlow grass
Erysimum perenne	Sanddune wallflower
Hirschfeldia incana	Shortpod mustard
Isatis tinctoria	Dyer's-woad
Lepidium campestre	English peppergrass
Noccaea fendleri ssp. *glauca*	Penny cress
Turritis glabra	Tower-mustard
Campanulaceae	**Bluebell Family**
Asyneuma prenanthoides	California harebell
Caprifoliaceae	**Honeysuckle Family**
Symphoricarpos sp.	Snowberry
Caryophyllaceae	**Pink Family**
Cerastium glomeratum	Mouse-eared chickweed
Minuartia douglasii	Douglas' sandwort
Silene lemmonii	Lemmon's catchfly
Silene menziesii	Menzie's catchfly
Convolvulaceae	**Morning Glory Family**
Convolvulus arvensis	Bindweed
Cornaceae	**Dogwood Family**
Cornus nuttallii	Mountain dogwood
Cornus sericea	American dogwood
Cupressaceae	**Cypress Family**
Calocedrus decurrens	Incense-cedar
Cyperaceae	**Sedge Family**
Carex sp.	Sedge
Carex amplifolia	Big-leaved sedge
Carex densa	Dense sedge
Carex multicaulis	Many-stemmed sedge
Carex nebrascensis	Nebraska sedge
Eleocharis macrostachya	Creeping spikerush
Dennstaedtiaceae	**Bracken Family**
Pteridium aquilinum var. *pubescens*	Bracken fern

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Drytopteridaceae	**Wood Fern Family**
Polystichum imbricans subsp. *imbricans*	Sword fern
Equisetaceae	**Horsetail Family**
Equisetum arvense	Common horsetail
Ericaceae	**Heath Family**
Arctostaphylos patula	Green-leaved manzanita
Arctostaphylos viscida	White-leaf manzanita
Chimaphila menziesii	Little prince's pine
Pterospora andromedea	Pinedrops
Pyrola picta	Wintergreen
Sarcodes sanguinea	Snow plant
Fabaceae	**Legume Family**
Acmispon americanus	Spanish lotus
Acmispon nevadensis var. *nevadensis*	Sierra Nevada lotus
Astragalus californicus	Klamath milkvetch
Hosackia crassifolia	Big deervetch
Lathyrus lanszwertii var. *lanszwertii*	Lanszwert's pea
Lathyrus latifolius	Perennial sweet pea
Lathyrus nevadensis var. *nevadensis*	Sierra pea
Lupinus albicaulis	Sickle keeled lupine
Lupinus bicolor	Bicolored lupine
Lupinus lepidus var. *lobbii*	Lobb's lupine
Lupinus leucophyllus	Velvet lupine
Lupinus obtusilobus (?)	Satiny lupine
Medicago sativa	Alfalfa
Robinia pseudoacacia	Black locust
Trifolium cyathiferum	Cup clover
Trifolium dubium	Little hop clover
Trifolium hirtum	Rose clover
Trifolium pratense	Red clover
Trifolium repens	White clover
Vicia americana subsp. *americana*	American vetch
Fagaceae	**Oak Family**
Quercus chrysolepis	Canyon live oak
Quercus garryana var. *garryana*	Oregon white oak
Quercus kelloggii	California black oak
Geraniaceae	**Geranium Family**
Erodium cicutarium	Red-stemmed filaree
Grossulariaceae	**Gooseberry Family**
Ribes nevadense	Pink mountain currant
Ribes sp.	Gooseberry
Ribes velutinum	Desert gooseberry
Hydrangeaceae	**Mock Orange Family**
Philadelphus lewisii	Wild mock orange

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Hypericaceae	**St. John's-wort Family**
Hypericum perforatum	Klamath weed
Iridaceae	**Iris Family**
Iris sp.	Iris (horticultural)
Iris sp.	Iris (native)
Juncaceae	**Rush Family**
Juncus balticus subsp. *ater*	Baltic rush
Juncus exiguus (?)	Klamath rush
Juncus orthophyllus	Straight-leaved rush
Luzula sp.	Wood rush
Lamiaceae	**Mint Family**
Monardella odoratissima	Mountain monardella
Liliaceae	**Lily Family**
Fritillaria sp.	Fritillary
Prosartes hookeri	Drops of gold
Malvaceae	**Mallow Family**
Malva neglecta (?)	Common mallow
Montiaceae	**Miner's Lettuce Family**
Claytonia rubra	Miner's lettuce
Myrsinaceae	**Myrsine Family**
Lysmachia latifolia	Pacific starflower
Onagraceae	**Evening-Primrose Family**
Clarkia sp. (*gracilis*?)	Clarkia
Orchidaceae	**Orchid Family**
Corallorhiza maculata	Spotted coralroot
Piperia transversa	Cross-spurred reinorchid
Orobanchaceae	**Broom-rape Family**
Castilleja applegatei subsp. *pinetorum*	Applegate's paintbrush
Papaveraceae	**Poppy Family**
Eschscholzia californica	California poppy
Phrymaceae	**Lopseed Family**
Mimulus guttatus	Common monkey-flower
Pinaceae	**Pine Family**
Abies concolor	White fir
Pinus lambertiana	Sugar pine
Pinus ponderosa	Ponderosa pine
Pseudotsuga menziesii var. *menziesii*	Douglas-fir

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Plantaginaceae	**Plantain Family**
Collinsia linearis	Narrow-leaf collinsia
Plantago lanceolata	English plantain
Tonella tenella	Small-flowered tonella
Poaceae	**Grass Family**
Aira caryophyllea	Silver hairgrass
Bromus carinatus var. *carinatus*	California brome
Bromus diandrus	Ripgut grass
Bromus hordeaceus	Soft chess
Bromus tectorum	Downy brome
Dactylis glomerata	Orchard grass
Elymus glaucus subsp. *glaucus*	Blue wild rye
Festuca arundinacea	Tall fescue
Festuca bromoides	Six-weeks fescue
Festuca microstachys	Reflexed fescue
Festuca myuros	Foxtail fescue
Glyceria declinata	Low mannagrass
Holcus lanatus	Common velvet grass
Hordeum marinum subsp. *gussoneanum*	Mediterranean barley
Hordeum murinum	Foxtail barley
Poa bulbosa	Bulbous bluegrass
Poa pratensis subsp. *pratensis*	Kentucky bluegrass
Poa secunda subsp. *secunda*	One-sided bluegrass
Secale cereale	Rye
Stipa lemmonii	Lemmon's needlegrass
Triticum aestivum	Wheat
Polemoniaceae	**Phlox Family**
Collomia grandiflora	Large-flowered collomia
Microsteris gracilis	Slender phlox
Phlox sp.	Phlox
Polygonaceae	**Buckwheat Family**
Eriogonum compositum	Arrowleaf buckwheat
Eriogonum nudum	Naked buckwheat
Polygonum aviculare subsp. *depressum*	Common knotweed
Rumex acetosella	Sheep sorrel
Rumex crispus	Curly dock
Ranunculaceae	**Buttercup Family**
Ranunculus occidentalis	Western buttercup
Rhamnaceae	**Buckthorn Family**
Ceanothus cuneatus var. *cuneatus*	Buckbrush
Rosaceae	**Rose Family**
Cercocarpus betuloides	Mountain-mahogany
Horkelia daucifolia var. *daucifolia*	Three-toothed horkelia
Holodiscus discolor var. *discolor*	Oceanspray
Physocarpus capitatus	Ninebark
Potentilla recta	Sulphur cinquefoil

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Prunus virginiana var. *demissa*	Western choke-cherry
Purshia tridentata	Antelope bush
Rosa sp.	Wild rose
Rubus armeniacus	Himalayan blackberry
Rubus laciniatus	Cut-leaf blackberry
Rubus leucodermis	Black-capped raspberry
Rubus parviflorus	Thimbleberry
Rubiaceae	**Madder Family**
Galium bolanderi	Bolander's bedstraw
Galium triflorum	Sweet-scented bedstraw
Ruscaceae	**Butcher's Broom Family**
Maianthemum racemosum	Western false Solomon's-seal
Salicaceae	**Willow Family**
Salix sp. (*boothii* ?)	Willow
Salix exigua	Sandbar willow
Salix lasiolepis	Arroyo willow
Salix scouleriana	Scouler's willow
Sapindaceae	**Soapberry Family**
Acer macrophyllum	Big-leaved maple
Saxifragaceae	**Saxifrage Family**
Lithophragma campanulatum	Bell-shaped woodlandstar
Micranthes sp. (*fragosa* ?)	Saxifrage
Scrophulariaceae	**Snapdragon Family**
Verbascum thapsus	Woolly mullein
Solanaceae	**Nightshade Family**
Solanum parishii	Parish's nightshade
Themidaceae	**Brodiaea Family**
Dichelostemma congestum	Fork-tooth ookow
Typhaceae	**Cattail Family**
Typha sp.	Cattail
Ulmaceae	**Elm Family**
Ulmus sp.	Elm (horticultural)
Valerianaceae	**Valerian Family**
Plectritis congesta ssp. b*rachystemon*	Short-spur plectritis
Plectritis macrocera	White plectritis
Verbenaceae	**Vervain Family**
Verbena lasiostachys	Western verbena

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Violaceae	**Violet Family**
Viola purpurea	Goosefoot violet
Viola sheltonii	Shelton's violet
Viscaceae	**Mistletoe Family**
Phoradendron leucarpum subsp. *tomentosum*	Oak mistletoe
Vitaceae	**Grape Family**
Vitis californica	Wild grape
Woodsiaceae	**Cliff Family**
Cystopteris fragilis	Fragile fern