

**Potential for Special-Status Species Identified by the National Marine Fisheries Service, USFWS,  
and CNDDDB to Occur on the Project Site  
September 2021**

COMMON NAME	STATUS <sup>1</sup>	GENERAL HABITAT DESCRIPTION	HABITAT PRESENT (Y/N)	CRITICAL HABITAT PRESENT (Y/N)	SPECIES PRESENT (Y/N/POT.)	RATIONALE/COMMENTS
<b>PLANTS</b>						
Silky cryptantha <i>Cryptantha crinita</i>	1B.2	Silky cryptantha is an annual herb that occurs along low-gradient seasonal streams with broad floodplains, usually on the valley floor, where it is found on gravelly or cobbly substrates. The species also occurs in vernal moist uplands. Less frequently, it occurs along perennial streams, including the Sacramento River. The species is found between 200 and 4,000 feet in elevation. The flowering period is April and May.	Y	N	N	Although habitat is present in the BSA, silky cryptantha was not observed during the botanical survey and is not expected to be present.
Dwarf downingia <i>Downingia pusilla</i>	2B.2	Dwarf downingia is an annual herb that occurs in wetlands and vernal pools. The species is reported at elevations below approximately 500 feet. The flowering period is between March and May.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, dwarf downingia was not observed during the botanical survey and is not expected to be present.
Hoover's spurge <i>Euphorbia hooveri</i>	FT, 1B.2	Hoover's spurge is an annual herb that occurs in vernal pools. The species is reported at elevations below 820 feet. The flowering period is between July and September.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, Hoover's spurge was not observed during the botanical survey and is not expected to be present.
Stony Creek spurge <i>Euphorbia ocellata</i> ssp. <i>rattanii</i>	1B.2	Stony Creek spurge is an annual herb that occurs on sandy or stony ground in valley grasslands. The species is reported from sea level to 330 feet in elevation. The flowering period is between May and September.	N	N	N	The BSA does not contain habitat for Stony Creek spurge; additionally, the species was not observed during botanical surveys. Therefore, it is not expected to be present.
Boggs Lake hedge hyssop <i>Gnaphalium heterosepala</i>	SE, 1B.2	Boggs Lake hedge-hyssop occurs in marshes, swamps, and vernal pools. The species is reported from sea level to 7,800 feet in elevation. The flowering period is April through August.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, Boggs Lake hedge hyssop was not observed during botanical surveys and is not expected to be present.
Adobe-lily <i>Fritillaria pluriflora</i>	1B.2	Adobe-lily occurs on heavy clay soils in foothill grassland, chaparral, and/or cismontane woodland. The species is reported between 200 and 2300 feet in elevation. The flowering period is February through April.	Y	N	N	Although foothill grassland habitat with clay soils is present in the study area, adobe lily was not observed during botanical surveys. Therefore, it is not expected to be present in the BSA.
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	1B.2	Ahart's dwarf rush is an annual grass-like herb found in vernal pool margins and grassland swales. The species is found below 300 feet in elevation. The flowering period is from March to May.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, this species was not observed during botanical surveys and is not expected to be present.

Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	1B.1	Red Bluff dwarf rush is an annual herb that typically occurs along the edges of vernal pools and vernal drainages, or on clay-rich terrace soils. The species is found between 100 and 3,400 feet in elevation. The flowering period is March through May.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, this species was not observed during the botanical surveys and is not expected to be present.
Legenere <i>Legenere limosa</i>	1B.1	Legenere is an annual herb that occurs in moist or wet soil associated with vernal pools, vernal marshes, lakes, ponds, and sloughs up to 3,000 feet in elevation. The flowering period is April through June.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, this species was not observed during botanical surveys and is not expected to be present.
Hairy Orcutt grass <i>Orcuttia pilosa</i>	FE, SE, 1B.1	Hairy Orcutt grass is an annual grass-like herbs found in vernal pools below approximately 700 feet in elevation. The flowering period is between May and September.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, this species was not observed during botanical surveys and is not expected to be present.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT, SE, 1B.1	Slender Orcutt grass is an annual herb that occurs in vernal pools and similar habitats, occasionally on reservoir edges or stream floodplains, and on clay soils with seasonal inundation. Surrounding habitat types may include valley grassland, oak woodland, coniferous forest, and sagebrush scrub. The species is found between 100 and 5,800 feet in elevation. The flowering period is May through September.	Y	N	N	Although vernal pools and seasonal wetlands are present in the BSA, slender Orcutt grass was not observed during the botanical survey and is not expected to be present.
Ahart's paronychia <i>Paronychia ahartii</i>	1B.1	Ahart's paronychia is an annual herb that occurs in valley and foothill grassland, vernal pool, and cismontane woodland habitats. This plant is typically found in nearly barren clay in swales and on higher ground around vernal pools from 100 to 1,700 feet in elevation. It also occurs in rocky soils. The flowering period is March through June.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, this species was not observed during botanical surveys and is not expected to be present.
Greene's tuctoria <i>Tuctoria greenei</i>	FE, SR, 1B.1	Greene's tuctoria occurs in vernal pools in valley and foothill grasslands below 3,500 feet in elevation. The flowering period is May through July.	Y	N	N	Although seasonal wetlands, similar to vernal pools, are present in the BSA, this species was not observed during botanical surveys and is not expected to be present.
<b>INVERTEBRATES</b>						
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE	Conservancy fairy shrimp inhabit large, cool-water vernal pools with moderately turbid water.	Y	N	N	The project action area is outside the known range of this species and thus conservancy fairy shrimp are not expected to be present.
Crotch bumble bee <i>Bombus crotchii</i>	SCE	The Crotch bumble bee can be found throughout southern California and the Central Valley. The bees primarily nest underground. The flight period for the queens is from late February to late October, and the flight period for workers and males is from March through September.	Y	N	N	According to CNDDDB, the last know occurrence in the vicinity of the project was recorded in 1956, approximately 0.7 miles northwest of the BSA. Current distribution maps indicate that, in the Sacramento Valley, the bee is not expected to be present as far north as Red Bluff.

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.	Y	Y	POT	Vernal pools and seasonal wetlands are present within the project area and have the potential to provide habitat for vernal pool fairy shrimp. Additionally, a portion of the study area is located within designated critical habitat for the species.
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.	Y	N	POT	Vernal pools and seasonal wetlands are present in the project area and have the potential to provide habitat for vernal pool tadpole shrimp.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	The valley elderberry longhorn beetle is found only in association with elderberry shrubs ( <i>Sambucus</i> spp). The species is known to occur in the Central Valley and foothills, and generally occurs below 500 feet in elevation.	Y	N	POT	One heavily pruned elderberry is present in the project area and several elderberry clusters are present approximately 100 feet from the work area. There is a potential for direct and indirect effects to the beetle should it be present within 165 feet of the project area.
<b>FISH</b>						
Central Valley spring-run Chinook salmon <i>Oncorhynchus tshawytscha</i>		Central Valley spring-run Chinook salmon enter the Sacramento-San Joaquin Delta in early January, and enter natal streams between mid-March and mid-October. Upon entering fresh water, spring-run are sexually immature and must hold in cold water habitats through summer to mature. Typically, spring-run utilize mid- to high-elevation streams that provide sufficient flow, water temperature, cover, and pool depth to allow over-summering. Spawning occurs between August and mid-October.	Y	Y	Y	Three streams that cross under 99W in the study area are federally designated as critical habitat for spring-run Chinook salmon: Red Bank Creek, Elder Creek, and McClure Creek. The species is expected to be present in these streams when conditions are favorable.
Steelhead - Central Valley DPS <i>Oncorhynchus mykiss</i>		Central Valley steelhead inhabit cold-water tributaries of the Sacramento and San Joaquin rivers. Adults begin their upstream spawning migration between August and March. Spawning occurs between December and April. Spawning habitat is characterized by loose, clean gravel in cold, swiftly flowing, shallow water.	Y	Y	Y	Four streams that cross under 99W in the study area are federally designated as critical habitat for Central Valley steelhead: Red Bank Creek, Elder Creek, Oat Creek, and McClure Creek. The species is expected to be present in these streams when conditions are favorable.
Sacramento River winter-run Chinook salmon <i>Oncorhynchus tshawytscha</i>		Sacramento River winter-run Chinook salmon spawn almost exclusively in the Sacramento River, and not in tributary streams. Spawning generally occurs in swift, relatively shallow riffles or along the edges of fast runs where there is an abundance of loose gravel. Juveniles may rear in tributaries of the Sacramento River.	N	N	N	No suitable habitat for Sacramento River winter-run Chinook salmon occurs on the site. The winter-run would thus not be present.
Delta smelt <i>Hypomesus transpacificus</i>	FT	Delta smelt primarily inhabit the brackish waters of Sacramento-San Joaquin River Delta. Most spawning occurs in backwater sloughs and channel edgewater.	N	N	N	The Delta smelt would not be present because the project site is well outside the range of the species.

Green sturgeon <i>Acipenser medirostris</i>		The green sturgeon is an anadromous fish that spawns in large rivers. In California, green sturgeon spawn primarily in the Klamath and Trinity rivers, but a small number is known to spawn in the Sacramento River. Most spawning in the Sacramento River occurs above Hamilton City, and may range as far north as Keswick Dam. Spawning in the Sacramento River occurs between March and July, when water temperatures are 8° to 14°C. Spawning occurs in deep (greater than three meters) water with a swift current. Preferred spawning substrate is large cobble, but may include clean sand to bedrock.	N	N	N	Although federally designated critical habitat for green sturgeon is present in the Sacramento River, no suitable habitat for green sturgeon occurs on the site. The green sturgeon would thus not be present.
<b>BIRDS</b>						
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE, SE	Least Bell's vireos occur in a variety of riparian habitat types, including cottonwood-willow woodlands, oak woodlands, and mule fat scrub. Early successional riparian habitats are preferred for nesting. Two features are essential for nesting site selection: 1) the presence of dense cover within 3 to 6 feet of the ground for nest concealment and 2) a dense, stratified canopy for foraging.	N	N	N	No potentially suitable nesting habitats are present in the project site. Thus, the least Bell's vireo is not expected to nest in the project site.
Bank swallow <i>Riparia riparia</i>	ST	Bank swallows require vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, or the ocean for nesting.	N	N	N	Vertical banks required for nesting by bank swallows are not present in the BSA, therefore this species is not expected to be present.
Burrowing owl <i>Athene cunicularia</i>	SSSC	Burrowing owls occupy open, dry grassland and desert habitats, as well as grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats. They are often seen during the day standing at the mouth of their burrow.	Y	N	POT	Habitat for the burrowing owl is present in and near the BSA. Therefore, there is a potential for direct or indirect impacts to this species.
Swainson's hawk <i>Buteo swainsoni</i>	ST	Swainson's hawk nest in riparian areas and oak savannahs in and around the Central Valley, as well as in similar communities and juniper-sage flats in northeastern California.	Y	N	POT	Habitat for the Swainson's hawk is present in and near the BSA. Therefore, there is a potential for direct or indirect impacts to this species.

Tricolored blackbird <i>Agelaius tricolor</i>	ST, SSSC	Tricolored blackbirds are colonial nesters and generally nest near open water. Nesting areas must be large enough to support a minimum colony of about 50 pairs. Tricolored blackbirds generally constructed nests in dense cattails or tules, although they can also nest in thickets of willow, blackberry, wild rose, and tall herbs.	N	N	N	Areas with dense cattails or tules are not present in the BSA. Further, vegetation thickets that are present are not large enough to support a colony of nesting tricolored blackbirds. Therefore, this species is not expected to nest in the BSA.
Western yellow-billed cuckoo / Yellow-billed cuckoo <i>Coccyzus americanus</i> <i>occidentalis</i> / <i>Coccyzus</i> <i>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 abut slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of the vegetation. In the Sacramento Valley, the western yellow-billed cuckoo also utilizes adjacent orchards, especially of walnut, for nesting.	N	N	N	No potentially suitable nesting habitats are present in the project site. Thus, the western yellow-billed cuckoo is not expected to nest in the project site.
White-tailed kite <i>Elanus leucurus</i>	SFP	White-tailed kites occur in herbaceous and open stages of cismontane habitats, and often very near agricultural areas. This species uses trees with dense canopies for roosts. White-tailed kites are not generally migratory, but may move in response to food abundance.	N	N	N	Although agricultural fields have the potential to provide foraging habitat for the white-tailed kite, no potential nest trees are present in the study area. The white-tailed kite is not expected to be present in the BSA and neither foraging nor nesting habitat would be affected by the project..
Yellow-breasted chat <i>Icteria virens</i>	SSSC	The yellow-breasted chat requires dense, brushy thickets and tangles near water, and thick understory in riparian woodlands for nesting and foraging.	N	N	N	The BSA does not contain extensive areas of dense riparian vegetation preferred by yellow-breasted chat for nesting and foraging. Therefore, this species is not expected to be present in the BSA.
Yellow warbler <i>Setophaga petechia</i>	SSSC	In migration, the yellow warbler is found in a variety of woodland and forest habitats. Nesting generally occurs in riparian vegetation in close proximity to water, where the birds may be found in willows, cottonwoods, and numerous other riparian shrubs or trees. The yellow warbler primarily nests in riparian woodlands from sea level to approximately 8,000 feet in elevation; nesting also occasionally occurs in shrubs or open coniferous forests.	N	N	N	Neither dense woodland or dense riparian are present in the BSA, thus the yellow warbler is not expected to be present

AMPHIBIANS						
California red-legged frog <i>Rana draytonii</i>	FT	Suitable aquatic habitat for the California red-legged frog (CRLF) consists of permanent water bodies of virtually still or slow-moving fresh water, including natural and man-made ponds, backwaters within streams and creeks, marshes, lagoons, and dune ponds. The CRLF is not characteristically found in deep lacustrine habitats (e.g., deep lakes and reservoirs). Dense, shrubby riparian vegetation, e.g., willow and bulrush species, and bank overhangs are important features of CRLF breeding habitat. The CRLF tends to occur in greater numbers in deeper, cooler pools with dense emergent and shoreline vegetation.	N	N	N	No suitable habitat for the California red-legged frog is present in the project site. Additionally, the project site is outside of the known range of this species. The CRLF would thus not be present in the project site.
Foothill yellow-legged frog <i>Rana boylei</i>	SCT, 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.	N	N	N	Habitat for the foothill yellow-legged frog is not found in the BSA and therefore this species is not expected to be present.
Western spadefoot <i>Spea hammondi</i>	SSSC	Western spadefoots breed from January through May in shallow, temporary pools that persist for at least three weeks. Breeding pools are generally absent of bullfrogs, fish, and crayfish, which are known to prey on tadpoles. After breeding, adults seek shelter underground either by excavating a subterranean burrow or retreating into a small mammal burrow nearby. Tadpoles transform within three weeks. Following transformation, juveniles leave breeding pools and seek shelter underground. Western spadefoots remain underground until breeding pools form the following spring.	N	N	N	Although temporary wetlands are present in the BSA, field surveys during the wet season did not identify any western spadefoot tadpoles. Therefore, this species is not expected to be present in the BSA.
REPTILES						
Western pond turtle <i>Emys marmorata</i>	SSSC	The western pond turtle associates with permanent or nearly permanent quiet-water environments. Pond turtles require basking sites such as partially submerged logs, rocks, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying. Nesting and courtship occur during spring. Nests are generally constructed within 500 feet of a waterbody. Pond turtles may leave aquatic sites in the fall and overwinter in nearby uplands, returning to the aquatic sites in spring.	N	N	POT	One perennial stream is present in the BSA and has the potential to support the western pond turtle. However, no work will occur in the stream.

Giant garter snake <i>Thamnophis gigas</i>	FT, ST	Giant garter snake habitat requirements consist of (1) adequate water during the snake's active season (early-spring through mid-fall) to provide food and cover; (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season; (3) grassy banks and openings in waterside vegetation for basking; and (4) higher elevation uplands for cover and refuge from flood waters during the snake's inactive season in the winter. The giant garter snake inhabits small mammal burrows and other soil crevices above prevailing flood elevations throughout its winter inactive period. Giant garter snakes typically select burrows with sunny exposure along south and west facing slopes. The breeding season extends through March and April, and females give birth to live young from late July through early September.	N	N	N	The project site is outside of the known range of the species. The giant garter snake would thus not be present in the project site.
<b>MAMMALS</b>						
Pallid bat <i>Antrozous pallidus</i>	SSSC	Pallid bats inhabit grasslands, shrublands, woodlands, and forests, but are most common in open, dry habitats. Day roosts include caves, rock crevices, mines, and occasionally trees and buildings. Buildings are often used for night roosting. The breeding period is October through February, and pups are born between April and July.	Y	N	POT	Potential foraging habitat for the pallid bat is present within and surrounding the BSA. However, no suitable roosting habitat is present in the study area.
Western mastiff bat <i>Eumops perotis californicus</i>	SSSC	The western mastiff bat occurs in semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Roost locations are provided by crevices in rock outcrops and buildings. Males and females can be found together throughout the year and although parturition dates are variable, females generally give birth from early April through August or September.	Y	N	POT	Potential foraging habitat for the western mastiff bat is present within and surrounding the BSA. However, no suitable roosting habitat is present in the study area.
Western red bat <i>Lasiurus blossevillii</i>	SSSC	In California, western red bats occur primarily below 200 meters in elevation, although individuals have been detected up to nearly 2500 meters. The bats both forage and roost in riparian habitats and are strongly associated with riparian habitats that are over 50 meters wide. Breeding females are concentrated in the Central Valley. Roosting is expected to occur primarily in the largest riparian trees. Roosting has also been observed in orchards.	Y	N	POT	Potential foraging habitat for the western red bat is present within and surrounding the BSA. Roosting habitat is present in nearby riparian corridors.

**1 Status Codes**

**Federal:**

FE Federally Listed – Endangered  
FT Federally Listed – Threatened

**State:**

SE State Listed – Endangered  
ST State Listed – Threatened  
SCE State Listed – Candidate Endangered  
SR State Listed – Rare  
SFP State Listed – Fully Protected  
SSSC State Listed – Species of  
Special Concern

**California Rare Plant Rank:**

1B.1 Rare, Threatened, or Endangered in California and  
Elsewhere; Seriously threatened in California  
1B.2 Rare, Threatened, or Endangered in California and  
Elsewhere; Moderately threatened in California  
2B.2 Rare, Threatened, or Endangered in California,  
Common Elsewhere; Moderately threatened in  
California



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Sacramento Fish And Wildlife Office  
Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

August 25, 2021

Consultation Code: 08ESMF00-2021-SLI-2644

Event Code: 08ESMF00-2021-E-07615

Project Name: Tehama County 99W/South Main Street Reconstruction Project

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) 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 Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

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 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>

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](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

[www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html).

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

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 Tracking Number 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
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## Official Species List

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

This species list is provided by:

### **Sacramento Fish And Wildlife Office**

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
(916) 414-6600

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## Project Summary

Consultation Code: 08ESMF00-2021-SLI-2644

Event Code: 08ESMF00-2021-E-07615

Project Name: Tehama County 99W/South Main Street Reconstruction Project

Project Type: TRANSPORTATION

Project Description: The proposed Project includes rehabilitating the roadway along 99W/South Main Street from Gyle Road north the Interstate 5 Interchange, located in the City of Red Bluff. Proposed improvements include the construction of a roundabout; repairing structural roadway deficiencies along a ±10.35-mile stretch of 99W; and, reconstructing and widening a ±0.95-mile section of South Main Street. The proposed Project is located within both the City of Red Bluff and Tehama County limits, along 99W/South Main Street from Gyle Road north to the Interstate 5 Interchange. The project is located in unsectioned lands of Township 25 North, Range 3 West; in Section 4 and additional unsectioned lands of Township 26 North, Range 3 West; and in Sections 29, 32, and 33 of Township 27 North, Range 3 West in the Red Bluff East and Gerber 7.5-minute quadrangles.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.0818302,-122.17124904550957,14z>



Counties: Tehama County, California

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## Endangered Species Act Species

There is a total of 9 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<sup>1</sup>, 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.

### Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

### Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4482">https://ecos.fws.gov/ecp/species/4482</a>	Threatened

### Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

## Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/7850">https://ecos.fws.gov/ecp/species/7850</a>	Threatened

## Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/2246">https://ecos.fws.gov/ecp/species/2246</a>	Endangered

## Flowering Plants

NAME	STATUS
Slender Orcutt Grass <i>Orcuttia tenuis</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/1063">https://ecos.fws.gov/ecp/species/1063</a>	Threatened

## Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> <a href="https://ecos.fws.gov/ecp/species/498#crithab">https://ecos.fws.gov/ecp/species/498#crithab</a>	Final

**IPaC****U.S. Fish & Wildlife Service**

# IPaC resource list

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

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

## Project information

## NAME

Tehama County 99W/South Main Street Reconstruction Project

## LOCATION

Tehama County, California



## DESCRIPTION

Some(The proposed Project includes rehabilitating the roadway along 99W/South Main

Street from Gyle Road north the Interstate 5 Interchange, located in the City of Red Bluff. Proposed improvements include the construction of a roundabout; repairing structural roadway deficiencies along a ±10.35-mile stretch of 99W; and, reconstructing and widening a ±0.95-mile section of South Main Street. The proposed Project is located within both the City of Red Bluff and Tehama County limits, along 99W/South Main Street from Gyle Road north to the Interstate 5 Interchange. The project is located in unsectioned lands of Township 25 North, Range 3 West; in Section 4 and additional unsectioned lands of Township 26 North, Range 3 West; and in Sections 29, 32, and 33 of Township 27 North, Range 3 West in the Red Bluff East and Gerber 7.5-minute quadrangles.)

## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

NOT FOR CONSULTATION

# Endangered species

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

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

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

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

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

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

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

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

of Commerce.

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

## Birds

NAME	STATUS
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i></p> <p>There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.</p> <p><a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a></p>	Threatened

## Reptiles

NAME	STATUS
<p>Giant Garter Snake <i>Thamnophis gigas</i></p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/4482">https://ecos.fws.gov/ecp/species/4482</a></p>	Threatened

## Amphibians

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

## Fishes

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

## Insects

NAME	STATUS
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**Valley Elderberry Longhorn Beetle** *Desmocerus californicus dimorphus* **Threatened**  
 Wherever found  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<https://ecos.fws.gov/ecp/species/7850>

## Crustaceans

NAME	STATUS
<b>Conservancy Fairy Shrimp</b> <i>Branchinecta conservatio</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	<b>Endangered</b>
<b>Vernal Pool Fairy Shrimp</b> <i>Branchinecta lynchi</i> Wherever found There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	<b>Threatened</b>
<b>Vernal Pool Tadpole Shrimp</b> <i>Lepidurus packardii</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/2246">https://ecos.fws.gov/ecp/species/2246</a>	<b>Endangered</b>

## Flowering Plants

NAME	STATUS
<b>Slender Orcutt Grass</b> <i>Orcuttia tenuis</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/1063">https://ecos.fws.gov/ecp/species/1063</a>	<b>Threatened</b>

## Critical habitats

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

This location overlaps the critical habitat for the following species:

NAME	TYPE
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> <a href="https://ecos.fws.gov/ecp/species/498#crithab">https://ecos.fws.gov/ecp/species/498#crithab</a>	Final

## Migratory birds

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

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

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

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

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

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

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

**Bald Eagle** *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

**Black Tern** *Chlidonias niger*

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

<https://ecos.fws.gov/ecp/species/3093>

Breeds May 15 to Aug 20

**California Thrasher** *Toxostoma redivivum*

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

Breeds Jan 1 to Jul 31

**Clark's Grebe** *Aechmophorus clarkii*

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

Breeds Jun 1 to Aug 31

- Common Yellowthroat** *Geothlypis trichas sinuosa* Breeds May 20 to Jul 31  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/2084>
- Golden Eagle** *Aquila chrysaetos* Breeds Jan 1 to Aug 31  
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  
<https://ecos.fws.gov/ecp/species/1680>
- Lawrence's Goldfinch** *Carduelis lawrencei* Breeds Mar 20 to Sep 20  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/9464>
- Nuttall's Woodpecker** *Picoides nuttallii* Breeds Apr 1 to Jul 20  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/9410>
- Oak Titmouse** *Baeolophus inornatus* Breeds Mar 15 to Jul 15  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/9656>
- Olive-sided Flycatcher** *Contopus cooperi* Breeds May 20 to Aug 31  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/3914>
- Tricolored Blackbird** *Agelaius tricolor* Breeds Mar 15 to Aug 10  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/3910>
- Wrentit** *Chamaea fasciata* Breeds Mar 15 to Aug 10  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie *Pica nuttalli*

Breeds Apr 1 to Jul 31

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

<https://ecos.fws.gov/ecp/species/9726>

NOT FOR CONSULTATION

# Probability of Presence Summary

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

## Probability of Presence (■)

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

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

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

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

## Breeding Season (■)

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

## Survey Effort (|)

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

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

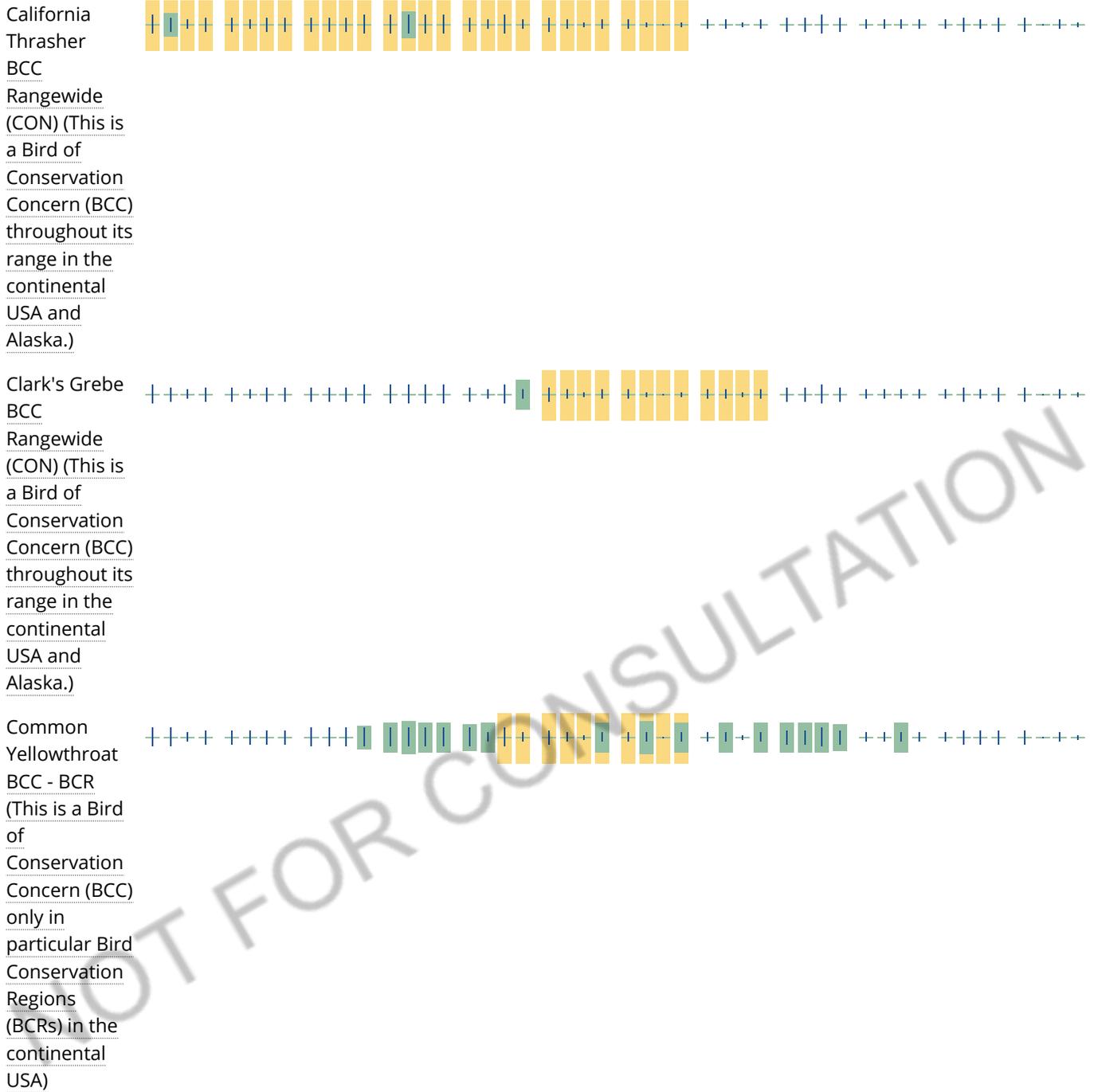
### No Data (-)

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

### Survey Timeframe

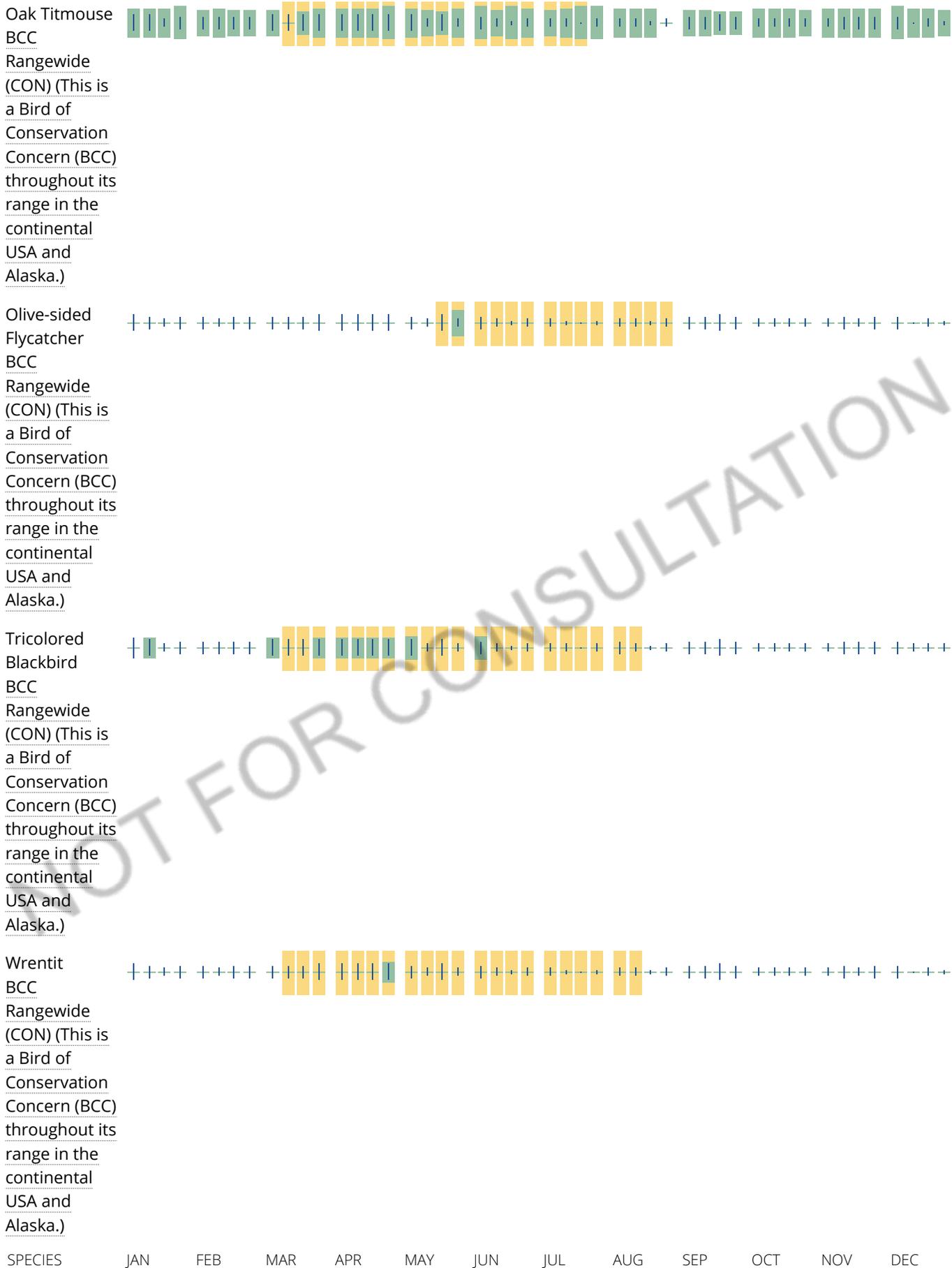
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





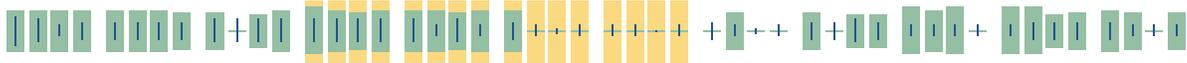


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Yellow-billed  
Magpie  
BCC  
Rangewide  
(CON) (This is  
a Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental  
USA and  
Alaska.)



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

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

## What does IPaC use to generate the migratory birds potentially occurring in my specified location?

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

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

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

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

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

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to

interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

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

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

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

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

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

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

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

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

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

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

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

## Facilities

### National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

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

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

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

This location overlaps the following wetlands:

## FRESHWATER EMERGENT WETLAND

[PEM1Ei](#)

[PEM1F](#)

[PEM1C](#)

## FRESHWATER FORESTED/SHRUB WETLAND

[PSS1A](#)

[PFO1A](#)

[PSS1C](#)

## RIVERINE

[R4SBC](#)

[R2UBHx](#)

[R4SBCx](#)

[R2AB4Hx](#)

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

### Data limitations

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

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth

verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

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

### **Data exclusions**

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

### **Data precautions**

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

NOT FOR CONSULTATION

# National Marine Fisheries Service

September 2021

Quad Name **Gerber**

Quad Number **40122-A2**

## ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

**CVSR Chinook Salmon ESU (T) - X**

**SRWR Chinook Salmon ESU (E) - X**

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

**CCV Steelhead DPS (T) - X**

Eulachon (T) -

**sDPS Green Sturgeon (T) - X**

## ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

**CVSR Chinook Salmon Critical Habitat - X**

**SRWR Chinook Salmon Critical Habitat - X**

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

**CCV Steelhead Critical Habitat - X**

Eulachon Critical Habitat -

**sDPS Green Sturgeon Critical Habitat - X**

## Essential Fish Habitat

Coho EFH -

**Chinook Salmon EFH - X**

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

# National Marine Fisheries Service

September 2021

Quad Name **Red Bluff East**

Quad Number **40122-B2**

## ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

**CVSR Chinook Salmon ESU (T) - X**

**SRWR Chinook Salmon ESU (E) - X**

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

**CCV Steelhead DPS (T) - X**

Eulachon (T) -

**sDPS Green Sturgeon (T) - X**

## ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

**CVSR Chinook Salmon Critical Habitat - X**

**SRWR Chinook Salmon Critical Habitat - X**

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

**CCV Steelhead Critical Habitat - X**

Eulachon Critical Habitat -

## Essential Fish Habitat

Coho EFH -

**Chinook Salmon EFH - X**

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**CNDDDB Report Summary (August 25, 2021 Data)**

Tehama County 99W/South Main Street

Listed Element	Quadrangle <sup>1</sup>									Status <sup>2</sup>
	CN	GB	HV	LM	RBE	RBW	TS	VN	WG	
<b>Animals</b>										
Antioch Dunes anthicid beetle				•						None
Bank swallow		•		•	•			•		ST
Blennosperma vernal pool andrenid bee					•					None
Burrowing owl		•			•	•				SSSC
California linderiella	•								•	None
Chinook salmon – Sacramento River winter-run ESU		•		•	•			•		FE, SE
Crotch bumble bee					•					SCE
Foothill yellow-legged frog				•						STC, SSSC
Hoary bat					•					None
Least Bell's vireo				•	•					FE, SE
Long-eared myotis					•					None
Osprey		•		•	•			•		WL
Pallid bat					•					SSSC
Sacramento anthicid beetle				•						None
Silver-haired bat					•					None
Steelhead-Central Valley DPS		•		•	•	•	•	•	•	FT
Swainson's hawk	•	•			•			•		ST
Tricolored blackbird		•								ST, SSSC
Valley elderberry longhorn beetle		•		•	•			•		FT
Vernal pool fairy shrimp	•	•	•		•				•	FT
Vernal pool tadpole shrimp		•								FE
Western mastiff bat							•			SSSC
Western pond turtle	•			•						SSSC
Western red bat					•					SSSC
Western spadefoot		•							•	SSSC
Western yellow-billed cuckoo		•		•	•					FT, SE
White-tailed kite		•								SFP
Yellow-breasted chat		•								SSSC
Yellow warbler		•								SSSC
Yuma myotis					•					None

**CNDDB Report Summary (August 25, 2021 Data)**

Tehama County 99W/South Main Street

Listed Element	Quadrangle <sup>1</sup>									Status <sup>2</sup>
	CN	GB	HV	LM	RBE	RBW	TS	VN	WG	
<b>Plants</b>										
Ahart's dwarf rush					•					1B.2
Ahart's paronychia	•	•							•	1B.1
Boggs Lake hedge-hyssop	•									SE, 1B.2
Dwarf downingia	•				•				•	2B.2
Henderson's bent grass	•								•	3.2
Legenere		•								1B.1
Red Bluff dwarf rush					•					1B.1
Silky cryptantha					•					1B.2
Stony Creek spurge	•	•								1B.2
<b>Natural Communities</b>										
Central Valley Drainage Fall Run Chinook Stream				•						None
Central Valley Drainage Valley Floor River				•						None
Great Valley Cottonwood Riparian Forest		•		•	•					None
Great Valley Mixed Riparian Forest		•		•	•			•		None
Great Valley Valley Oak Riparian Forest		•			•			•		None
Great Valley Willow Scrub		•						•		None
Northern Hardpan Vernal Pool						•			•	None

*Highlighting Denotes the Quadrangles in which Project Site is Located*

Highlighting denotes the quadrangles in which the project site is located. Special-status species broadly mapped by the CNDDDB to include a portion of the study area include legenere, steelhead - Central Valley DPS, Stony Creek spurge, and Swainson's hawk; the non-status species, Antioch Dunes anthicid beetle, has been broadly mapped by the CNDDDB to include a portion of the study area.

<sup>1</sup>Quadrangle Code

CN = Corning  
GB = Gerber  
HV = Henleyville

LM = Los Molinos  
RBE = Red Bluff East  
RBW = Red Bluff West

TS = Tuscan Springs  
VN = Vina  
WG = West of Gerber

<sup>2</sup>Status Codes

*Federal*

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

*State*

SFP = State Fully Protected  
SR = State Rare  
SE = State Listed – Endangered  
ST = State Listed – Threatened  
SCT = State Candidate – Threatened  
SD = State Delisted  
SSSC = State Species of Special Concern

WL = Watch List

*Rare Plant Rank*

List 1A = Presumed extirpated in California and either rare or extinct elsewhere  
List 1B = Rare or Endangered in California and elsewhere  
List 2A = Presumed extirpated in California, but more common elsewhere  
List 2B = Rare or Endangered in California, but more common elsewhere  
List 3 = Plants for which we need more information - Review list (generally not considered special-status, unless unusual circumstances warrant)  
List 4 = Plants of limited distribution - Watch list (generally not considered special-status, unless unusual circumstances warrant)

*Threat Ranks*

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

## California Native Plant Society Inventory of Rare and Endangered Plants

USGS Corning, Gerber, Henleyville, Los Molinos, Red Bluff East, Red Bluff West,  
Tuscan Springs, Vina, and West of Gerber 7.5-Minute Quadrangles

September 2021

Common Name	Scientific Name	CA Rare Plant Rank	State Listing Status	Federal Listing Status	Blooming Period
adobe-lily	<i>Fritillaria pluriflora</i>	1B.2	None	None	Feb-Apr
Ahart's dwarf rush	<i>Juncus leiospermus</i> var. <i>ahartii</i>	1B.2	None	None	Mar-May
Ahart's paronychia	<i>Paronychia ahartii</i>	1B.1	None	None	Feb-Jun
Bidwell's knotweed	<i>Polygonum bidwelliae</i>	4.3	None	None	Apr-Jul
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	1B.2	CE	None	Apr-Aug
broad-lobed leptosiphon	<i>Leptosiphon latisectus</i>	4.3	None	None	Apr-Jun
depauperate milk-vetch	<i>Astragalus pauperculus</i>	4.3	None	None	Mar-Jun
dwarf downingia	<i>Downingia pusilla</i>	2B.2	None	None	Mar-May
Greene's tuctoria	<i>Tuctoria greenei</i>	1B.1	CR	FE	May-Jul(Sep)
hairy Orcutt grass	<i>Orcuttia pilosa</i>	1B.1	CE	FE	May-Sep
Henderson's bent grass	<i>Agrostis hendersonii</i>	3.2	None	None	Apr-Jun
hogwallow starfish	<i>Hesperovax caulescens</i>	4.2	None	None	Mar-Jun
Hoover's spurge	<i>Euphorbia hooveri</i>	1B.2	None	FT	Jul-Sep(Oct)
legenere	<i>Legenere limosa</i>	1B.1	None	None	Apr-Jun
Mendocino tarplant	<i>Hemizonia congesta</i> ssp. <i>calyculata</i>	4.3	None	None	Jul-Nov
Red Bluff dwarf rush	<i>Juncus leiospermus</i> var. <i>leiospermus</i>	1B.1	None	None	Mar-Jun
Redding checkerbloom	<i>Sidalcea celata</i>	3	None	None	Apr-Aug
shield-bracted monkeyflower	<i>Erythranthe glaucescens</i>	4.3	None	None	Feb-Aug(Sep)
silky cryptantha	<i>Cryptantha crinita</i>	1B.2	None	None	Apr-May
slender Orcutt grass	<i>Orcuttia tenuis</i>	1B.1	CE	FT	May-Sep(Oct)
Stony Creek spurge	<i>Euphorbia ocellata</i> ssp. <i>rattanii</i>	1B.2	None	None	May-Oct
Tehama navarretia	<i>Navarretia heterandra</i>	4.3	None	None	Apr-Jun
woolly meadowfoam	<i>Limnanthes floccosa</i> ssp. <i>floccosa</i>	4.2	None	None	Mar-May(Jun)

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. 2021. Inventory of Rare and Endangered Plants of California (online edition, v9-01 0.0). <http://www.rareplants.cnps.org>. Accessed September 2021.

# LIST OF VASCULAR PLANT SPECIES OBSERVED

Highway 99W/South Main Street Project

May 7, 2019 and April 21, 2020

## Alismataceae

*Alisma triviale*

## Alliaceae

*Allium amplexans*

## Anacardiaceae

*Toxicodendron diversilobum*

## Apiaceae

*Anthriscus caucalis*

*Daucus pusillus*

*Eryngium castrense*

*Sanicula bipinnata*

*Sanicula bipinnatifida*

*Scandix pecten-veneris*

*Torilis arvensis*

## Apocynaceae

*Nerium oleander*

*Vinca major*

## Araceae

*Lemna minor*

## Aristolochiaceae

*Aristolochia californica*

## Asteraceae

*Achyrachaena mollis*

*Artemisia douglasiana*

*Baccharis salicifolia*

*Blennosperma nanum*

*Carduus pycnocephalus*

*Centaurea solstitialis*

*Centromadia fitchii*

*Erigeron canadensis*

*Grindelia camporum*

*Hypochaeris glabra*

*Lactuca serriola*

*Lasthenia glaberrima*

*Leontodon saxatilis*

*Logfia gallica*

*Matricaria discoidea*

*Micropus californicus* var. *californicus*

*Psilocarphus brevissimus* var. *brevissimus*

*Psilocarphus oregonus*

*Senecio vulgaris*

*Silybum marianum*

*Sonchus asper* subsp. *asper*

*Xanthium strumarium*

## Water Plantain Family

Water plantain

## Onion Family

Clasping onion

## Sumac Family

Poison-oak

## Carrot Family

Bur-chervil

Rattlesnake weed

Coyote thistle

Poison sanicle

Purple sanicle

Venus' needle

Field hedge-parsley

## Dogbane Family

Oleander

Greater periwinkle

## Arum Family

Smaller duckweed

## Birthwort Family

Pipevine

## Sunflower Family

Blow-wives

Mugwort

Mule's-fat

Common stickyweed

Italian thistle

Yellow star thistle

Fitch's spikeweed

Canadian horseweed

Valley gumplant

Smooth cat's ear

Prickly lettuce

Smooth goldfields

Hawkbit

Narrow-leaved cottonrose

Pineapple weed

Slender cottonweed

Dwarf woolly marbles

Oregon woolly-marbles

Old-man-in-the-Spring

Milk thistle

Prickly sow thistle

Cocklebur

# CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

## Highway 99W/South Main Street Project

### **Boraginaceae**

*Amsinckia menziesii*  
*Amsinckia intermedia*  
*Plagiobothrys fulvus* var. *campestris*  
*Plagiobothrys stipitatus* var. *micranthus*

### **Brassicaceae**

*Cardamine oligosperma*  
*Hirschfeldia incana*  
*Lepidium nitidum*  
*Lepidium strictum*  
*Raphanus raphanistrum*

### **Cactaceae**

*Opuntia* sp.

### **Caryophyllaceae**

*Cerastium glomeratum*  
*Petrorhagia dubia*  
*Silene gallica*

### **Convolvulaceae**

*Convolvulus arvensis*

### **Crassulaceae**

*Crassula aquatica*

### **Cyperaceae**

*Cyperus eragrostis*  
*Eleocharis macrostachya*

### **Euphorbiaceae**

*Croton setigerus*

### **Fabaceae**

*Acmispon americanus* var. *americanus*  
*Acmispon parviflorus*  
*Acmispon wrangelianus*  
*Cercis occidentalis*  
*Lathyrus angulatus*  
*Lens culinaris*  
*Lupinus bicolor*  
*Lupinus succulentus*  
*Medicago sativa*  
*Melilotus indicus*  
*Trifolium dubium*  
*Trifolium glomeratum*  
*Trifolium hirtum*  
*Vicia sativa*  
*Vicia villosa*

### **Borage Family**

Menzie's fiddleneck  
Common fiddleneck  
Fulvous popcorn-flower  
Small popcorn-flower

### **Mustard Family**

Few-seeded bittercress  
Shortpod mustard  
Shining peppergrass  
Peppergrass  
Jointed charlock

### **Cactus Family**

Prickly-pear

### **Pink Family**

Mouse-eared chickweed  
Grass pink  
Common catchfly

### **Morning Glory Family**

Bindweed

### **Stonecrop Family**

Water pygmy weed

### **Sedge Family**

Nutsedge  
Creeping spikerush

### **Spurge Family**

Dove weed

### **Legume Family**

Spanish lotus  
Miniature lotus  
Wrangel lotus  
Western redbud  
Angular-seeded pea  
Lentil  
Bicolored lupine  
Hollowleaf annual lupine  
Alfalfa  
Indian sweetclover  
Little hop clover  
Sessile-headed clover  
Rose clover  
Garden vetch  
Winter vetch

# CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

## Highway 99W/South Main Street Project

### Fagaceae

*Quercus lobata*  
*Quercus wislizeni*

### Oak Family

Valley oak  
Interior live oak

### Geraniaceae

*Erodium botrys*  
*Erodium cicutarium*  
*Erodium moschatum*  
*Geranium dissectum*

### Geranium Family

Long-beaked filaree  
Red-stemmed filaree  
White-stemmed filaree  
Cut-leaf geranium

### Juglandaceae

*Juglans hindsii*

### Walnut Family

Northern California black walnut

### Juncaceae

*Juncus patens*  
*Juncus phaeocephalus* var. *paniculatus*

### Rush Family

Spreading rush  
Panicked rush

### Lythraceae

*Lythrum hyssopifolia*

### Loosestrife Family

Hyssop loosestrife

### Malvaceae

*Malva nicaeensis*

### Mallow Family

Bull mallow

### Molluginaceae

*Mollugo verticillata*

### Carpet-weed Family

Green carpetweed

### Moraceae

*Ficus carica*  
*Morus* sp.

### Mulberry Family

Common fig  
Mulberry

### Myrtaceae

*Eucalyptus* sp.

### Myrtle Family

Gum tree

### Oleaceae

*Fraxinus latifolia*  
*Ligustrum* sp.  
*Olea europaea*

### Olive Family

Oregon ash  
Privet  
Olive

### Onagraceae

*Clarkia purpurea*  
*Epilobium ciliatum* subsp. *ciliatum*  
*Ludwigia* sp.

### Evening-Primrose Family

Four-spot  
Fringed willowherb  
Yellow waterweed

### Papaveraceae

*Eschscholzia californica*

### Poppy Family

California poppy

# CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

## Highway 99W/South Main Street Project

### Plantaginaceae

*Callitriche stagnalis*  
*Callitriche marginata*  
*Gratiola ebracteata*  
*Plantago coronopus*  
*Plantago erecta*  
*Plantago lanceolata*  
*Veronica anagallis-aquatica*  
*Veronica peregrina* subsp. *xalapensis*  
*Veronica persica*

### Platanaceae

*Platanus racemosa*

### Poaceae

*Aira caryophylllea*  
*Arundo donax*  
*Avena barbata*  
*Briza minor*  
*Bromus diandrus*  
*Bromus hordeaceus*  
*Bromus madritensis* subsp. *madritensis*  
*Bromus madritensis* subsp. *rubens*  
*Cynodon dactylon*  
*Deschampsia danthonioides*  
*Elymus caput-medusae*  
*Elymus glaucus* subsp. *glaucus*  
*Festuca microstachys*  
*Festuca myuros*  
*Festuca perennis*  
*Glyceria x occidentalis*  
*Hordeum marinum* subsp. *gussoneanum*  
*Hordeum murinum*  
*Nassella pulchra*  
*Poa annua*  
*Poa bulbosa*  
*Polypogon monspeliensis*

### Polygonaceae

*Eriogonum nudum*  
*Polygonum aviculare*  
*Rumex* sp.  
*Rumex crispus*  
*Rumex pulcher*

### Rosaceae

*Prunus cerasifera*  
*Prunus dulcis*  
*Rubus armeniacus*

### Plantain Family

Pond water-starwort  
Winged water-starwort  
Hedge hyssop  
Cut-leaf plantain  
Hooker's plantain  
English plantain  
Water speedwell  
Purslane speedwell  
Persian speedwell

### Sycamore Family

Western sycamore

### Grass Family

Silver hairgrass  
Giant reed  
Slender wild oats  
Little quaking grass  
Ripgut grass  
Soft chess  
Foxtail chess  
Red brome  
Bermuda grass  
Annual hairgrass  
Medusahead  
Blue wild rye  
Reflexed fescue  
Foxtail fescue  
Annual ryegrass  
Western mannagrass  
Mediterranean barley  
Foxtail barley  
Purple needlegrass  
Annual bluegrass  
Bulbous bluegrass  
Annual beardgrass

### Buckwheat Family

Naked buckwheat  
Common knotweed  
Dock  
Curly dock  
Fiddle dock

### Rose Family

Cherry plum  
Almond  
Himalayan blackberry

# CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

## Highway 99W/South Main Street Project

### Rubiaceae

*Galium aparine*  
*Galium parisiense*

### Salicaceae

*Populus fremontii* subsp. *fremontii*  
*Salix* sp.  
*Salix gooddingii*  
*Salix laevigata*

### Scrophulariaceae

*Verbascum blattaria*  
*Verbascum thapsus*

### Simaroubaceae

*Ailanthus altissima*

### Themidaceae

*Dichelostemma multiflorum*  
*Triteleia hyacinthina*

### Typhaceae

*Typha* sp.

### Ulmaceae

*Ulmus* sp.(*pumila?*)

### Vitaceae

*Vitis californica*

### Madder Family

Cleavers  
Wall bedstraw

### Willow Family

Fremont cottonwood  
Willow  
Goodding's black willow  
Red willow

### Snapdragon Family

Moth mullein  
Woolly mullein

### Quassia Family

Tree of heaven

### Brodiaea Family

Round-toothed ookow  
Wild hyacinth

### Cattail Family

Cattail

### Elm Family

Elm

### Grape Family

Wild grape