

Biological Resources Documentation



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:
Project Code: 2024-0002300
Project Name: Hayfork Water Treatment Plant Improvement Project

January 29, 2024

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

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

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

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

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

Yreka Fish And Wildlife Office

1829 South Oregon Street

Yreka, CA 96097-3446

(530) 842-5763

PROJECT SUMMARY

Project Code: 2024-0002300
Project Name: Hayfork Water Treatment Plant Improvement Project
Project Type: Wastewater Facility - Maintenance / Modification
Project Description: The proposed project includes improvements to the Trinity County Waterworks District No. 1 WTP. Improvements include constructing a new water treatment building, 600,000-gallon potable clearwell tank, 110,000-gallon backwash storage tank, backwash water recycle pump station, leach field and septic tank, and a potassium permanganate (KMnO₄) dosing station. Aggregate base would be installed throughout the WTP site to provide access to the new and the existing facilities, and a small parking area would be installed adjacent to the new water treatment building.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.5565572,-123.16291370728851,14z>



Counties: Trinity County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

MAMMALS

NAME	STATUS
Gray Wolf <i>Canis lupus</i> Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico. There is final critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/4488	Endangered
North American Wolverine <i>Gulo gulo luscus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Threatened

BIRDS

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

CRITICAL HABITATS

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

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

IPAC USER CONTACT INFORMATION

Agency: Enplan
Name: Tiana Honigman
Address: 3179 Bechelli Ln Suite 100
City: Redding
State: CA
Zip: 96002
Email: thonigman@enplan.com
Phone: 5302210440

National Marine Fisheries Service

January 2024

Quad Name **Hayfork**

Quad Number **40123-E2**

ESA Anadromous Fish

SONCC Coho ESU (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat - **X**

Essential Fish Habitat

Coho EFH - **X**

Chinook Salmon EFH - **X**

TABLE 1
Rarefind (CNDDDB) Report Summary
Hayfork Water Treatment Plant Improvement Project
Five-Mile Radius of Project Area
 January 2024

Listed Element	Quadrangle ¹							Status ²
	HF	SH	HS	DM	HB	JC	WW	
ANIMALS								
Chinook salmon – Upper Klamath and Trinity Rivers ESU		•						FC, ST, SSSC
Fisher	•					•		SSSC
Foothill yellow-legged frog – North Coast DPS	•		•	•			•	SSSC
Golden eagle	•							SFP, WL
Hooded lancetooth	•							None
Osprey	•							WL
Pacific tailed frog	•		•					SSSC
Townsend's big-eared bat	•						•	SSSC
Trinity shoulderband						•		None
Northwestern pond turtle	•		•					SSSC, FPT
PLANTS								
Heckner's lewisia					•	•		1B.2
Tracy's eriastrum	•			•				3.2
Woolly meadowfoam	•							4.2

Highlighting denotes the quadrangle in which project site is located

¹Quadrangle Code

HF = Hayfork
 SH = Sportshaven
 HS = Hayfork Summit
 DM = Dubakella Mtn.
 HB = Hayfork Bally
 JC = Junction City
 WW = Wildwood

²STATUS 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
 SCE State Candidate Endangered
 SSSC State Species of Special Concern

Rare Plant Rank

1A Plants Presumed Extinct in California
 1B Plants Rare, Threatened or Endangered in California and Elsewhere
 2 Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
 3 Plants About Which We Need More Information (*A Review List*)
 (generally not considered special-status, unless unusual circumstances warrant)
 4 Plants of Limited Distribution (*A Watch List*)
 (generally not considered special-status, unless unusual circumstances warrant)

Rare Plant Threat Rank

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 7.5-minute Quadrangle: Hayfork
 January 2024

Common Name	Scientific Name	CA Rare Plant Rank	Blooming Period	State Listing Status	Federal Listing Status
Canyon Creek stonecrop	<i>Sedum paradisum</i> ssp. <i>paradisum</i>	1B.3	May-June	–	–
Lemon-colored fawn lily	<i>Erythronium citrinum</i> var. <i>citrinum</i>	4.3	March-May	–	–
Nelson's stringflower	<i>Silene nelsonii</i>	4.3	April-June	–	–
Niles' harmonia	<i>Harmonia doris-nilesiae</i>	1B.1	May-July	–	–
Tracy's eriastrum	<i>Eriastrum tracyi</i>	3.2	May-July	CR	–
Woolly meadowfoam	<i>Limnanthes floccosa</i> ssp. <i>floccosa</i>	4.2	March-May (June)	–	–

Rare Plant Rank	
1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened or Endangered in California and Elsewhere
2	Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3	Plants About Which We Need More Information – A Review List (generally not considered special-status, unless unusual circumstances warrant)
4	Plants of Limited Distribution – A Watch List (generally not considered special-status, unless unusual circumstances warrant)
Rare Plant Threat Rank	
0.1	Seriously Threatened in California
0.2	Fairly Threatened in California
0.3	Not Very Threatened in California

Source: California Native Plant Society, Rare Plant Program. 2024. *Inventory of Rare and Endangered Plants of California* (online edition, v9.5). <http://www.rareplants.cnps.org>. Accessed January 2024.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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							
Canyon Creek stonecrop	<i>Sedum paradisum</i> ssp. <i>paradisum</i>	1B.3	Canyon Creek stonecrop occurs on rock faces or in crevices of exposed granite in the Klamath Mountains of northwestern California. The species is reported between 1,000 and 6,300 feet in elevation. The flowering period is May and June.	No	No	No	No potentially suitable habitat for Canyon Creek stonecrop is present in the project site. Canyon Creek stonecrop was not observed during the botanical survey and is not expected to be present.
Heckner's lewisia	<i>Lewisia cotyledon</i> var. <i>heckneri</i>	1B.2	Heckner's lewisia occurs in rocky areas within lower montane coniferous forests in the Klamath Mountains. The species is reported between 700 and 6,900 feet in elevation. The flowering period is May through July.	No	No	No	No potentially suitable habitat for Heckner's lewisia is present in the project site. The species was not observed during the botanical survey and is not expected to be present.
Niles' harmonia	<i>Harmonia doris-nilesiae</i>	1B.1	Niles harmonia occurs on barren serpentine soils in chaparral, cismontane woodland, and lower montane coniferous forest in Shasta and Trinity counties. The species is reported between 2,200 and 5,500 feet in elevation. The flowering period is May through July.	Yes	No	No	Potentially suitable habitat for Niles' harmonia is present in the project site. However, Niles' harmonia was not observed during the botanical survey and is not expected to be present.
INVERTEBRATES							
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	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	<i>Branchinecta lynchi</i>	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.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	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							
Golden eagle	<i>Aquila chrysaetos</i>	SFP, WL	Golden eagles may be found throughout all of California except the Central Valley, ranging from sea level to over 11,000 feet in elevation. They inhabit oak woodlands, coniferous forests, and deserts and require open terrain for hunting. Nesting habitat consists of large trees in open areas or cliff-walled canyons. Breeding occurs between late January and August. Eggs are usually laid between early February and mid-May, with the nestling period concluding about four months later.	No	No	No	No suitable nesting habitat for the golden eagle is present in the project site or vicinity. Thus, the golden eagle would not nest in the project site.
Northern spotted owl	<i>Strix occidentalis caurina</i>	FT, SC, SSSC	Northern spotted owls inhabit dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir forests from sea level to approximately 7,600 feet in elevation. Northern spotted owls typically nest in tree cavities, the broken tops of trees, or in snags. The nesting season is March through June.	No	No	No	No old-growth forest or potentially suitable nesting trees/snags are present in the project site or vicinity. Thus, the spotted owl is not expected to nest in the project site.
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	FT, SE	Western yellow-billed cuckoos inhabit and nest in extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which about slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of the vegetation.	No	No	No	No suitable nesting habitat for the yellow-billed cuckoo is present in the project site or vicinity. Thus, the species is not expected to nest in the project site.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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
AMPHIBIANS							
Foothill yellow-legged frog, north coast DPS	<i>Rana boylei</i>	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.	No	No	No	There is no suitable habitat for the foothill yellow-legged frogs within the project site. Therefore, the foothill yellow-legged frog is not expected to be present in the project site.
Pacific tailed frog	<i>Ascaphus truei</i>	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.	No	No	No	No potentially suitable habitat for the Pacific tailed frog is present in the project site. Therefore, the Pacific tailed frog is not expected to be present in the project site.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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
REPTILES							
Northwestern pond turtle	<i>Emys marmorata</i>	SSSC, FPT	The northwestern pond turtle is associated with permanent or nearly permanent water in a variety of habitats. This turtle is typically found in quiet water environments. Pond turtles require basking sites such as partially submerged logs, rocks, or open mud banks, and suitable (sandy banks or grassy open fields) upland habitat for egg-laying. Nesting and courtship occur during spring. Nests are generally constructed within 500 feet of a waterbody, but some nests have been found up to 1,200 feet away. Pond turtles leave aquatic sites in the fall and overwinter in uplands nearby. Pond turtles return to aquatic sites in spring.	No	No	No	No potentially suitable habitat for the northwestern pond turtle is present in the project site. Therefore, the western pond turtle is not expected to be present in the project site.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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
INSECTS							
Monarch butterfly	<i>Danaus plexippus</i>	FC	Monarch butterflies are reliant on milkweed species for development and survival. Adults migrate from their overwintering sites on the California Coast, Baja California, and to some extent the central Mexico mountains in February and March and reach the northern limit of their North America range in California, Oregon, Washington, Idaho, and Nevada, in early to mid-June. Eggs are laid singly on milkweed plants within their breeding range. Once hatched, larva reach the adult stage in 20 to 35 days; adults live 2 to 5 weeks. Several generations can be produced within one season, with the last generation beginning migration to their overwintering range in August and September where they live between 6 and 9 months before migrating north.	No	No	No	Monarch butterflies rely on milkweed plants for reproduction, and on various flowering species for nectar as adults. No milkweeds were observed in the project area during the botanical survey, nor does the project site possess an abundance of floral resources. Although monarch butterflies may migrate through the area, they would not be affected by project implementation.
Western bumble bee	<i>Bombus occidentalis</i>	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.	The project site contains a variety of floral resources in addition to fruit-bearing plants that could be potential foraging sources for the western bumble bee and is within the current active habitat range for the species. Therefore, there is a potential for the western bumble bee to occur on-site.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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
FISH							
Coho salmon - Southern Oregon/Northern California ESU	<i>Oncorhynchus kisutch</i>	ST	In California, coho salmon are found in many of the short, coastal drainages from the Oregon border south to Monterey Bay. In the 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.	No	No	No	No suitable habitat occurs in the project site for the Coho salmon. Thus, the Coho salmon would not be present.
Chinook salmon – Upper Klamath and Trinity Rivers ESU	<i>Oncorhynchus tshawytscha</i>	FC, ST, SSSC	Adults enter the Klamath and Trinity rivers between March and May. Upon entering fresh water, adults are sexually immature and must hold in cold-water habitats through summer to mature. Typically, adults utilize the main stems of the Klamath and Trinity rivers, and mid-to high-elevation tributaries that provide sufficient flow, water temperature, cover, and pool depth to allow over-summering. Spawning occurs between August and October. After hatching, juveniles migrate downstream to the ocean as soon as the following spring, or may postpone the downstream migration until the following fall.	No	No	No	No suitable habitat occurs in the project site for the Chinook salmon. Thus, the Chinook salmon would not be present.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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							
North American Wolverine	<i>Gulo gulo luscus</i>	FPT	Wolverines are dependent on areas in high mountains, near the tree-line, where conditions are cold year-round and snow cover persists well into the month of May. Female wolverines 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 naturally 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	No suitable habitat occurs in the project site for the North American wolverine. The North American wolverine would thus not be present.
Fisher	<i>Pekania pennant</i>	SSSC	Fishers inhabit mixed conifer forests dominated by Douglas-fir, although they also are encountered frequently in 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 snags and greater than 50 percent canopy closure. 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	No potentially suitable habitat for the fisher is present in the project site. The fisher is not expected to be present.

TABLE 3
Hayfork Water Treatment Plant Improvement Project
Potential for Special-Status Species to Occur on the Project Site
January 2024

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	<i>Canis lupus</i>	FE, 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. Dens may be a hollow log or a tunnel excavated in loose soil. A den may have two or more entrances, which are usually indicated by a large pile of dirt. Den sites are often near water, and are usually elevated to detect approaching enemies. 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.	Yes	No	No	There is potentially suitable habitat for the gray wolf in the project area. Although gray wolves can travel approximately 30 miles each day, and could potentially stray near the project sites, gray wolves would not be expected to stray onto or den in the project sites given the extent of human activity and urbanization in and adjacent to the project sites.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SSSC	Townsend's big-eared bat is found throughout California except in subalpine and alpine habitats and may be found at any season throughout its range. The species is most abundant in mesic habitats. The bat requires caves, mines, tunnels, buildings, or other human-made structures for roosting. This bat is especially sensitive to disturbance of roosting sites, and a single disturbance event may result in abandonment of the roost site.	Yes	No	Pot.	Suitable foraging habitat for the Townsend's big-eared bat is present in the project site and vicinity. The closest occurrences were in the Hayfork caves, approximately 2.5 miles from the project site. This species may be expected to occur within the project boundary.

¹ Status Codes

Federal:

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

State:

SFP State Fully Protected
SR State Rare
SE State Listed - Endangered
ST State Listed - Threatened
SC State Candidate Species
SCE State 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