
Appendix B:

Biological Resources Supporting Information

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Table 1: Special-status Plant Species Potentially Occurring Within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale
	USFWS ¹	CDFW ²	CNPS ³		
<i>Allium sanbornii</i> var. <i>congdonii</i> Congdon's onion	—	—	4.3	Perennial bulbiferous herb found in chaparral and cismontane woodland. Typically found in ultramafic barrens or volcanic soils with scattered gray pines. Grows in serpentine, volcanic soils. Elevation: 300-1,395 m. Bloom period: April-July	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Allium yosemitense</i> Yosemite onion	—	CR	1B.3	Perennial bulbiferous herb found in broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest. Grows in sometimes granitic, sometimes metamorphic, rocky soils. Elevation: 530-2,200 m. Bloom period: April-July	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Amsinckia furcata</i> forked fiddleneck	—	—	4.2	Annual herb found in cismontane woodland and valley and foothill grassland. Elevation: 50-1,000 m. Bloom period: February-May	Unlikely to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland. One recent checklist entry in the Mariposa quad but no other occurrences recorded within 10 miles of project site.
<i>Anomobryum julaceum</i> slender silver moss	—	—	4.2	Moss found in broadleafed upland forest, lower montane coniferous forest, and North Coast coniferous forest. Typically found on roadsides. Grows on damp rock and soil on outcrops. Elevation: 100-1,000 m. Bloom period: N/A	Unlikely to Occur: Project site contains mixed oak woodland, oak-pine woodland, grassland, roads, and a drainage with rocky outcrops but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.

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<i>Balsamorhiza macrolepis</i> big-scale balsamroot	—	—	1B.2	Perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland. Grows in sometimes serpentine soils. Elevation: 35-1,555 m. Bloom period: March-June	Moderate Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland. One recent occurrence within 10 miles of project site.
<i>Calyptridium pulchellum</i> Mariposa pussypaws	FT	—	1B.1	Annual herb found in chaparral and cismontane woodland. Grows in granitic, sometimes gravelly, sometimes sandy soils. Elevation: 400-1,100 m. Bloom period: April-August	High Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. One recent occurrence within 5 miles of project site.
<i>Camissonia lacustris</i> grassland suncup	—	—	1B.2	Annual herb found in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland. Grows in granitic, gravelly, serpentine soils. Elevation: 180-1,220 m. Bloom Period: March-June	Unlikely to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Carex tompkinsii</i> Tompkins' sedge	—	CR	4.3	Perennial rhizomatous herb found in chaparral, cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest. Grows in sometimes granitic soils. Elevation: 420-1,830 m. Bloom Period: May-July	Unlikely to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Ceanothus fresnensis</i> Fresno ceanothus	—	—	4.3	Perennial evergreen shrub found in cismontane woodland and lower montane coniferous forest. Typically found in openings. Elevation: 900-2,210 m. Bloom Period: (April) May-July	Unlikely to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland but is 240 meters below species elevation range and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale
	USFWS ¹	CDFW ²	CNPS ³		
<i>Clarkia australis</i> Small's southern clarkia	—	—	1B.2	Annual herb found in cismontane woodland and lower montane coniferous forest. Elevation: 800-2,075 m Bloom Period: May-August	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is 140 meters below species elevation range and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Clarkia biloba ssp. australis</i> Mariposa clarkia	—	—	1B.2	Annual herb found in chaparral and cismontane woodland. Grows in serpentine soils. Elevation: 120-1,480 m. Blooming period: April-July	High Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. Multiple recent occurrences recorded within 5 miles of project site.
<i>Clarkia lingulata</i> Merced clarkia	—	SE	1B.1	Annual herb found in chaparral and cismontane woodland. Elevation: 400-460 m. Blooming period: May-June	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is 180 meters above species elevation range and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Clarkia rostrata</i> beaked clarkia	—	—	1B.3	Annual herb found in cismontane woodland and valley and foothill grassland. Elevation: 60-915 m. Blooming period: April-May	High Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland. One recent occurrence recorded within 5 miles of project site.
<i>Clarkia virgata</i> Sierra clarkia	—	—	4.3	Annual herb found in cismontane woodland and lower montane coniferous forest. Elevation: 400-1,680 m. Bloom Period: May-August	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Cordylanthus rigidus ssp. brevibracteatus</i> short-bracted bird's-beak	—	—	4.3	Annual hemiparasitic herb found in chaparral, lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest. Typically found in openings. Grows in granitic soils. Elevation: 610-2,590 m. Bloom period: July-August (September-October)	Unlikely to Occur: Project site does not contain coniferous forest and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale
	USFWS ¹	CDFW ²	CNPS ³		
<i>Cryptantha mariposae</i> Mariposa cryptantha	—	—	1B.3	Annual herb found in chaparral. Grows in rocky, serpentine soils. Elevation: 90-825 m. Bloom Period: April-June	Unlikely to Occur: Project site does not contain chaparral. One recent occurrence within 5 miles of project site.
<i>Cypripedium montanum</i> mountain lady's-slipper	—	—	4.2	Perennial rhizomatous herb found in broadleafed upland forest, cismontane woodland, lower montane coniferous forest, and North Coast coniferous forest. Elevation: 185-2,225 m. Blooming period: March-August	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Delphinium hansenii</i> ssp. <i>ewanianum</i> Ewan's larkspur	—	—	4.2	Perennial herb found in cismontane woodland and valley and foothill grassland. Grows in rocky soils. Elevation: 60-600 m. Bloom period: March-May	Low Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland but is 35 meters above species elevation range. One historical occurrence within 5 miles of project site. No recent occurrences within 10 miles of project site.
<i>Diplacus pulchellus</i> yellow-lip pansy monkeyflower	—	—	1B.2	Annual herb found in lower montane coniferous forest and meadows and seeps. Often found in disturbed areas. Grows in clay, vernal mesic soils. Elevation: 600-2,000 m. Bloom Period: April-July	Low Potential to Occur: Project site contains grassland, disturbed areas, and a drainage. One historical occurrence within 5 miles of project site. No recent occurrences within 10 miles of project site.
<i>Entosthodon kochii</i> Koch's cord moss	—	—	1B.3	Moss found in cismontane woodland. Grows on soil. Elevation: 180-1,000 m. Bloom Period: N/A	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. One historical occurrence within 10 miles of project site. No recent occurrences within 10 miles of project site.
<i>Erigeron mariposanus</i> Mariposa daisy	—	—	1A	Perennial herb found in cismontane woodland. Elevation: 600-800 m. Bloom period: June-August	Unlikely to Occur: Project site contains oak woodland and oak-pine woodland. This species was last recorded in Mariposa in 1900 and is now presumed extinct.

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<i>Eriogonum tripodum</i> tripod buckwheat	—	—	4.2	Perennial deciduous shrub found in chaparral and cismontane woodland. Grows in often serpentine soils. Elevation: 200-1,600 m. Bloom period: May-July	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. Two historical occurrences within 10 miles of project site. No recent occurrences within 10 miles of project site.
<i>Eriophyllum confertiflorum</i> <i>var. tanacetiflorum</i> tansy-flowered woolly sunflower	—	—	4.3	Perennial shrub found in cismontane woodland and lower montane coniferous forest. Elevation: 305-1,340 m. Bloom Period: May-July	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Eriophyllum congdonii</i> Congdon's woolly sunflower	—	CR	1B.2	Annual herb found in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland. Grows in metamorphic, rocky soils. Elevation: 485-1,900 m. Bloom Period: April-June	Unlikely to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland but is outside of species range map on Calflora. One historical occurrence within 10 miles of project site. No recent occurrences within 10 miles of project site.
<i>Erythranthe acutidens</i> Kings River monkeyflower	—	—	3	Annual herb found in cismontane woodland and lower montane coniferous forest. Elevation: 305-1,220 m. Bloom period: April-July	Low Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. One recent occurrence within 10 miles of project site.
<i>Erythranthe filicaulis</i> slender-stemmed monkeyflower	—	—	1B.2	Annual herb found in cismontane woodland, lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest. Grows in vernal mesic soils. Elevation: 620-1,750 m. Bloom period: April-August	Low Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, and a drainage. One historical occurrence within 10 miles of project site. No recent occurrences within 10 miles of project site.
<i>Erythranthe gracilipes</i> slender-stalked monkeyflower	—	—	1B.2	Annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest.	Low Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, and disturbed areas. One historical occurrence within 5 miles of

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	USFWS ¹	CDFW ²	CNPS ³		
				Often found in burned areas or disturbed areas. Grows in decomposed granitic soils. Elevation: 500-1,300 m. Bloom Period: April-June	project site. No recent occurrences within 10 miles of project site.
<i>Erythranthe grayi</i> Gray's monkeyflower	—	—	4.3	Annual herb found in lower montane coniferous forest and upper montane coniferous forest. Grows in mesic soils. Elevation: 550-2,900 m. Bloom Period: May-July	Unlikely to Occur: Project site does not contain coniferous forest and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Erythranthe inconspicua</i> small-flowered monkeyflower	—	—	4.3	Annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest. Grows in mesic soils. Elevation: 274-760 m. Bloom period: May-June	Moderate Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. One recent occurrence within 5 miles of project site within a different watershed.
<i>Erythranthe laciniata</i> cut-leaved monkeyflower	—	—	4.3	Annual herb found in chaparral, lower montane coniferous forest, and upper montane coniferous forest. Grows in granitic, mesic soils. Elevation: 490-2,650 m. Bloom period: April-July	Unlikely to Occur: Project site does not contain chaparral or coniferous forest and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Githopsis pulchella</i> ssp. <i>serpentinicola</i> serpentine bluecup	—	—	4.3	Annual herb found in cismontane woodland. Grows in loam, serpentine soils. Elevation: 320-610 m. Bloom period: May-June	Low Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland but is 25 meters above species elevation range and is outside of species range map on Calflora. One recent occurrence within 10 miles of project site.
<i>Hartmaniella sierrae</i> Sierra starwort	—	—	4.2	Perennial rhizomatous herb found in chaparral, cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest. Elevation: 1,225-2,195 m.	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is 565 meters below species elevation range and is outside of

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	USFWS ¹	CDFW ²	CNPS ³		
				Bloom period: May-August	species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Hesperervax caulescens</i> hogwallow starfish	—	—	4.2	Annual herb found in valley and foothill grassland and shallow vernal pools. Grows in sometimes alkaline, clay, mesic soils. Elevation: 0-505 m. Bloom period: March-June	Unlikely to Occur: Project site contains grassland and a drainage but is 130 meters above species elevation range and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Horkelia parryi</i> Parry's horkelia	—	—	1B.2	Perennial herb found in chaparral and cismontane woodland. Grows in Lone Formation and other soils. Elevation: 80-1,115 m. Blooming period: April-September	Low Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. Two recent occurrences within 10 miles of project site.
<i>Jensia yosemitana</i> Yosemite tarplant	—	—	3.2	Annual herb found in lower montane coniferous forest and meadows and seeps. Elevation: 1,200-2,300 m. Blooming period: (April) May-July	Unlikely to Occur: Project site does not contain coniferous forest, meadows, or seeps and is 540 meters below species elevation range. No occurrences recorded within 10 miles of project site.
<i>Jepsonia heterandra</i> foothill jepsonia	—	—	4.3	Perennial herb found in cismontane woodland and lower montane coniferous forest. Grows in metamorphic, rocky soils. Elevation: 50-500 m. Bloom period: August-December	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is 135 meters above species elevation range and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Leptosiphon serrulatus</i> Madera leptosiphon	—	—	1B.2	Annual herb found in cismontane woodland and lower montane coniferous forest. Elevation: 80-1,645 m. Bloom period: April-May	Low Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. Two historical occurrences within 5 miles of project site. No recent occurrences within 10 miles of project site.
<i>Lewisia congdonii</i> Congdon's lewisia	—	CR	1B.3	Perennial herb found in chaparral, cismontane woodland, lower montane coniferous forest, upper montane coniferous forest, and valley and foothill	Unlikely to Occur: Project site contains mixed oak woodland, oak-pine woodland, and grassland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.

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	USFWS ¹	CDFW ²	CNPS ³		
				grassland. Grows in sometimes granitic, mesic, sometimes metamorphic, rocky soils. Elevation: 500-2,800 m. Bloom period: April-June	
<i>Lomatium congdonii</i> Congdon's lomatium	—	—	1B.2	Perennial herb found in chaparral and cismontane woodland. Grows in serpentine soils. Elevation: 300-2,100 m. Blooming period: March-June	High Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. One recent occurrence within 5 miles of project site.
<i>Lupinus citrinus</i> var. <i>deflexus</i> Mariposa lupine	—	ST	1B.2	Annual herb found in chaparral and cismontane woodland. Grows in granitic, sandy soils. Elevation: 400-685 m. Blooming period: April-May	High Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. Two recent occurrences within 5 miles of project site.
<i>Lupinus spectabilis</i> shaggyhair lupine	—	—	1B.2	Annual herb found in chaparral and cismontane woodland. Grows in serpentine soils. Elevation: 260-825 m. Bloom period: April-May	High Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. Two recent occurrences within 5 miles of project site.
<i>Lycopus uniflorus</i> northern bugleweed	—	—	4.3	Perennial herb found in bogs and fens and marshes and swamps. Elevation: 5-2,000 m. Bloom period: July-September	Unlikely to Occur: Project site does not contain bogs, fens, marshes, or swamps and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Mielichhoferia elongata</i> elongate copper moss	—	—	4.3	Moss found in broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, and subalpine coniferous forest. Often found on roadsides. Grows on usually acidic, sometimes carbonate, metamorphic, usually vernal mesic rock. Elevation: 0-1,960 m.	Low Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, roads, and a drainage with rocky outcrops but is outside of species range map on Calflora. One recent occurrence within 10 miles of project site.

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	USFWS ¹	CDFW ²	CNPS ³		
				Bloom period: N/A	
<i>Mielichhoferia shevockii</i> Shevock's copper moss	—	—	1B.2	Moss found in cismontane woodland. Grows on mesic, metamorphic rock. Elevation: 365-1,400 m. Boom Period: N/A	Low Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, and a drainage with rocky outcrops but is outside of species range map on Calflora. One recent occurrence within 10 miles of project site.
<i>Monardella candicans</i> Sierra monardella	—	—	4.3	Annual herb found in chaparral, cismontane woodland, and lower montane coniferous forest. Grows in gravelly, sandy soils. Elevation: 150-800 m. Blooming period: April-July	Unlikely to Occur: Project site contains mixed oak woodland and oak-pine woodland but is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Perideridia bacigalupii</i> Bacigalupi's yampah	—	—	4.2	Perennial herb found in chaparral and lower montane coniferous forest. Grows in serpentine soils. Elevation: 450-1,255 m. Bloom period: June-August	Unlikely to Occur: Project site does not contain chaparral or coniferous forest. Project site contains oak-pine woodland. One recent occurrence within 5 miles of project site.
<i>Piperia colemanii</i> Coleman's rein orchid	—	—	4.3	Perennial herb found in chaparral and lower montane coniferous forest. Grows in often sandy soils. Elevation: 1,200-2,300 m. Bloom period: June-August	Unlikely to Occur: Project site does not contain chaparral or coniferous forest and is 540 meters below species elevation range and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.
<i>Plagiobothrys torreyi</i> var. <i>torreyi</i> Yosemite popcornflower	—	—	1B.2	Annual herb found in lower montane coniferous forest and meadows and seeps. Elevation: 1,080-1,390 m. Bloom period: April-June	Unlikely to Occur: Project site does not contain coniferous forest, meadows, or seeps and is 420 meters below species elevation range and is outside of species range map on Calflora. No occurrences recorded within 10 miles of project site.

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<i>Selaginella asprella</i> bluish spike-moss	—	—	4.3	Moss found in cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland, subalpine coniferous forest, and upper montane coniferous forest. Grows on granitic, rocky substrate. Elevation: 1,600–2,700 m. Bloom period: July	Low Potential to Occur: Project site contains mixed oak woodland, oak-pine woodland, and rocky outcrops but is 940 meters below species elevation range and is outside of species range map on Calflora. One recent occurrence within 10 miles of project site.
<i>Wyethia elata</i> Hall's wyethia	—	—	4.3	Perennial herb found in cismontane woodland and lower montane coniferous forest. Elevation: 585-1,400 m. Blooming period: May-August	Moderate Potential to Occur: Project site contains mixed oak woodland and oak-pine woodland. One recent occurrence recorded within 5 miles of project site.
¹ Federal Status: 2026 USFWS Listing				² State Status: 2026 CDFW Listing	
FE = Listed as endangered under the Endangered Species Act FT = Listed as threatened under the Endangered Species Act FC = Candidate for listing (threatened or endangered) under Endangered Species Act FD = Delisted in accordance with the Endangered Species Act — = Not federally listed				SE = Listed as endangered under the California Endangered Species Act ST = Listed as threatened under the California Endangered Species Act SC = Candidate for listing under the California Endangered Species Act SSC = Species of Special Concern as identified by CDFW CFP = Listed as fully protected under California law CR = Species identified as rare by CDFW — = Not State listed	

Table 2: Special-status Wildlife Species Potentially Occurring Within the Project Site

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale
	USFWS ¹	CDFW ²		
Amphibians				
Anaxyrus canorus Yosemite toad	FT	SSC	Found in the vicinity of wet meadows in central High Sierra, 6,400 to 11,300 feet in elevation. Primarily found in montane wet meadows; also in seasonal ponds associated with lodgepole pine and subalpine conifer forest.	Unlikely to Occur: Project site does not contain lodgepole pine or subalpine conifer forests and is 4,200 feet below species elevation range. No occurrences recorded within 10 miles of project site.
Hydromantes brunus limestone salamander	—	ST, FP	Found on limestone outcrops in foothill pine-chaparral belt along the Merced River and its tributaries, from 800-2600 feet in elevation. California buckeye is an indicator of optimal habitat. Seeks cover in limestone caverns, talus, rock fissures, surface objects.	Unlikely to Occur: Project site does not contain limestone outcrops or California buckeye. CNDDDB records for this species are obscured, but there have been eight occurrences recorded within the USGS quad where the project site is located, most recently in 2008.
Rana boylei pop. 5 foothill yellow-legged frog – south Sierra DPS	FE	SE	Found in Sierra Nevada from South Fork American River subbasin (HU 8) in El Dorado County south to Tehachapi Mountains in Kern County. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	Unlikely to Occur: Project site contains ephemeral drainages but does not contain riffled streams lined with cobblestones that stay flowing for more than 15 weeks out of the year. There is one occurrence recorded in Mariposa from 1899, however this is a nonspecific point that was georeferenced much later. There have been multiple occurrences recorded between 5-10 miles from the project site along Highway 140, though some are marked as extirpated and the most recent observation was in the 1970s. There was one occurrence recorded 6 miles north of the project site in 2017, associated with Sherlock Creek. There was one occurrence recorded 8 miles north of the project site in 2008, associated with the Merced River. There was one occurrence recorded 10 miles northwest of the project site in 1971, along

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				Highway 49. None of these water features connect directly with Mariposa Creek. Project site does not overlap with Proposed Critical Habitat for this species on IPaC.
<i>Rana draytonii</i> California red-legged frog	FT	SSC	Found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Unlikely to Occur: Project site does not contain perennial waters and the nearby Mariposa Creek is a shallow perennial stream that would not provide suitable deep aquatic habitat for this species. No occurrences recorded within 10 miles of project site on CNDDDB. Project site does not overlap with Final Critical Habitat for this species on IPaC.
<i>Rana sierrae</i> Sierra Nevada yellow-legged frog	FE	ST	Always encountered within a few feet of water. Tadpoles may require 2 - 4 years to complete their aquatic development.	Unlikely to Occur: Project site contains ephemeral drainages connecting to Mariposa Creek but does not contain perennial waters on site. There was one occurrence recorded 8 miles northeast of the project site in 1915 associated with Sweetwater Creek, however it is marked as possibly extirpated.
Birds				
<i>Gymnogyps californianus</i> California condor	FE MBTA	SSC	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	Unlikely to Occur: Project site does not contain nor is adjacent to vast expanses of grasslands, savannah, foothill chaparral, or deep canyons. No occurrences recorded within 10 miles of project site on CNDDDB. Project site does not overlap with Final Critical Habitat for this species on IPaC.
<i>Strix nebulosa</i> great gray owl	— MBTA	SE	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	Unlikely to Occur: Project site does not contain mixed conifer forest, red fir forest, or meadows that would provide suitable habitat for this species. No occurrence recorded within 10 miles of project site on CNDDDB.

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	USFWS ¹	CDFW ²		
Fish				
<i>Mylopharodon conocephalus</i> hardhead	—	SSC	Found in low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	Unlikely to Occur: Project site does not contain perennial drainages or streams that would provide suitable habitat for this species. There were ten juvenile individuals recorded in 2017 in a plunge pool in Stockton Creek, a tributary to Mariposa Creek that is ~3 miles south of the project site.
Invertebrates				
<i>Bombus crotchii</i> Crotch's bumble bee	—	SC	Found in coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Low Potential to Occur: Project site may include food plant genera including <i>Clarkia</i> and <i>Phacelia</i> , but was not surveyed during the blooming season. There have been three occurrences recorded within 10 miles of the project site in the past 10 years. There was a queen with smaller individuals seen on a <i>Phacelia</i> ~7 miles southwest of the project site in 2020. There was one male recorded on a <i>Salvia</i> ~10 miles southeast of the project site in 2018. There was an individual recorded on a <i>Lupinus</i> ~7 miles north of project site in 2017.
<i>Danaus plexippus</i> monarch butterfly	FPT	—	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Unlikely to Occur: Project site does not contain <i>Eucalyptus</i> groves. No recorded roosts within 10 miles of project site on CNDDDB. Project site does not overlap with Proposed Critical Habitat for this species on IPaC.
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT	—	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Unlikely to Occur: The project site is located outside the mapped range of this species as mapped by the USFWS.

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale
	USFWS ¹	CDFW ²		
Mammals				
<i>Antrozous pallidus</i> pallid bat	—	SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Species is very sensitive to disturbance of roosting sites.	Low to Occur: Project site contains open grassland areas with some rocky areas. One roost was recorded ~8 miles from project site in 1997, under a bridge over Bear Creek in Briceburg, CA.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	—	SSC	Found throughout California in a wide variety of habitats, most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Unlikely to Occur: Project site contains ephemeral drainages but would not be considered a mesic site. Project site does not contain buildings that would provide suitable roosting habitat for this species. Three specimens were collected in the general area of Bullion Mountain in 1956, ~5-7 miles from the project site.
<i>Euderma maculatum</i> spotted bat	—	SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	Unlikely to Occur: Project site does contain cliffs or caves that would provide suitable roosting habitat for this species. There was an audio recording captured of this species in the general area of Briceburg in 1996, ~7 miles north of the project site.
<i>Eumops perotis californicus</i> western mastiff bat	—	SSC	Found in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Low to Occur: Project site contains oak woodland, oak-pine woodland, and grassland, including tall trees that may provide suitable roosting habitat for this species. No recent or historical occurrences recorded within 10 miles of project site.
<i>Lasiurus frantzii</i> western red bat	—	SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Low to Occur: Project site contains edges of oak woodland and pine-oak woodland with open annual grassland that may provide suitable roosting habitat for this species. No recent or historical occurrences within 10 miles of project site.

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale
	USFWS ¹	CDFW ²		
<i>Pekania pennanti</i> – SSN DPS Fisher – South Sierra Nevada DPS	FE	SSC	Found in intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Unlikely to Occur: Project site does not contain coniferous forest or deciduous riparian areas that would provide suitable habitat for this species. No recent or historical occurrences within 10 miles of project site. Project site does not overlap with Proposed Critical Habitat for this species on IPaC.
<i>Vulpes vulpes necator pop. 2</i> Sierra Nevada red fox - Sierra Nevada DPS	FE	ST	Found in multiple habitat types in the alpine and subalpine zones including high-elevation conifer dominated by whitebark pine, mountain hemlock and lodgepole pine, as well as meadows and fell-fields; typically in areas of heavy snow cover. Generally above 1,200 meters (3,900 feet).	Unlikely to Occur: Project site does not contain alpine or subalpine conifer woodland or significant snow that would provide suitable habitat for this species. Project site is ~500 meters below typical species elevation range. No occurrences recorded within 10 miles of project site on CNDDB.
Reptiles				
<i>Actinemys marmorata</i> northwestern pond turtle	FPT	SSC	This species is a thoroughly aquatic turtle found in ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation below 6000 feet elevation. Requires basking sites and suitable upland habitat (sandy banks or grassy open fields) up to 0.5 km from water for egg-laying.	Moderate Potential to Occur: Project site contains small ephemeral drainages that is not likely to provide suitable aquatic habitat for this species, however the project site does contain suitable upland habitat. The on-site ephemeral drainage connects to Mariposa Creek ~300 feet west of the project site. One CNDDB occurrence was recorded in the general vicinity of Mariposa on an unknown date. One iNaturalist occurrence recorded ~1.5 miles east of project site in 2023, in a retention basin. One iNaturalist occurrence recorded ~3.5 miles west of project site in 2023, in a north section of the Agua Fria Creek. No Critical Habitat has been designated for this species on IPaC.

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale
	USFWS ¹	CDFW ²		
Code Designations				
¹ Federal Status: 2025 USFWS Listing			² State Status: 2025 CDFW Listing	
ESU = Evolutionary Significant Unit is a distinctive population.			SE = Listed as endangered under the California Endangered Species Act	
FE = Listed as endangered under the Endangered Species Act			ST = Listed as threatened under the California Endangered Species Act	
FT = Listed as threatened under the Endangered Species Act			SC = Candidate for listing under the California Endangered Species Act	
FC = Candidate for listing (threatened or endangered) under the Endangered Species Act			SSC = Species of Special Concern as identified by the CDFW.	
FD = Delisted in accordance with the Endangered Species Act			FP = Listed as fully protected under FGC.	
FPT = Proposed as threatened under the Endangered Species Act			CFG = FGC =protected by Fish and Game Code 3503.5	
FPD = Federally Proposed to be Delisted.			CR = Rare in California.	
MBTA = protected by the Migratory Bird Treaty Act			— = Not State listed	
— = Not federally listed				
³ Habitat description: Habitat description adapted from CNDDB (CDFW 2025a).				



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad> IS < >(Buckhorn Peak (3712061)> OR < >Kinsley (3711968)> OR < >El Portal (3711967)> OR < >Bear Valley (3712051)> OR < >Feliciano Mtn. (3711958)> OR < >Buckingham Mtn. (3711957)> OR < >Catheys Valley (3712041)> OR < >Mariposa (3711948)> OR < >Stumpfield Mtn. (3711947))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Actinemys marmorata</i> northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
<i>Allium yosemitense</i> Yosemite onion	PMLIL022L0	None	Rare	G3	S3	1B.3
<i>Anaxyrus canorus</i> Yosemite toad	AAABB01040	Threatened	None	G2	S2	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Atractelmis wawona</i> Wawona riffle beetle	IICOL58010	None	None	G3	S1S2	
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
<i>Big Tree Forest</i> Big Tree Forest	CTT84250CA	None	None	G3	S3.2	
<i>Bombus crotchii</i> Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
<i>Calicina conifera</i> Crane Flat harvestman	ILARAU8030	None	None	G1	S1	
<i>Calyptridium pulchellum</i> Mariposa pussypaws	PDPOR09060	Threatened	None	G1	S1	1B.1
<i>Camissonia lacustris</i> grassland suncup	PDONA030W0	None	None	G2	S2	1B.2
<i>Carex tompkinsii</i> Tompkins' sedge	PMCYP03DR0	None	Rare	G3G4	S3S4	4.3
<i>Clarkia australis</i> Small's southern clarkia	PDONA05040	None	None	G2	S2	1B.2
<i>Clarkia biloba ssp. australis</i> Mariposa clarkia	PDONA05051	None	None	G4G5T3	S3	1B.2
<i>Clarkia lingulata</i> Merced clarkia	PDONA050P0	None	Endangered	G1	S1	1B.1
<i>Clarkia rostrata</i> beaked clarkia	PDONA050Y0	None	None	G2G3	S2S3	1B.3
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
<i>Cryptantha mariposae</i> Mariposa cryptantha	PDBOR0A1Q0	None	None	G2G3	S2S3	1B.3



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
<i>Desmona bethula</i> amphibious caddisfly	IITRI77010	None	None	G2G3	S2S3	
<i>Diplacus pulchellus</i> yellow-lip pansy monkeyflower	PDSCR1B280	None	None	G2	S2	1B.2
<i>Entosthodon kochii</i> Koch's cord moss	NBMUS2P050	None	None	G1	S1S2	1B.3
<i>Erethizon dorsatum</i> North American porcupine	AMAFJ01010	None	None	G5	S3	
<i>Erigeron mariposanus</i> Mariposa daisy	PDAST3M5L0	None	None	GX	SX	1A
<i>Eriophyllum congdonii</i> Congdon's woolly sunflower	PDAST3N030	None	Rare	G2	S2	1B.2
<i>Erythranthe filicaulis</i> slender-stemmed monkeyflower	PDPHR012H0	None	None	G2	S2	1B.2
<i>Erythranthe gracilipes</i> slender-stalked monkeyflower	PDSCR1B1C0	None	None	G2	S2	1B.2
<i>Euderma maculatum</i> spotted bat	AMACC07010	None	None	G4	S3	SSC
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Helminthoglypta allynsmithi</i> Merced Canyon shoulderband	IMGASC2020	None	None	G1	S1	
<i>Horkelia parryi</i> Parry's horkelia	PDROS0W0C0	None	None	G2	S2	1B.2
<i>Hydromantes brunus</i> limestone salamander	AAAAD09010	None	Threatened	G2G3	S2S3	FP
<i>Hydroporus leechi</i> Leech's skyline diving beetle	IICOL55040	None	None	G3	S2S3	
<i>Lasiurus cinereus</i> hoary bat	AMACC05032	None	None	G3G4	S4	
<i>Lasiurus frantzii</i> western red bat	AMACC05080	None	None	G4	S3	SSC
<i>Leptosiphon serrulatus</i> Madera leptosiphon	PDPLM09130	None	None	G3	S3	1B.2
<i>Lewisia congdonii</i> Congdon's lewisia	PDPOR04040	None	Rare	G2	S2	1B.3
<i>Lomatium congdonii</i> Congdon's lomatium	PDAP1B0B0	None	None	G2	S2	1B.2
<i>Lupinus citrinus var. deflexus</i> Mariposa lupine	PDFAB2B102	None	Threatened	G2T1T2	S1	1B.2



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Lupinus spectabilis</i> shaggyhair lupine	PDFAB2B3P0	None	None	G2	S2	1B.2
<i>Mielichhoferia elongata</i> elongate copper moss	NBMUS4Q022	None	None	G5	S3S4	4.3
<i>Mielichhoferia shevockii</i> Shevock's copper moss	NBMUSA1010	None	None	G2	S2	1B.2
<i>Monadenia yosemitensis</i> Yosemite sideband	IMGASZ3010	None	None	G1	S1S2	
<i>Mylopharodon conocephalus</i> hardhead	AFCJB25010	None	None	G3	S3	SSC
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Pekania pennanti</i> Fisher	AMAJF01020	None	None	G5	S2S3	SSC
<i>Philotiella speciosa bohartorum</i> Boharts' blue butterfly	IILEPG3011	None	None	G3T1	S1	
<i>Picoides arcticus</i> black-backed woodpecker	ABNYF07090	None	None	G5	S2	
<i>Plagiobothrys torreyi</i> var. <i>torreyi</i> Yosemite popcornflower	PDBOR0V152	None	None	G4T3Q	S3	1B.2
<i>Rana boylei</i> pop. 5 foothill yellow-legged frog - south Sierra DPS	AAABH01055	Endangered	Endangered	G3T2	S2	
<i>Rana sierrae</i> Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	G2	S2	WL
<i>Strix nebulosa</i> great gray owl	ABNSB12040	None	Endangered	G5	S1	
<i>Stygobromus wengerorum</i> Wengerors' Cave amphipod	ICMAL05620	None	None	G1	S1	
<i>Tetrix sierrana</i> Sierra pygmy grasshopper	IIORT27010	None	None	G1G2	S1	
<i>Vulpes vulpes necator</i> pop. 2 Sierra Nevada red fox - Sierra Nevada DPS	AMAJA03017	Endangered	Threatened	G5T1	S1	

Record Count: 55



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



Query Criteria: BIOS selection

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Actinemys marmorata</i> northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
<i>Calyptridium pulchellum</i> Mariposa pussypaws	PDPOR09060	Threatened	None	G1	S1	1B.1
<i>Clarkia biloba ssp. australis</i> Mariposa clarkia	PDONA05051	None	None	G4G5T3	S3	1B.2
<i>Clarkia rostrata</i> beaked clarkia	PDONA050Y0	None	None	G2G3	S2S3	1B.3
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
<i>Cryptantha mariposae</i> Mariposa cryptantha	PDBOR0A1Q0	None	None	G2G3	S2S3	1B.3
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
<i>Erethizon dorsatum</i> North American porcupine	AMAFJ01010	None	None	G5	S3	
<i>Erigeron mariposanus</i> Mariposa daisy	PDAST3M5L0	None	None	GX	SX	1A
<i>Erythranthe gracilipes</i> slender-stalked monkeyflower	PDSCR1B1C0	None	None	G2	S2	1B.2
<i>Hydromantes brunus</i> limestone salamander	AAAAD09010	None	Threatened	G2G3	S2S3	FP
<i>Hydroporus leechi</i> Leech's skyline diving beetle	IICOL55040	None	None	G3	S2S3	
<i>Leptosiphon serrulatus</i> Madera leptosiphon	PDPLM09130	None	None	G3	S3	1B.2
<i>Lomatium congdonii</i> Congdon's lomatium	PDAP11B0B0	None	None	G2	S2	1B.2
<i>Lupinus citrinus var. deflexus</i> Mariposa lupine	PDFAB2B102	None	Threatened	G2T1T2	S1	1B.2
<i>Lupinus spectabilis</i> shaggyhair lupine	PDFAB2B3P0	None	None	G2	S2	1B.2
<i>Mylopharodon conocephalus</i> hardhead	AFCJB25010	None	None	G3	S3	SSC
<i>Rana boylei pop. 5</i> foothill yellow-legged frog - south Sierra DPS	AAABH01055	Endangered	Endangered	G3T2	S2	

Record Count: 18

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.

Location

Mariposa County, California



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

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. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ 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 Fisheries²).

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

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

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

Mammals

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

Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered

Reptiles

NAME	STATUS
Northwestern Pond Turtle <i>Actinemys marmorata</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
Foothill Yellow-legged Frog <i>Rana boylei</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5133	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Critical habitats

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

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

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 "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "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.

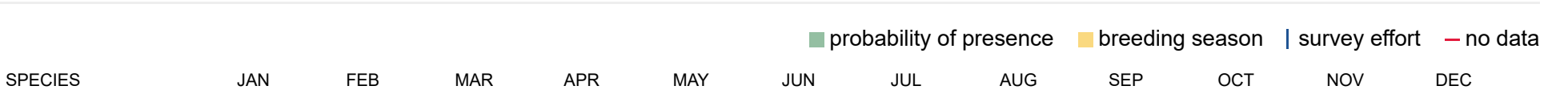
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

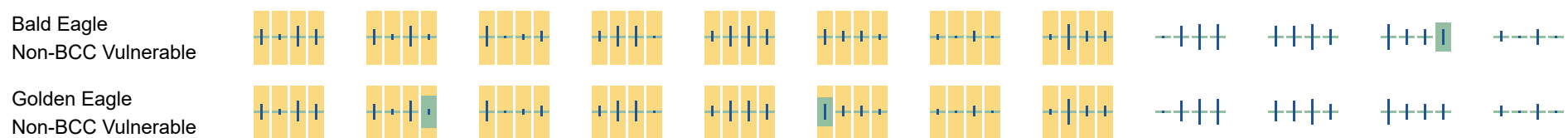
No Data (—)

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.





Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence 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 an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 line or no data line (red horizontal) 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 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 and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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.

Interpreting the Probability of Presence Graphs

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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

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

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.

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 $0.05/0.25 = 0.2$.

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.

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.

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.

Migratory birds

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

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:

- Eagle Management <https://www.fws.gov/program/eagle-management>

- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#) document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow <i>Passerculus sandwichensis beldingi</i> 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/8	Breeds Apr 1 to Aug 15
Bullock's Oriole <i>Icterus bullockii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Thrasher <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Cassin's Finch <i>Haemorhous cassinii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Common Yellowthroat <i>Geothlypis trichas sinuosa</i> 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	Breeds May 20 to Jul 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch <i>Spinus lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20

Northern Harrier <i>Circus hudsonius</i> 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/8350	Breeds Apr 1 to Sep 15
Nuttall's Woodpecker <i>Dryobates nuttallii</i> 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	Breeds Apr 1 to Jul 20
Oak Titmouse <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Santa Barbara Song Sparrow <i>Melospiza melodia graminea</i> 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/5513	Breeds Mar 1 to Sep 5
Western Screech-owl <i>Megascops kennicottii cardonensis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jun 30
Wrentit <i>Chamaea fasciata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie <i>Pica nuttalli</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

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 ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "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 (I)

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.

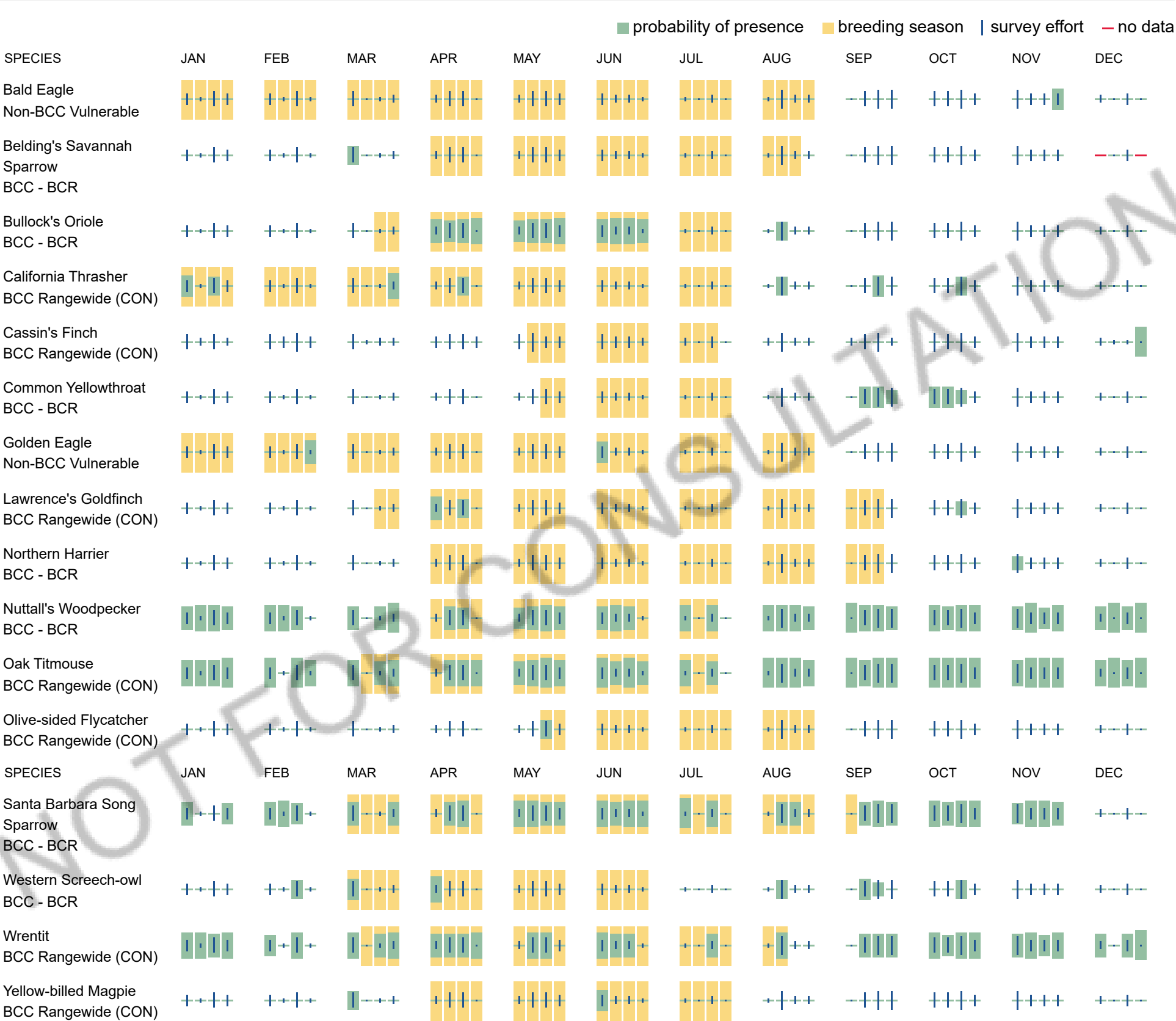
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

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

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

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) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection 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, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

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 to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

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

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), 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 [Bald and Golden Eagle Protection 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 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 BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

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.

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 look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). 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 does not represent all birds present in your project area. 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 and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

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 taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

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

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.

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 $0.05/0.25 = 0.2$.

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.

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.

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.

Facilities

National Wildlife Refuge lands

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

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

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

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

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

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

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