Attachment B

Biological Resources

VEGETATION AND HABITAT

The project area is located within the southern California coast ecoregion. Vegetation and habitat types were identified from Table 3.6-27 of the CalVTP PEIR, and descriptions of the California Wildlife Habitat Relationship (CWHR) system habitat types were reviewed in Appendix BIO-1 of the CalVTP. Additionally, CAL FIRE's Fire and Resource Assessment Program (FRAP) vegetation layer was used to identify the CWHR habitat and vegetation types mapped within the project area. Habitat types within the project area are coastal scrub, mixed chaparral, coastal oak woodland, annual grassland, fresh emergent wetland (seasonal), riverine (ephemeral and intermittent streams), lacustrine (seasonal ponds), and barren habitats (see Table B-1). The CWHR classifications were cross-referenced to *Manual of California Vegetation (MCV)* (CNPS 2022a) alliances to identify sensitive natural communities that may be found within each CWHR type. US Fish and Wildlife Service's (USFWS) National Wetland Inventory GIS dataset and the National Hydrography Dataset were used to identify previously mapped wetland and aquatic habitats within the project area.

Table B-1 Vegetation and Habitat Types within the Haley Vegetation Treatment Project Area

Habitat Type (CWHR Classification)	Fuel Break Acreage	WUI Fuel Reduction Acreage	Ecological Restoration Acreage	Total Acres	Percent of Project Area	MCV Alliances
Woodland and Forest Habitats						
Coastal Oak Woodland	144.27	14.68	27.4	186.4	41.6%	California walnut groves[1]
						Coast live oak woodland[3]
						California bay forest and woodland[1]
						California sycamore – coast live oak riparian woodlands[1, 3]
						Madrone forest
Chaparral and Scrub Habitats						
Coastal Scrub	2.5	0	156.3	158.8	35.4%	Dune mat[1]
						California sagebrush – (purple sage) scrub[3]
						California sagebrush – black sage scrub
						California brittle bush - Ashy buckwheat scrub[1]
						California buckwheat scrub
						California buckwheat – white sage scrub
						Coyote brush scrub
						Broom patches[2]
						Sawtooth golden bush scrub[1, 3]
						Bush mallow scrub
						Laurel sumac scrub[3]
						Ice plant mats[2]
						Coast prickly pear scrub[1]
						Lemonade berry scrub[1]
						Bushy spikemoss mats[1]

Habitat Type (CWHR Classification)	Fuel Break Acreage	WUI Fuel Reduction Acreage	Ecological Restoration Acreage	Total Acres	Percent of Project Area	MCV Alliances
						Poison oak scrub
						Giant coreopsis scrub[1]
						Bush monkeyflower scrub[1]
						Live-forever - lichen/moss sparse herbaceous rock outcrop
						Scale broom scrub[1]
						Deerweed - silver lupine - yerba santa scrub
						Yellow bush lupine scrub
						Silver dune lupine - mock heather scrub[1]
						White sage scrub[1]
						Black sage scrub
Mixed Chaparral	0	0.5	20.0	20.5	4.6%	Eastwood manzanita chaparral[1]
						Bigberry manzanita chaparral
						Bigpod ceanothus chaparral
						Hairy leaf - woolly leaf ceanothus chaparral[1]
						Deerweed - silver lupine - yerba santa scrub
						Bush mallow scrub
						Laurel sumac scrub[3]
						Interior live oak chaparral
						Poison oak scrub
						Burton Mesa chaparral[1]
						Hoary leaf ceanothus chaparral
						Wedge leaf ceanothus chaparral, Buck brush chaparral
						Birch leaf mountain mahogany chaparral
						Holly leaf cherry - toyon - greenbark ceanothus chaparral
						Scrub oak chaparral
Herbaceous Habitats						
Annual Grassland	0	10.8	66.9	77.7	17.3%	Clustered tarweed fields[1, 3]
						Barbed goatgrass patches[2]
						Western ragweed meadows
						Fiddleneck- phacelia fields
						Wild oats and annual brome grasslands[2]
						Upland mustards or star-thistle fields[2, 3]

Habitat Type (CWHR Classification)	Fuel Break Acreage	WUI Fuel Reduction Acreage	Ecological Restoration Acreage	Total Acres	Percent of Project Area	MCV Alliances
						Tournefort's mustard and other ruderal desert forb patches[2]
						Red brome or Mediterranean grass grasslands[2]
						Cheatgrass-medusahead grassland[2]
						Alkali weed- salt grass playas and sinks[1]
						Bermudagrass-prickle grass-crowngrass turfs[2]
						Needle spike rush stands[1]
						California goldfields-dwarf plantain-small fescue flower fields
						Perennial rye grass fields[2]
						Spanish clover fields
Other Habitats						
Barren[5]	0	0	5.1	5.1	1.1%	
Total				**448.23**	**100**	

[1] These are designated sensitive natural communities with a state rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable).

[2] These alliances are dominated by nonnative vegetation.

[3] Species that characterize these alliances are known to occur in the treatment area and were observed during the reconnaissance survey.

[4] Acreages for aquatic habitats are not included because this data is not available.

[5] Areas mapped as barren habitat are generally characterized by eroded slopes or heavily grazed grasslands with little to no ground cover. Most barren habitats would not be targeted for treatment; however, due to the scale of the habitat mapping, some areas mapped as barren may contain habitats that would be treated (e.g., eroded slopes where some vegetation has recolonized, annual grasslands with eroded slopes).

Source: CAL FIRE FRAP data, compiled by Ascent Environmental in 2022; CNPS 2022a

SPECIAL-STATUS SPECIES

Table B-2 of this attachment presents special-status plant and wildlife species that are known to occur in the project region, which includes the following US Geological Survey 7.5-minute quadrangles including and surrounding the project area: White Ledge Peak, Matilija, Pitas Point, Ventura, Carpinteria, Hildreth Peak, Old Man Mountain, Wheeler Springs, Lion Canyon, Ojai, Saticoy, and Oxnard. Table B-2 was developed through a review of the CalVTP, relevant databases, and other available information, per SPR BIO-1. Data reviewed for special-status species that have potential to occur in the southern California coast ecoregion includes Appendix BIO-3 (Tables 3.6-27, 16a (plants), 16b (wildlife), and 19 (fish)) in Volume II of the Final PEIR, California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database records (CNDDB 2022; CNPS 2022a), USFWS Information for Planning and Consultation (IPaC) tool (USFWS 2022), Consortium of California of Herbaria (CCH 2022), Jepson eFlora (Jepson Flora Project 2022), and Calflora (Calflora 2022). The table also includes an assessment of species potential to occur in the project area, and summaries of the potential impacts from the project on each special-status plant and wildlife species.

Table B-2 Special-Status Species Known to Occur in the Project Region and their Potential for Occurrence in the Project Area

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Plants					
Abrams' oxytheca *Acanthoscyphus parishii* var. *abramsii*	—	—	1B.2	Chaparral. Shale or sandy places. 5,500–6,800 feet in elevation. Blooms June–August.	Not expected to occur. Habitat potentially suitable for this species is not present in the project area. The project area is restricted to elevations of 400 to 2,156 feet, and this species occurs only in higher elevation areas than are present in the project area.
Mt. Pinos onion *Allium howellii* var. *clokeyi*	—	—	1B.3	Great Basin scrub, pinyon and juniper woodland, meadows and seeps (edges). 4,540–5,900 feet in elevation. Blooms April–June.	Not expected to occur. Habitat potentially suitable for this species is not present in the project area. The project area is restricted to elevations of 400 to 2,156 feet, and this species occurs only in higher elevation areas than are present in the project area.
Aphanisma *Aphanisma blitoides*	—	—	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. 10–1,000 feet in elevation. Blooms February–June.	Not expected to occur. Habitat potentially suitable for this species (coastal bluff habitat near the ocean) is not present in the project area.
Miles' milk-vetch *Astragalus didymocarpus* var. *milesianus*	—	—	1B.2	Grassy areas near the coast, grassy openings in coastal scrub; elevations less than 1,260 feet in elevation. Blooms March–June.	**May occur.** Habitat potentially suitable for this species (grassland habitat near the coast) is uncommon but present in the project area. Most of the grassland observed in the project area is dominated by nonnative annual grasses and mustard, however, these areas may provide habitat suitable for this species. Treatments could result in direct or indirect adverse effects on Miles' milk-vetch. However, this species is an annual herb. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities (i.e., treatment activities that do not kill or remove vegetation or disturb the soil, such as manual treatment) and only during the dormant season (i.e., when the plant has no aboveground parts), which would generally occur in the winter (October – December). Treatment activities that could potentially kill or remove vegetation or disturb the soil (i.e., mechanical treatments and prescribed burning) may result in impacts on these plant species even when dormant and would require pre-treatment surveys (per SPR BIO-7). If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Life History	Potential for Occurrence[2]/Potential Impact
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	FE	SE	1B.1	Disturbed areas, open, sand to gravel. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. 0-120 feet in elevation. Blooms June–October. Perennial.	Not expected to occur. Habitat potentially suitable for this species (sandy areas adjacent to the coastline) are not present in the project area. Additionally, the project is entirely outside of the known elevation range for this species.
Coulter's saltbush *Atriplex coulteri*	—	—	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 0-1,500 feet in elevation. Blooms March–October. Perennial.	**May occur.** Habitat potentially suitable for this species (coastal scrub and grassland) is present in the project area. Treatments could result in direct or indirect adverse effects on Coulter's saltbush. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
South coast saltscale *Atriplex pacifica*	—	—	1B.2	Coastal bluff scrub, dunes. Alkali soils. 0-1,320 feet in elevation. Blooms March–October. Annual.	**May occur**. Habitat potentially suitable for this species (coastal bluff scrub) is present in the lower elevation portions of the project area. Although most soils are documented as acidic soil types, some scattered slightly alkaline soils are also present and may support this species' growth. Treatments could result in direct or indirect adverse effects on south coast saltscale. However, this species is an annual herb. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season, which would generally occur in the winter. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	—	—	1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil. 0-670 feet in elevation. Blooms April–October. Annual.	**May occur**. Habitat potentially suitable for this species (coastal scrub) is present in the lower elevation portions of the project area. Treatments could result in direct or indirect adverse effects on Davidson's saltscale. However, this species is an annual herb. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season, which would generally occur in the winter. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Late-flowered mariposa-lily *Calochortus fimbriatus*	—	—	1B.3	Dry, open, coastal woodland and chaparral, occasionally serpentine. 880–4,700 feet in elevation. Blooms June–August. Geophyte.	**May occur**. Habitat potentially suitable for this species (dry coastal woodland and chaparral) is present throughout the project area. No serpentine soil is expected to occur in the project area, but this species is only weakly associated with serpentine soils and therefore may occur in the loamy soils within the project area. Treatments could result in direct or indirect adverse effects on late-flowered mariposa-lily. However, this species is a geophyte. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season (i.e., when the plant has no aboveground parts), generally in the winter. Ground-disturbing treatment activities may result in impacts on this species even when dormant and would require pre-treatment surveys (per SPR BIO-7). If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Palmer's mariposa-lily *Calochortus palmeri* var. *palmeri*	—	—	1B.2	Meadows and seeps, chaparral, lower montane coniferous forest. Vernally moist places in yellow-pine forest, chaparral. 3,280–7,840 feet in elevation. Blooms April–July. Geophyte.	Not expected to occur. Habitat potentially suitable for this species (seasonally wet meadows and chaparral restricted to elevations exceeding 3,280 feet) is not present in the project area.
Lemmon's jewelflower *Caulanthus lemmonii*	—	—	1B.2	Valley and foothill grassland, chaparral, and scrub. 240–5,200 feet in elevation. Blooms February–May. Annual.	**May occur**. Habitat potentially suitable for this species (grassland, chaparral, and scrub) is present throughout the project area. Treatments could result in direct or indirect adverse effects on Lemmon's jewelflower. However, this species is an annual herb. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season, which would generally occur in the winter. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Southern tarplant *Centromadia parryi* ssp. *australis*	—	—	1B.1	Salt marshes, grassland, vernal pools, and coastal scrub at elevations less than 650 feet. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. Blooms June–October. Annual.	**May occur**. Habitat potentially suitable for this species (0 to 650-foot-elevation disturbed areas, grasslands, and coastal scrub) is present throughout the project area. Treatments could result in direct or indirect adverse effects on southern tarplant. However, this species is an annual herb. Impacts on this species would be avoided by implementing non-ground-disturbing treatment activities during the dormant season, which would generally occur in the winter. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	—	—	1B.1	Coastal bluff scrub, coastal dunes. Sandy sites. 10–260 feet in elevation. Blooms January–August. Annual.	Not expected to occur. Habitat potentially suitable for this species (coastal bluff scrub and dunes) is not present in the project area.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE	SE	1B.2	Coastal salt marsh, wetland. Limited to the higher zones of salt marsh habitat. 0–40 feet in elevation. Blooms May–October. Annual.	Not expected to occur. Habitat potentially suitable for this species (low-elevation coastal salt marsh) is not present in the project area.
Umbrella larkspur *Delphinium umbraculorum*	—	—	1B.3	Moist oak forest, mesic sites. 1,310–5,250 feet in elevation. Blooms April–June. Perennial.	**May occur**. Habitat potentially suitable for this species (oak woodland) is present in the fuel break and WUI fuel reduction treatment areas. Treatments could result in direct or indirect adverse effects on umbrella larkspur. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Life History	Potential for Occurrence[2]/Potential Impact
Ojai fritillary *Fritillaria ojaiensis*	—	—	1B.2	Rocky slopes and river basins. Broadleaved upland forest (mesic), chaparral, lower montane coniferous forest, cismontane woodland. Usually loamy soils. Sometimes on serpentine soil; sometimes along roadsides. 730–3,280 feet in elevation. Blooms February–May. Geophyte.	**May occur**. Habitat potentially suitable for this species (chaparral and forested habitat) is present throughout the project area. Treatments could result in direct or indirect adverse effects on Ojai fritillary. However, this species is a geophyte. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season (i.e., when the plant has no aboveground parts), generally in the winter. Ground-disturbing treatment activities may result in impacts on this species even when dormant and would require pre-treatment surveys (per SPR BIO-7). If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Mesa horkelia *Horkelia cuneata* var. *puberula*	—	—	1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 40–5,400 feet in elevation. Blooms February–July. Perennial.	**May occur**. Habitat potentially suitable for this species (chaparral and coastal scrub) is present in the project area. Treatments could result in direct or indirect adverse effects on mesa horkelia. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
California satintail *Imperata brevifolia*	—	—	2B.1	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 10–4,900 feet in elevation. Blooms September–May. Geophyte.	**May occur**. Habitat potentially suitable for this species (mesic sites in coastal scrub and riparian coastal scrub) is present in scattered areas throughout the project area. Treatments could result in direct or indirect adverse effects on California satintail. However, this species is a geophyte. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season (i.e., when the plant has no aboveground parts), generally in the winter. Ground-disturbing treatment activities may result in impacts on this species even when dormant and would require pre-treatment surveys (per SPR BIO-7). If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	—	—	1B.1	Alkali playa, wetland. Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 0–4,510 feet in elevation. Blooms February–June. Annual.	**May occur**. Habitat potentially suitable for this species (saline soil vernal pools) may be present in low grassland areas in the ecological restoration treatment area. Treatments could result in direct or indirect adverse effects on Coulter's goldfields. However, this species is an annual herb. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season, which would generally occur in the winter. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Pale-yellow layia *Layia heterotricha*	—	—	1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Sometimes alkaline or clay soils; open areas. 300–5,900 feet in elevation. Blooms March–June. Annual.	**May occur.** Habitat potentially suitable for this species (coastal scrub and grassland habitat) is present in the ecological restoration treatment area. Treatments could result in direct or indirect adverse effects on pale-yellow layia. However, this species is an annual herb. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season, which would generally occur in the winter. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Santa Barbara honeysuckle *Lonicera subspicata* var. *subspicata*	—	—	1B.2	Chaparral, cismontane woodland, coastal scrub. 10–2,700 feet in elevation. Blooms May–August. Perennial.	**May occur**. Habitat potentially suitable for this species (chaparral and coastal scrub) is present in the project area. Treatments could result in direct or indirect adverse effects on Santa Barbara honeysuckle. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Davidson's bush-mallow *Malacothamnus davidsonii*	—	—	1B.2	Sandy washes. 490–5,000 feet in elevation. Blooms June–January. Perennial.	**May occur.** Habitat potentially suitable for this species (riparian woodland and sandy washes) is present throughout the entire project area. Treatments could result in direct or indirect adverse effects on Davidson's bush-mallow. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Mexican malacothrix *similis*	—	—	2A	Coastal dunes. 0–130 feet in elevation. Blooms April–May. Annual.	Not expected to occur. Habitat potentially suitable for this species (coastal dunes) is not present in the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
White-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	—	—	1B.3	Chaparral, cismontane woodland. Dry slopes. 160–5,000 feet in elevation. Blooms, May–August. Perennial.	**May occur.** Habitat potentially suitable for this species (oak woodland and chaparral) is present throughout the project area. Treatments could result in direct or indirect adverse effects on white-veined monardella. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Tehachapi monardella *Monardella linoides* ssp. *oblonga*	—	—	1B.3	Chaparral, conifer woodland to forest, On dry slopes of yellow pine forest, decomposed granitic soils; also in roadside disturbed areas. 2,950–8,100 feet in elevation. Blooms June–August. Geophyte.	Not expected to occur. Habitat potentially suitable for this species (elevations exceeding 2950 feet) is not present in the project area.
Aparejo grass *Muhlenbergia utilis*	—	—	2B.2	Meadows and seeps, marshes and swamps, chaparral, coastal scrub, cismontane woodland. Sometimes alkaline, sometimes serpentinite. 80–7,630 feet in elevation. Blooms October–March. Geophyte.	**May occur.** Habitat potentially suitable for this species (wetlands in chaparral, coastal scrub and woodlands, often with serpentine soil) are uncommon but present in the project area. Treatments could result in direct or indirect adverse effects Aparejo grass. However, this species is a geophyte. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season (i.e., when the plant has no aboveground parts), generally in the winter. Ground-disturbing treatment activities may result in impacts on this species even when dormant and would require pre-treatment surveys (per SPR BIO-7). If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b. Treatments would not result in impacts on fresh emergent wetland which provides habitat suitable for Aparejo grass, because aquatic habitats would be protected prior to treatment activities, as described below. Pursuant to MM BIO-4, the boundaries of federally and state protected wetlands and waters would be delineated for avoidance prior to treatment implementation. Watercourse and Lake Protection Zones (WLPZs) and Equipment Limitation Zones (ELZs) pursuant to SPR HYD-4 would be implemented adjacent to all lakes and watercourses within the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Ojai navarretia *Navarretia ojaiensis*	—	—	1B.1	Openings in shrublands or grasslands. 900-2,040 feet in elevation. Blooms May–July. Annual.	**May occur.** Habitat potentially suitable for this species (chaparral, coastal scrub, and grassland) is present throughout the project area. Treatments could result in direct or indirect adverse effects on Ojai navarretia. However, this species is an annual herb. Impacts on this species would be avoided by implementing only non-ground-disturbing treatment activities and only during the dormant season, which would generally occur in the winter. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Baja navarretia *Navarretia peninsularis*	—	—	1B.2	Lower montane coniferous forest, chaparral, meadows and seeps, pinyon and juniper woodland. Wet areas in open forest. 3,770–7,760 feet in elevation. Blooms, June–August. Annual.	Not expected to occur. Habitat potentially suitable for this species (elevations exceeding 3775 feet) are not present in the project are. The project ranges from 400 to 2,156 feet in elevation.
Chaparral nolina *Nolina cismontana*	—	—	1B.2	Primarily on sandstone and shale substrates; also known from gabbro. 460–4,180 feet in elevation. Blooms, May–July. Perennial.	**May occur.** Habitat potentially suitable for this species (Chaparral and coastal scrub habitat) is present throughout the ecological restoration treatment area. Treatments could result in direct or indirect adverse effects on this species. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
White rabbit-tobacco *Pseudognaphalium leucocephalum*	—	—	2B.2	Sandy, gravelly sites along dry stream bottoms and canyon bottoms, especially associated with coastal sage scrub and chaparral. 110–1,690 feet in elevation. Blooms, August–November. Perennial.	**May occur.** Habitat potentially suitable for this species (Coastal scrub and chaparral sandy areas) is present in the ecological restoration treatment area. Aquatic habitats would be protected prior to treatment activities. Pursuant to MM BIO-4, the boundaries of federally and state protected wetlands and waters would be delineated prior to treatment implementation. WLPZs and ELZs pursuant to SPR HYD-4 would be implemented adjacent to lakes and watercourses within the project area, and this species would be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Nuttall's scrub oak *Quercus dumosa*	—	—	1B.1	Generally, on sandy soils near the coast; sometimes on clay loam. 50–1,320 feet in elevation. Blooms February–April. Perennial.	**May occur.** Habitat potentially suitable for this species (forest, chaparral, and coastal scrub with sandy soils) is present throughout the project area. One occurrence is documented near the ecological restoration area. Treatments could result in direct or indirect adverse effects on this species. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Sanford's arrowhead *Sagittaria sanfordii*	—	—	1B.2	Wetland. Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0–2,130 feet in elevation. Blooms May–October. Geophyte.	Not expected to occur. Habitat potentially suitable for this species (freshwater aquatic ponds, ditches, marshes and swamps) are not present in the project area; all water resources in the project area are extremely ephemeral and are not expected to support freshwater marsh species such as Sanford's arrowhead.
Salt spring checkerbloom *Sidalcea neomexicana*	—	—	2B.2	Typically, in wetlands, alkaline springs, and marshes, also in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 0–5,020 feet in elevation. Blooms March–June. Perennial.	**May occur.** Habitat potentially suitable for this species (Chaparral and coastal scrub adjacent to fresh emergent wetland) is present in the ecological restoration treatment area. Aquatic habitats including wetland, marsh, and alkaline spring habitat suitable for salt spring checkerbloom would be protected prior to treatment activities. Pursuant to MM BIO-4, the boundaries of federally and state protected wetlands and waters would be delineated prior to treatment implementation, and within delineated wetlands, no soil disturbance or ignition would occur. WLPZs and ELZs pursuant to SPR HYD-4 would be implemented adjacent to lakes and watercourses within the project area, and this species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.
Southern jewelflower *Streptanthus campestris*	—	—	1B.3	Chaparral, lower montane coniferous forest, pinyon-juniper woodland. Open, rocky areas. 2,950–7,550 feet in elevation. Blooms, May–July. Perennial.	Not expected to occur; Habitat potentially suitable for this species (areas exceeding 2,950 feet in elevation) is not present in the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Sonoran maiden fern *Thelypteris puberula* var. *sonorensis*	—	—	2B.2	Wetland, meadows, and seeps in forested areas along streams, seepage areas. 165–2,000 feet in elevation. Blooms January–September. Geophyte.	**May occur.** Habitat potentially suitable for this species (wetlands in woodland or riparian areas) are uncommon but present in the oak woodland along the fuel break and WUI fuel reduction treatment areas. Aquatic habitats including wetland and seeps which may provide habitat suitable for Sonoran maiden fern would be protected prior to treatment activities. Pursuant to MM BIO-4, the boundaries of federally and state protected wetlands and waters would be delineated prior to treatment implementation, and within delineated wetlands, no soil disturbance or ignition would occur. WLPZs and ELZs would be implemented pursuant to SPR HYD-4 adjacent to all lakes and watercourses within the project area. Treatments could result in direct or indirect adverse effects on Sonoran maiden fern. However, this species is a geophyte. Impacts on this species would be avoided by implementing non-ground-disturbing treatment activities during the dormant season (i.e., when the plant has no aboveground parts), generally in the winter. Ground-disturbing treatment activities may result in impacts on this species even when dormant. If non-ground disturbing treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found pursuant to Mitigation Measure BIO-1b.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Invertebrates					
Monarch butterfly – California overwintering population *Danaus plexippus* pop. 1	FC	—	—	Closed-cone coniferous forest. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	**May occur**. Habitat potentially suitable for breeding (grassland and oak woodland containing the species' host plant, milkweed [*Asclepias* spp.]) is present in the project area; however, no suitable overwintering habitat (closed-coniferous forest within 10 miles from the coast) is present. Non-breeding individuals may feed on milkweed and other flowering species within the treatment area. Monarch has been observed overwintering in eucalyptus and pine trees near the city of Ventura approximately 10 miles southeast of the project area as recently as 2010 (CNDDB 2022). However, suitable closed-cone pine forest is absent in the project area and overwintering is not anticipated. While there are limited known occurrences documented of milkweed host plants in the project area and monarch breeding is not known to occur (Western Milkweed Mapper 2022), milkweed was observed throughout the ecological restoration treatment area, and breeding may occur within the project area. Treatments within coastal scrub, chaparral, oak woodlands, and grasslands may result in the loss of host plants if present. If monarch butterflies or host plants are detected or assumed to occur, treatments within habitat suitable for monarch will be designed to avoid milkweed when feasible and to maintain habitat function for the species. Milkweed studies have shown that prescribed burning during dormant season has positive or neutral effects on milkweed, and milkweed has adaptations which promote fire survivorship and establishment post-fire (wind-blown seeds, deep rhizomes, early successional status) (Ulev 2005). Therefore, prescribed fire treatment in grasslands containing milkweed is recommended to occur during the milkweed dormant season, from October 31 through March 15. Habitat function will be maintained because all areas would not be treated at once; treatment will be spread out over the course of several years. The species is currently a candidate for listing under the Endangered Species Act (ESA). Should the species be listed, further consultation with USFWS may be required.

Crotch bumble bee *Bombus crotchii*	—	SC		Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum*.	**May occur**. Habitat potentially suitable for this species (grassland and scrubland with suitable food plants) is present in the project area. Crotch bumble bee has been documented extensively in Los Padres National Forest in Ventura County (Los Padres ForestWatch 2013), which is located 8 miles northwest of the treatment area (CNDDB 2022). Nearby occurrences for Crotch bumble bee are recorded in areas that have similar coastal scrub habitats as those available in within the project area (CNDDB 2022). Treatment activities within habitat suitable for Crotch bumble bee may result in the removal of floral resources, and injury or death of individuals and loss of colonies, if present. If Crotch bumble bee is detected during pre-treatment surveys, or if presence of the species is assumed, Mitigation Measure BIO-2g would be implemented as required in the PEIR. Coordination with CDFW on the species concluded that for CESA compliance purposes the mitigation actions for the species are appropriate measures to maintain suitable refuge and habitat functions of floral resources for Crotch bumble bee. Additional guidance regarding Crotch's bumble bee survey methodology was provided by CDFW and has been incorporated into the project-specific implementation of SPR BIO-10 (Kelly, pers. comm., 2023). Habitat use by this species in or near the project area remains unknown, and information on the abundance of Crotch's bumble bee in California or on colony size of the species (CDFW 2019) is very limited. Published or other technical information useful for estimating the potential magnitude of effects from the loss of individual Crotch's bumble bee overwintering queens or nests on populations of the species is not available. Therefore, although Mitigation Measure BIO-2g applies and will be implemented for this project, further assessment of the impact on the species due to the potential loss of an overwintering queen or nest from implementation of the proposed project would be speculative, and as such, further analysis of this issue is not included in accordance with CEQA Guidelines Section 15064(d)(3). CEQA Guidelines indicate that after thorough investigation, if an impact is too speculative for meaningful evaluation, this finding should be noted, and further discussion can be concluded (CEQA Guidelines Section 15145). However, as a candidate for listing under CESA, an Incidental Take Permit may be required if project activities may result in loss of individual Crotch's bumble bees. With implementation of Mitigation Measure BIO-2g and applicable SPRs, habitat function for Crotch's bumble bee would be maintained during and after treatment implementation. Treatments would be designed and implemented in a patchy pattern to retain floral resources and provide refuge for bumble bees. The proposed vegetation treatments would not cause any conversion or loss of natural land cover or permanent soil disturbance that could remove availability of potential underground nesting or overwintering sites over the long term. Ecological restoration treatment in grassland areas would focus on broadcast burning to encourage native species and promote habitat quality within the natural fire regime, retaining floral resources and other elements of habitat function for grassland species. SPR BIO-9 would be implemented, which would prevent the spread of invasive plants and noxious weeds through application of best

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
					management practices before, during, and after treatments. Additionally, requirements to maintain habitat function in coastal sage scrub and chaparral, pursuant to SPR BIO-5, would incidentally contribute to maintenance of floral resources and habitat function for Crotch's bumble bee. While implementation of Mitigation Measure BIO-2g and applicable SPRs is expected to reduce potential mortality, injury, and other disturbances to individual Crotch's bumble bee if the species is present during treatment activities, determining the level of significance for potential impacts on individuals and populations (including nesting bees and overwintering queens) would be too speculative to evaluate for the reasons discussed above. With implementation of Mitigation Measure BIO-2g and applicable SPRs, the impact of the project on habitat function for Crotch's bumble bee would be less than significant. These potential effects would not constitute a substantially more severe significant impact than what was covered in the Program EIR.
Fishes					
Arroyo chub *Gila orcuttii*	—	SSC	—	South coast flowing waters. Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave, and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	**May occur**. Habitat potentially suitable for this species (perennial flowing waterways that could potentially support fully aquatic species) was not observed during the reconnaissance survey on August 2, 2022; however, Coyote Creek may provide suitable habitat for Arroyo chub during the wet months of the year. Manual, mechanical, and prescribed burning treatments upslope from waterways could result in inadvertent discharge of silt into streams that could increase turbidity, potentially resulting in adverse effects to Arroyo chub. Implementation of erosion and hazardous waste SPRs and implementation of WLPZs and ELZs pursuant to SPR HYD-4 would reduce injury to or mortality to this species.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Pacific lamprey *Entosphenus tridentatus*	—	SSC	—	Klamath/north coast flowing waters, Sacramento/San Joaquin flowing waters, South coast flowing waters. Found in Pacific Coast streams north of San Luis Obispo County, however regular runs in Santa Clara River. Size of runs is declining. Swift-current gravel-bottomed areas for spawning with water temperatures between 12-18 degrees C. Ammocoetes need soft sand or mud.	**May occur**. Habitat potentially suitable for this species (perennial flowing waterways that could potentially support fully aquatic species) was not observed during the reconnaissance survey on August 2, 2022; however, Coyote Creek may provide suitable habitat for pacific lamprey during the wet months of the year. Manual, mechanical, and prescribed burning treatments upslope from waterways could result in inadvertent discharge of silt into streams that could increase turbidity, potentially resulting in adverse effects to pacific lamprey. Implementation of erosion and hazardous waste SPRs and implementation of WLPZs and ELZs pursuant to SPR HYD-4 would reduce injury to or mortality to this species.
Steelhead - southern California DPS *Oncorhynchus mykiss irideus* pop. 10	FE	—	—	South coast flowing waters. Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	**Known to occur.** Habitat potentially suitable for this species (flowing water) is present in Coyote Creek, which is mapped as critical habitat for this species, and is considered active migration habitat (NOAA 2006). Habitat suitable for this species is also present in two intermittent tributaries to Coyote Creek that occur in the proposed fuel break area near Casitas Vista Road. Coyote Creek was dry during the site visit on August 2, 2022, but may support some migrating steelhead seasonally during the wet months of the year. Manual, mechanical, and prescribed burning treatments upslope from waterways could result in inadvertent discharge of silt into streams, which could increase turbidity, potentially resulting in adverse effects, injury, or death to steelhead. Implementation of erosion and hazardous waste SPRs and implementation of WLPZs and ELZs pursuant to SPR HYD-4 would reduce injury to or mortality to this species.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Tidewater goby *Eucyclogobius newberryi*	FE	SSC	—	Klamath/north coast flowing waters, Sacramento/San Joaquin flowing waters, South coast flowing waters. Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not expected to occur. Habitat potentially suitable for this species (brackish flowing water) is not present in the project area.
Unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	FE	SE, FP	—	South coast flowing waters. Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool, clear water with abundant vegetation.	**May occur**. Habitat potentially suitable for unarmored threespine stickleback may be present seasonally in Coyote Creek and in intermittent tributaries to Coyote Creek that occur in the proposed fuel break area near Casitas Vista Road. Coyote Creek was dry during the site visit on August 2, 2022, but may support stickleback seasonally during the wet months of the year. Manual, mechanical, and prescribed burning treatments upslope from waterways that provide habitat suitable for stickleback may result in the injury or death of individuals. Implementation of erosion and hazardous waste SPRs and implementation of WLPZs and ELZs pursuant to SPR HYD-4 would reduce injury to or mortality to this species.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Reptiles and Amphibians					
Arroyo toad *Anaxyrus californicus*	FE	SSC	—	Desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, and desert wash. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Not expected to occur. Habitat potentially suitable for this species is present in the project area; however, the project area is located approximately 2 miles outside of this species known range and significant barriers (e.g., State Route (SR) 33, steep slopes, development) is expected to prevent dispersal. This species is not known to occur west of SR 33 or south of Lake Casitas (USGS 2022; Thomson et al 2019).
California legless lizard[1] *Anniella* sp. 1	—	SSC	—	Chaparral, coastal dunes, coastal scrub, with sandy or loose loamy soils under sparse vegetation. Prefers soils with a high moisture content.	**May occur.** Habitat potentially suitable for this species (coastal scrub with loose soil) is present in some riparian areas in the project area. Unidentified *Anniella* species are known to occur in the vicinity of the project area, and documented occurrences are recorded along the eastern side of Lake Casitas in habitat similar to that present in the ecological restoration treatment area (CNDDB 2022). Manual, mechanical, and prescribed burning treatments within habitat suitable for legless lizards may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist would reduce injury or mortality to this species.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Northern California legless lizard[1] *Anniella pulchra*	—	SSC	—	Chaparral, coastal dunes, coastal scrub, with sandy or loose loamy soils under sparse vegetation. Prefer soils with a high moisture content.	**May occur.** Habitat potentially suitable for this species (coastal scrub with loose soil) is present in some riparian areas in the project area. Unidentified *Anniella* species are known to occur in the vicinity of the project area, and documented occurrences are recorded along the eastern side of Lake Casitas in habitat similar to that present in the ecological restoration treatment area (CNDDB 2022). Manual, mechanical, and prescribed burning treatments within habitat suitable for legless lizards may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist would reduce injury or mortality to this species.
Southern California legless lizard[1] *Anniella stebbinsi*	—	SSC	—	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub. Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Variety of habitats; generally in moist, loose soil.	**May occur.** Habitat potentially suitable for this species (coastal scrub with loose soil) is present in some riparian areas in the project area. Unidentified *Anniella* species are known to occur in the vicinity of the project area, and documented occurrences are recorded along the eastern side of Lake Casitas in habitat similar to that present in the ecological restoration treatment area (CNDDB 2022). Manual, mechanical, and prescribed burning treatments within habitat suitable for legless lizards may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist would reduce injury or mortality to this species.

[1] The project area falls within a portion of the range of the California legless lizard (*Anniella* species) that has not been identified to species. Legless lizard occurring within the treatment area may be either *Anniella pulchra, Anniella stebbinsi,* or another undetermined *Anniella* species 1. All three use similar habitat, and are California state Species of Special concern. These species have been assessed separately in Table B-2.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
California red-legged frog *Rana draytonii*	FT	SSC	—	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.	**May occur.** Habitat potentially suitable for this species (various habitat types near permanent sources of fresh water with emergent vegetation) is present in the WUI fuel reduction and fuel break treatment areas within the vicinity of Coyote Creek. Three occurrences of California red-legged frog are documented within the vicinity of the project area; all occur along tributaries of the Ventura River (CNDDB 2022). The closest occurrence is located within 0.4 mile of the WUI fuel reduction treatment area. Intermittent and ephemeral drainages throughout the project area could support seasonal dispersal and upland movement of California red-legged frog; however, no waterways in the project area are known to hold water long enough to support breeding in wet years. Permanent ponds and breeding habitat is present along Ventura River, which is located 0.5 mile east of the treatment area. This species may move through the project area to disperse from more permanent waters in the wettest years, but the treatment areas are not likely to support a permanent population of California red-legged frog due to the lack of aquatic breeding habitat. Manual, mechanical, and prescribed burning within habitat suitable for California red-legged frog may result in the injury or death of individuals. If California red-legged frog is detected during pre-treatment surveys, biological monitoring, and work stoppages, along within implementation of WLPZ setbacks pursuant to SPR HYD-4 would avoid injury or mortality to this species.
Coast horned lizard *Phrynosoma blainvillii*	—	SSC	—	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**May occur.** Habitat potentially suitable for this species (open coastal scrub and chaparral) is present throughout the project area. The ecological restoration treatment area provides the highest quality habitat for this species, although open areas in and adjacent to the other treatment areas also could provide habitat suitable for coast horned lizard. Manual, mechanical, and prescribed burning treatments within habitat suitable for coast horned lizard may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist would reduce injury to or mortality of this species.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	—	SSC	—	Coastal scrub. Brushy or shrubby vegetation in coastal Southern California. Require small mammal burrows for refuge and overwintering sites.	**May occur.** Habitat potentially suitable for this species (coastal scrub) is present throughout the ecological restoration treatment area, and there is a high density of mammal burrows in the project area. Manual, mechanical, and prescribed burning treatments within habitat suitable for coast patch-nosed snake may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist would reduce injury to or mortality of this species.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Coast Range newt *Taricha torosa*	—	SSC	—	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate more than 0.6 mile (1 km) to breed in ponds, reservoirs and slow-moving streams.	**May occur.** Habitat potentially suitable for this species (aquatic habitat) is seasonally present in and adjacent to aquatic resources in the WUI fuel reduction and fuel break treatment areas. This species may use terrestrial habitats for dispersal and foraging within 0.6 mile of those aquatic resources. Manual, mechanical, and prescribed burning treatments within habitat suitable for coast range newt may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist, along with implementation of WLPZ setbacks pursuant to SPR HYD-4 would reduce injury to or mortality of this species.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	—	SSC	—	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	**May occur.** Habitat potentially suitable for this species (open areas of chaparral, coastal scrub, and forest) is present throughout the project area. Manual, mechanical, and prescribed burning treatments within habitat suitable for coastal whiptail may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist would reduce injury to or mortality of this species.
Foothill yellow-legged frog *Rana boylii*	—	SE, SSC	—	Requires partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	Not expected to occur. Habitat potentially suitable for this species (rocky, shaded, flowing streams) is not present in the project area. One record of this species along San Antonio Creek (approximately 4 miles east of the project area) was documented in 1940; the species is now considered extirpated from the area (CNDDB 2022).

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Life History	Potential for Occurrence[2]/Potential Impact
South coast gartersnake *Thamnophis sirtalis* pop. 1	—	SSC	—	Southern California coastal plain from Ventura County to San Diego County, and from sea level to about 2,790 feet. Most frequently found in marsh and upland habitats near permanent water with good strips of riparian vegetation.	**May occur.** Habitat potentially suitable for this species (riparian vegetation adjacent to permanent water and surrounding vegetated uplands) is present in the vicinity of Coyote Creek adjacent to the WUI fuel reduction treatment area. However, the aquatic habitat within Coyote Creek contained only isolated pools of water during the August 2, 2022, reconnaissance survey and the project area generally provides low-quality habitat due to the short hydroperiod of streams throughout project area. Habitat within the WUI fuel reduction treatment area may support gartersnakes but no other treatment areas are suitable. Manual, mechanical, and prescribed burning treatments within habitat suitable for gartersnakes may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist, along with implementation of WLPZs pursuant to SPR HYD-4 would reduce injury to or mortality of this species.
Two-striped gartersnake *Thamnophis hammondii*	—	SSC	—	Coastal California from vicinity of Salinas to northwest Baja California. From sea level to about 7,000 feet elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	**May occur.** Habitat potentially suitable for this species (riparian vegetation adjacent to permanent water and surrounding vegetated uplands) is present in the vicinity of Coyote Creek adjacent to the WUI treatment area. However, the aquatic habitat within Coyote Creek contained only isolated pools of water during the August reconnaissance survey and the project area generally provides low-quality habitat due to the short hydroperiod of streams throughout the area. Habitat within the WUI fuel reduction treatment area may support gartersnakes but no other treatment areas contain habitat suitable for this species. Manual, mechanical, and prescribed burning treatments within habitat suitable for gartersnakes may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist, along with implementation of WLPZs pursuant to SPR HYD-4 would reduce injury to or mortality of this species.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Western pond turtle *Emys marmorata*	—	SSC	—	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to approximately 0.3 mile (0.5 km) from water for egg-laying.	**May occur.** Habitat potentially suitable for this species (aquatic habitat and upland habitat near marshes, rivers, and streams) is present in Coyote Creek and adjacent to the WUI fuel reduction treatment area; however, the aquatic habitat contained only isolated pools of water during the August 2, 2022, reconnaissance survey and the project area generally provides low-quality aquatic habitat due to the short hydroperiod of streams throughout the project area. Habitat within the WUI fuel reduction treatment area may support western pond turtle but no other treatment areas contain habitat suitable for the species. Western pond turtle is known to travel up to 0.3 mile from suitable stream habitat, and Coyote Creek provides seasonally suitable habitat for this species. Therefore, upland areas within 0.3 mile of Coyote Creek, which includes the WUI fuel reduction treatment area, may provide suitable upland habitat for this species. Manual, mechanical, and prescribed burning treatments within habitat suitable for western pond turtle may result in the injury or death of individuals. If this species is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist, along with implementation of WLPZs pursuant to SPR HYD-4 would reduce injury to or mortality of this species.
Western spadefoot *Spea hammondii*	—	SSC	—	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**May occur.** Habitat potentially suitable for this species (coastal scrub, grassland, woodland, and fresh emergent wetland) is present in all treatment areas. Manual, mechanical, and prescribed burning treatments within habitat suitable for western spadefoot may result in the injury or death of individuals. If western spadefoot is detected during surveys, biological monitoring, and relocation of individual animals by a qualified RPF or biologist, along with implementation of WLPZs pursuant to SPR HYD-4 would reduce injury to or mortality of this species.
Birds					
American peregrine falcon *Falco peregrinus anatum*	FD	SD, FP	—	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not expected to occur. Habitat potentially suitable for American peregrine falcon nesting (cliffs or human structures near water resources) is not present in the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Ashy storm-petrel *Hydrobates homochroa*	—	SSC	—	Protected deep-water coastal communities. Colonial nester on off-shore islands. Usually nests on driest part of islands. Forages over open ocean. Nest sites on islands are in crevices beneath loosely piled rocks or driftwood, or in caves.	Not expected to occur. Habitat potentially suitable for ashy storm-petrel nesting (offshore islands in the Pacific Ocean) is not present in the project area.
Bald eagle *Haliaeetus leucocephalus*	FD	SE, FP	—	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	**May occur.** Habitat potentially suitable for bald eagle nesting (large trees within 1 mile of permanent water) may potentially be present in the portions of the WUI fuel reduction and fuel break treatment areas that are heavily forested and located within 1 mile of Lake Casitas. Large, old-growth trees suitable for nesting were not observed during the August 2, 2022, reconnaissance survey; however, it is possible that suitable nesting trees are present that were not observed during the reconnaissance survey. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. Treatment would not remove foraging or nesting habitat for bald eagle, and treatment activities would reduce vegetation density in this species' foraging habitat, providing additional foraging opportunities that could benefit this species.
Bank swallow *Riparia riparia*	—	ST	—	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, or ocean to dig nesting hole.	**May occur.** Habitat potentially suitable for nesting (desert riparian scrub and riparian woodland with vertical banks with fine soils) may be present in scattered patches in all treatment areas. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. Treatment activities would not directly impact nests, because nests are constructed on vertical banks which are heavily eroded, inaccessible, and do not contain vegetative fuels. If active special-status bird nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest. Implementation of nesting bird seasonal avoidance or nesting bird surveys, and WLPZs pursuant to SPR HYD-4 would reduce injury to or mortality of this species.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	—	SE	—	Marsh, swamp, and wetlands. Inhabits coastal salt marshes from Santa Barbara south through San Diego County. Nests in pickleweed (*Salicornia* spp.) on and around margins of tidal flats.	Not expected to occur. Habitat potentially suitable for nesting and foraging (pickleweed-dominated coastal salt marshes) is not present in the project area.
Black skimmer *Rynchops niger*	—	SSC	—	Alkali playa, sand shore. Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually fewer than 200 pairs.	Not expected to occur. Habitat potentially suitable for nesting (sandy gravel bars and islands on the beach) is not present in the project area.
Black swift *Cypseloides niger*	—	SSC	—	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto Mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Not expected to occur. Habitat potentially suitable for nesting (canyons and sea-bluffs above the ocean) is not present in the project area.
Brant *Branta bernicla*	—	SSC	—	Requires well-protected, shallow marine waters with intertidal eel-grass beds, primarily within bays and estuaries. At high tide they need sheltered open water or protected beaches for loafing. Distribution is closely tied to abundance of eelgrass. Brant often feed close to mudflats, sandbars or spits used as gritting sites.	Not expected to occur. Habitat potentially suitable for nesting (estuarine and marine bay) is not present in the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Burrowing owl *Athene cunicularia*	—	SSC	—	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**May occur.** Habitat potentially suitable for this species (open grassland, desert, and scrubland with low-growing vegetation) is present in the ecological restoration treatment area. Although burrowing owl prefer grassland with shorter vegetation, greater ground squirrel activity, and more rolling hills than what was present in the project area, pockets of grazed grassland in and near the project area provide suitable overwintering and possible lower-quality breeding habitat for burrowing owl (Cornell 2022). Burrowing owl has been documented nearby in grasslands north of Lake Casitas, and in agricultural areas near the city of Ventura (CNDDB 2022). Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for burrowing owl overwintering or breeding year-round could injure adults or destroy or disturb active burrows, potentially resulting in abandonment of the nest and loss of young or adults. If active burrowing owl burrows are observed during focused surveys, then a non-disturbance buffer would be established around each burrow. Implementation of burrowing owl surveys year-round would reduce injury to or mortality of this species.
California black rail *Laterallus jamaicensis coturniculus*	—	ST, FP	—	Brackish marsh, freshwater marsh, marsh and swamp, salt marsh, wetland. Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not expected to occur. Habitat potentially suitable for nesting and foraging (freshwater or brackish marsh) is not present in the project area.
California brown pelican *Pelecanus occidentalis californicus*	FD	SD, FP	—	Colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size that afford immunity from attack by ground-dwelling predators. Roosts communally.	Not expected to occur. Habitat potentially suitable for nesting and foraging (coastal islands) is not present in the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
California condor *Gymnogyps californianus*	FE	SE, FP	—	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.	**May occur.** Habitat potentially suitable for California condor nesting and foraging (grassland, coastal scrub, and chaparral) is present in the project area, and this species is known to occur in canyons in the vicinity of the project area (CNDDB 2022, eBird 2022). Cliffs or caves that could serve as suitable condor nesting habitat were not observed during the August 2, 2022, reconnaissance survey; however, suitable nesting cliff habitat may be present in the project vicinity. Treatments would not result in complete removal of foraging habitat for California condor because condors use a variety of habitat and would be expected to continue to use foraging habitat post-treatment. Additionally, treatments in chaparral habitat would result in a reduction in overall chaparral density within the project area, which could provide additional foraging opportunities that could benefit this species. Manual, mechanical, and prescribed burning treatments conducted within nesting habitat suitable for this species during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. Treatment would not remove foraging or nesting habitat for California condor, and treatment activities would reduce vegetation density in this species' foraging habitat, providing additional foraging opportunities that could benefit this species.
California least tern *Sternula antillarum browni*	FE	SE, FP	—	Alkali playa, wetland. Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	Not expected to occur. Habitat potentially suitable for nesting (sandy beaches or alkali flats) is not present in the project area.
California spotted owl *Strix occidentalis*	—	SSC	—	Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure greater than 40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within approximately 1,000 feet of water.	Not expected to occur. Habitat potentially suitable for nesting (mixed conifer or hardwood forest with large diameter trees) is not present in the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Clark's marsh wren *Cistothorus palustris clarkae*	—	SSC	—	Resident of freshwater and brackish marshes dominated by bulrushes or cattails along lakeshores or within expansive wetland areas.	Not expected to occur. Habitat potentially suitable for nesting (freshwater brackish marshes) is not present in the project area. The project is outside of the species' known and historic range (Shuford and Gardali 2008).

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Coastal California gnatcatcher *Polioptila californica californica*	FT	SSC	—	Obligate, permanent resident of coastal sage scrub below 2,500 feet in southern California. Generally nest in coastal scrub habitat with greater than 50 percent canopy cover (USFWS 2007). Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	**May occur.** Habitat potentially suitable for nesting (coastal scrub with greater than 50 percent canopy cover) is present throughout the ecological restoration treatment area. This species is documented near the city of Ventura based on a record from 1906 and is possibly extirpated from the area (CNDDB 2022). This species has not been documented in the vicinity of northern Ventura County for many years; however, data is limited, and populations may be extant. Due to the relatively isolated location of the project area, the presence of habitat suitable for this species, and the lack of past surveys in the project area, it is possible that coastal California gnatcatcher may be present. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. Treatment activities in suitable nesting habitat for coastal California gnatcatcher will occur outside of the nesting season per SPR BIO-1, or SPR BIO-10 will be implemented, and targeted nesting bird surveys will be conducted prior to treatment. If coastal California gnatcatcher is observed during focused surveys, then a non-disturbance buffer would be established around all nests. Habitat function would be maintained for coastal California gnatcatcher because treatment in preferred habitat (chaparral and coastal scrub) will be designed to maintain the characteristics of the vegetation alliance per SPR BIO-3, and type conversion will be avoided per SPR BIO-5. This will include maintaining cover of a minimum of 35 percent. In addition, substantial chaparral and coastal scrub habitat which would be left untreated in the surrounding area to facilitate continued foraging and overwintering habitat for gnatcatcher. Gnatcatchers prefer 30-40 percent canopy cover, so post-treatment chaparral and coastal scrub would remain within the desirable canopy cover range for coastal California gnatcatcher (Winchell and Doherty 2018). Suitable chaparral and coastal scrub habitat observed on site ranges from 30 to 60 percent canopy density, with the densest areas overtaken by invasive mustard stands. In these areas, habitat would be expected to be improved for gnatcatcher foraging and nesting post-treatment. Additionally, both the male and female build a new nest each time they breed and would build a second nest if they double-clutch in a single year (Sibley 2001). Therefore, if work occurs outside of the nesting season, there would be no net loss of habitat for nesting. During implementation, MM BIO-2a will be implemented, which requires that habitat function be maintained. In addition to the protections provided by SPR BIO-3 and SPR BIO-5 as described above, a qualified biologist or RPF will work with VCFPD in areas where coastal California gnatcatcher is observed to ensure nesting habitat is not modified.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Common loon *Gavia immer*	—	SSC	—	Nesting locations at large lakes and reservoirs in interior of California, primarily in northeastern plateau region. Bodies of water regularly frequented are extensive, fairly deep, and produce large fish.	Not expected to occur. Habitat potentially suitable for nesting, foraging, and refugia (lakes) is not present in the project area.
Golden eagle *Aquila chrysaetos*	—	FP	—	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**May occur.** Habitat potentially suitable for nesting and foraging (rolling foothills and desert) is present throughout project area, especially steep, cliff areas within the ecological treatment area. Treatments would not completely remove foraging habitat for golden eagle, and treatments in chaparral habitat would reduce vegetation density, providing additional foraging opportunities that could benefit this species. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active golden eagle nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest. Treatment would not remove foraging or nesting habitat for golden eagle, and treatment activities would reduce vegetation density in this species' foraging habitat, providing additional foraging opportunities that could benefit this species.
Least Bell's vireo *Vireo bellii pusillus*	FE	SE	—	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, coyote brush, mesquite.	**May occur.** Habitat potentially suitable for nesting (riparian scrub and riparian forest) is uncommon but present in all treatment areas. Two records of this species are documented within the project vicinity, and the species is thought to be extant in the project area (CNDDB 2022). Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active least bell's vireo nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Life History	Potential for Occurrence[2]/Potential Impact
Light-footed Ridgway's rail *Rallus obsoletus levipes*	FE	SE, FP	—	Salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover.	Not expected to occur. Habitat potentially suitable for nesting, foraging, and refugia (salt marsh) is not present in the project area.
Loggerhead shrike *Lanius ludovicianus*	—	SSC	—	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**May occur**. Habitat potentially suitable for nesting (scrub and riparian woodland) is present throughout the project area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active loggerhead shrike nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.
Mountain plover *Charadrius montanus*	—	SSC	—	Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents.	**May occur.** Habitat potentially suitable for wintering mountain plovers (flat topography with short vegetation, especially grazed areas) is present in some of the mowed or heavily grazed sites within the ecological restoration treatment area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the overwintering season is not expected to result in impacts on mountain plovers because they can leave the area. Overwintering mountain plovers are migrating adults and can leave the project area of their own volition. Because this species does not nest in the project area, and overwintering individuals can leave of their own volition, treatment activities are not anticipated to result in impacts on mountain plover.
Northern harrier *Circus hudsonius*	—	SSC	—	Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Not expected to occur. Habitat potentially suitable for nesting (expansive coastal salt or freshwater marsh) is not present in the treatment area.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Life History	Potential for Occurrence[2]/Potential Impact
Olive-sided flycatcher *Contopus cooperi*	—	SSC	—	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes, or other open terrain.	Not expected to occur. Habitat potentially suitable for nesting (conifer forest) is not present in the project area.
Southwestern willow flycatcher *Empidonax traillii extimus*	FE	SE	—	Riparian woodlands in southern California.	**May occur.** Habitat potentially suitable for nesting southwestern willow flycatcher (riparian forest and riparian scrub) is present in the project area. Although this species has not been documented in the vicinity of the project area (CNDDB 2022; eBird 2022; iNaturalist 2022), the project is within range for this species and nesting southwestern willow flycatchers may be present. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for this species during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active southwestern willow flycatcher nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.
Summer tanager *Piranga rubra*	—	SSC	—	Riparian forest. Summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts. Requires cottonwood-willow riparian habitat for nesting and foraging; prefers older, dense stands along streams.	**May occur.** Habitat potentially suitable for nesting summer tanagers (riparian forest and riparian scrub) is uncommon but present in the project area. This species has been documented in the vicinity of Lake Casitas (eBird 2022). Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for summer tanager during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active summer tanager nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Swainson's hawk *Buteo swainsoni*	—	ST	—	Great Basin grassland, riparian forest, riparian woodland, valley, and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**May occur.** Habitat potentially suitable for nesting Swainson's hawk (isolated large trees within the savannah, grazed grassland, and riparian forest) is present in scattered areas throughout the project area, and this species has been documented during the nesting season in the vicinity of Lake Casitas (eBird 2022). Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for Swainson's hawk during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active Swainson's hawk nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest. Treatment would not remove foraging or nesting habitat for Swainson's hawk, and treatment activities would reduce vegetation density in this species' foraging habitat, providing additional foraging opportunities that could benefit this species.
Tricolored blackbird *Agelaius tricolor*	—	ST, SSC	—	Freshwater marsh or wetland. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	Not expected to occur. Habitat potentially suitable for nesting tricolored blackbirds (perennial open-water marsh or wetland habitat with open water) is not present in the project area.
Vaux's swift *Chaetura vauxi*	—	SSC	—	Lower montane coniferous forest, north coast coniferous forest, old growth redwood, Douglas fir. Nests in large hollow trees and snags. Often nests in flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes.	Not expected to occur. Habitat potentially suitable for nesting Vaux's swifts (coniferous forest, especially around riparian resources) is not present in the treatment area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Vermilion flycatcher *Pyrocephalus rubinus*	—	SSC	—	Marsh and swamp, riparian forest, riparian scrub, riparian woodland, wetland. During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nest in cottonwood, willow, mesquite, and other large desert riparian trees.	**May occur.** Habitat potentially suitable for nesting vermilion flycatchers (riparian areas) is not common but is present within the project area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for vermilion flycatcher during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active vermilion flycatcher nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.
Western snowy plover *Charadrius nivosus*	FT	SSC	—	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	Not expected to occur. Habitat potentially suitable for western snowy plover nesting (sandy beaches) is not present in the project area.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT	SE	—	Riparian forest. Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not expected to occur. The project area is outside of the species known breeding range. The western population of the western yellow-billed cuckoo historically ranged through the Ventura County region, but in recent years, California breeding populations are restricted to the Sacramento River Valley, the South Fork Kern River Valley, and the Colorado River Valley (BIOS 2016).
White-tailed kite *Elanus leucurus*	—	FP	—	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**May occur.** Habitat potentially suitable for nesting white-tailed kite (large trees in oak woodland, riparian forest, grassland, or meadows) is present in the project area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for white-tailed kite during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active white-tailed kite nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Yellow warbler *Setophaga petechia*	—	SSC	—	Riparian plant associations in proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**May occur.** Habitat potentially suitable for nesting yellow warbler (riparian wetland) is uncommon but present in the project area, and this species has been documented in the vicinity of the project area (eBird 2022). Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for yellow warbler during the nesting season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active yellow warbler nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.
Yellow-breasted chat *Icteria virens*	—	SSC	—	Riparian forest, riparian scrub, riparian woodland. Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	**May occur.** Habitat potentially suitable for nesting yellow-breasted chat (riparian forest and riparian scrub) is present but uncommon in the project area, and this species has been documented during the nesting season in the vicinity of Lake Casitas (eBird 2022). Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for yellow-breasted chat during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active yellow-breasted chat nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	—	SSC	—	Marsh, swamp, and wetland. Nests in fresh emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as odonata are abundant, nesting timed with maximum emergence of aquatic insects.	Not expected to occur. Habitat potentially suitable for nesting yellow-headed blackbird (deep-water marsh) is not present in the project area.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Mammals					
American badger *Taxidea taxus*	—	SSC	—	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**May occur.** Habitat potentially suitable for American badger (shrubland, forest, and grassland) is present throughout the project area. One occurrence of a badger vehicle strike is documented along SR 33 approximately 1.5 miles southeast of the fuel break treatment area (CNDDB 2022). This road strike indicates that American badger may be present in the project area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for American badger year-round could result in destruction of dens and injury or mortality of adults or pups, which would be a potentially substantial adverse effect on American badger. Pre-treatment surveys in suitable denning habitat and no-disturbance buffers of 100 feet around active maternity dens would be implemented.
Dulzura pocket mouse *Chaetodipus californicus femoralis*	—	SSC	—	Chaparral, coastal scrub, valley and foothill grassland. Attracted to grass-chaparral edges.	Not expected to occur. Habitat potentially suitable for this species (chaparral, coastal scrub, and grassland) is present throughout the ecological restoration treatment area, however, the project is outside of the documented range for the species. Although there are two records of this species documented in the vicinity of the project area, these records are dated, and the locations are noted as unverified (CNDDB 2022). All other documented records of this species are located further south, within the documented species' range (Hall 1981).
Mexican long-tongued bat *Choeronycteris mexicana*	—	SSC	—	Pinyon and juniper woodlands, riparian scrub, Sonoran thorn woodland. Roosts in relatively well-lit caves, and in and around buildings.	**May occur.** Habitat potentially suitable for this species (riparian scrub) is infrequent but present in the ecological restoration treatment area. One occurrence is documented nearby at the edge of the city of Ventura (CNDDB 2022). Caves and abandoned buildings suitable for bat roosting were not observed during the August 2, 2022, reconnaissance survey but may be present in or near the project area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts, potentially resulting in abandonment of the roost and loss of young. If active roosts are found during pre-activity surveys, a no-disturbance buffer of 250 feet would be established around the roost.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Mountain lion-Southern California/Central Coast ESU *Puma concolor*	—	CT	—	Found in most habitats within central California. Uses caves, other natural cavities, and brush thickets for cover and denning often within riparian habitats.	**May occur.** Habitat potentially suitable for mountain lion foraging (various shrub and forested areas) and denning (remote rock outcrops away from human disturbance) is present in the project area. Manual, mechanical, and prescribed burning treatments conducted within 2,000 feet of suitable denning/nursery habitat could disturb active dens or nurseries, potentially resulting in abandonment of the den or nursery, and individuals could be inadvertently injured or killed by heavy equipment. Due to the large areas of potential denning or nursery habitat, disturbance of denning lions would likely result in the mother moving her cubs to another nearby suitable nursery location.
Pallid bat *Antrozous pallidus*	—	SSC	—	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**May occur.** Habitat potentially suitable for pallid bat (coastal scrub and coastal oak woodland) is present within the project area. Caves and abandoned buildings suitable for bat roosting were not observed during reconnaissance survey but may be present in or near the project area. Treatments conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts, potentially resulting in abandonment of the roost and loss of young. If active roosts are found during pre-activity surveys, a no-disturbance buffer of 250 feet would be established around the roost.
Ringtail *Bassariscus astutus*	—	FP	—	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations.	**May occur**. Habitat potentially suitable for ringtail (forest and scrub) is present across the project area, and the project area is within range for this species. There is one documented observation of ringtail with a photo west of the city of Oak View approximately 6 miles north of the project area, and three more occurrences of ringtail are documented in the vicinity of the project area (iNaturalist 2022). Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for ringtail during the maternity season (April 15–June 30) could result in disturbance of ringtail adults or young. Pre-treatment surveys in suitable denning habitat, monitoring, and no-disturbance buffers of 0.25 mile around active maternity dens would be implemented to avoid and minimize disturbance, injury, or mortality during the maternity season. Outside of the maternity season, resting ringtails would likely flee from the presence of equipment, vehicles, or personnel, and injury or mortality would not be expected.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Life History	Potential for Occurrence[2]/Potential Impact
San Diego desert woodrat *Neotoma lepida intermedia*	—	SSC	—	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. Abundant in rock outcrops and rocky cliffs and slopes.	**May occur.** Habitat potentially suitable for this species (dense coastal scrub) is present and widespread throughout project area, especially in the densely vegetated areas within the ecological restoration treatment area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for San Diego desert woodrat during the breeding season could result in disturbance of maternity dens, and treatments year-round could result in injury or mortality of adults, which would be a potentially substantial adverse effect on this species. Pre-treatment surveys in suitable denning habitat and no-disturbance buffers of 25 feet around active nests would be implemented.
South coast marsh vole *Microtus californicus stephensi*	—	SSC	—	Tidal marshes in Los Angeles, Orange, and southern Ventura counties.	Not expected to occur. Habitat potentially suitable for this species (tidal marsh) is not present in the project area.
Southern sea otter *Enhydra lutris nereis*	FT	FP	—	Nearshore marine environments from about Ano Nuevo, San Mateo County to Point Sal, Santa Barbara County. Needs canopies of giant kelp and bull kelp for rafting and feeding. Prefers rocky substrates with abundant invertebrates.	Not expected to occur. Habitat potentially suitable for this species (marine aquatic habitat) is not present in the project area.
Townsend's big-eared bat *Corynorhinus townsendii*	—	SSC	—	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**May occur.** Habitat potentially suitable for this species (coastal scrub and coastal oak woodland) is present within all treatment areas. Caves and abandoned buildings suitable for bat roosting were not observed during the reconnaissance survey but may be present in or near the project area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts, potentially resulting in abandonment of the roost and loss of young. If active roosts are found during pre-activity surveys, a no-disturbance buffer of 250 feet would be established around the roost.

Species	Status [1] Federal	Status [1] State	Status [1] CRPR/ Other	Habitat and Life History	Potential for Occurrence [2]/Potential Impact
Western mastiff bat *Eumops perotis californicus*	—	SSC	—	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	**May occur.** Habitat potentially suitable for western mastiff bat (coastal oak woodland, coastal scrub, chaparral, and grassland areas with cliffs and large tress) is present throughout the project area. Caves and abandoned buildings suitable for bat roosting were not observed during the reconnaissance survey but may be present in or near the project area. Manual, mechanical, and prescribed burning treatments conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts, potentially resulting in abandonment of the roost and loss of young. If active roosts are found during pre-activity surveys, a no-disturbance buffer of 250 feet would be established around the roost.

Note: CNDDB = California Natural Diversity Database; CRPR = California Rare Plant Rank; DPS= Distinct Population Segment; ESU = Evolutionarily Significant Unit

[1] Legal Status Definitions

Federal:
FE Endangered (legally protected)
FT Threatened (legally protected)
FC Candidate for listing as endangered

State:
CT = Candidate for listing as threatened (legally protected)
ST = Threatened (legally protected)
SR = Rare (legally protected by NPPA)
FD = Federally delisted
SE = Endangered (legally protected)
FP = Fully protected (legally protected)
SSC = Species of special concern (no formal protection other than CEQA consideration)

California Rare Plant Ranks:
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
2A Plant species that occur outside of California but are presumed extirpated in the state because they have not been observed or documented in California for many years.
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

Threat Ranks
0.1-Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

[2] Potential for Occurrence Definitions
Not expected to occur: Species is unlikely to be present in the project area due to poor habitat quality, lack of habitat with suitable features, or restricted current distribution of the species.
May occur: Habitat suitable for this species is available in the project area; however, there are little to no other indicators that the species might be present.
Known to occur: The species, or evidence of its presence, was observed in the project area during reconnaissance surveys or was reported by others.

Sources: CCH 2022; CNPS 2022b; CNDDB 2022; Cornell 2022, eBird 2022; iNaturalist 2022; Los Padres Forest Watch 2013, NOAA 2006; NRCS 2022; Sawyer et al 2009; Shuford and Gardali 2008; Thomson et al 2019, USGS 2022, Xerces Society 2022

SENSITIVE NATURAL COMMUNITIES AND SENSITIVE HABITATS

Based on review of CAL FIRE FRAP vegetation data and habitat present in the project area as verified during the August 2, 2022, reconnaissance survey, the CWHR habitat types present in the project area include coastal oak woodlands, coastal scrub, mixed chaparral, and grassland habitats. Twenty sensitive natural communities are known to occur or were determined to have potential to occur within these habitat types within the project area (Table B-3).

During the reconnaissance-level survey on August 2, 2022, observed sensitive natural communities observed included California sycamore-coast live oak riparian woodlands, clustered tarweed fields, and sawtooth golden bush scrub. Some areas dominated by clustered tarweed (*Deinadra fasciculata)* were observed in flat, grassland portions of the ecological restoration treatment area. Woodland dominated by California sycamore (*Platanus racemosa*) and coast live oak (*Quercus agrifolia*) was observed along Coyote Creek in the WUI fuel reduction treatment area and in portions of the fuel break treatment area. The ecological restoration treatment area, which represents the westernmost treatment area located southwest from Lake Casitas, was characterized by coastal scrub and mixed chaparral habitats, which were dominated by California sagebrush (*Artemisia californica*), purple sage (*Salvia leucophylla*), laurel sumac (*Malosma laurina*), and sawtooth golden bush (*Hazardia squarrosa*). Of these, scrub vegetation dominated by sawtooth golden bush is considered a sensitive natural community, while the scrub dominated or characterized by the other species is not (CNPS 2022b). However, all coastal sage scrub and chaparral habitats are considered sensitive habitat types based on Senate Bill 1260, Statutes of 2018, in that they warrant additional consideration because this statute prohibits type conversion of these vegetation communities (see discussion below). Additional sensitive natural community alliances were not observed within annual grassland, coastal scrub, and mixed chaparral habitats during the August reconnaissance survey, but species which comprise these sensitive natural communities were observed at levels that did not meet the membership rules for the communities. Although these communities were not observed, they have the potential to occur if these species are present at levels that meet the sensitive natural community membership rules outside of the areas accessed during the reconnaissance surveys. Therefore, additional sensitive natural communities were examined that may occur, and these may be identified during focused surveys (Table B-3). The majority of annual grassland habitat in the project area is dominated by nonnative plants including mustard, milk thistle, and nonnative grasses. However, small patches of clustered tarweed fields, a sensitive natural community, were observed during the reconnaissance survey in the ecological restoration treatment area. The toe of hillslopes in the ecological restoration areas were dominated by nonnative annual species, including mustard (*Hirschfeldia incana*) and milk thistle (*Silybum marianum*), or patches of native species including clustered tarweed (*Hemizonia fasciculata*).

As a result, SPR BIO-3 would apply in all treatment areas, and treatments will be designed to maintain the characteristics and membership rules of any vegetation alliance that is designated as a sensitive natural community.

Sensitive habitat types (CWHR types) and sensitive natural communities observed in the project area are discussed below Table B-3.

Table B-3 Sensitive Natural Communities Documented or with Potential to Occur in the Project Area

Sensitive Natural Community[1]	Rarity Rank[2]	CWHR Type	Occurrence Potential
Coast live oak woodland	S4[3]	Coastal Oak Woodland	Known to occur
California sycamore – coast live oak riparian woodlands	S3	Coastal Oak Woodland	Known to occur
Clustered tarweed fields	S2	Annual grassland	Known to occur
California walnut groves	S3.2[2]	Coastal Oak Woodland	May occur
California bay forest and woodland	S3	Coastal Oak Woodland	May occur
Dune mat	S3	Coastal Scrub	May occur

Sensitive Natural Community[1]	Rarity Rank[2]	CWHR Type	Occurrence Potential
California brittle bush - Ashy buckwheat scrub	S3	Coastal Scrub	May occur
Sawtooth golden bush scrub	S3	Coastal Scrub	Known to occur
Coast prickly pear scrub	S3	Coastal Scrub	May occur
Lemonade berry scrub	S3	Coastal Scrub	May occur
Bushy spikemoss mats	S3	Coastal Scrub	May occur
Giant coreopsis scrub	S3	Coastal Scrub	May occur
Bush monkeyflower scrub	S3	Coastal Scrub	May occur
Scale broom scrub	S3	Coastal Scrub	May occur
Silver dune lupine - mock heather scrub	S3	Coastal Scrub	May occur
White sage scrub	S3	Coastal Scrub	May occur
Eastwood manzanita chaparral	S3	Mixed chaparral	May occur
Hairy leaf - woolly leaf ceanothus chaparral	S3	Mixed chaparral	May occur
Burton Mesa chaparral	S1.2[2]	Mixed chaparral	May occur
Alkali weed- salt grass playas and sinks	S2	Annual grassland	May occur
Needle spike rush stands	S2	Annual grassland	May occur

1 These are designated sensitive natural communities with a state rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable)

2 Older ranks, which need to be updated, may still contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats.

3 Coast live oak is not designated as a sensitive natural community with a state rarity rank of S1, S2, or S3; however, this community is included in this assessment because oak woodlands are considered locally sensitive. See Impact BIO-7 of the PSA/Addendum for additional information.

Source: Sawyer et al. 2009, Compiled by Ascent Environmental in 2022

Clustered Tarweed Fields

Clustered tarweed fields were observed during the August reconnaissance survey in the ecological restoration treatment area. Treatments in the ecological restoration treatment area will focus on restoring ecosystem processes and conditions to improve fire resilience in habitats that have departed from the natural fire regime as a result of fire exclusion. Clustered tarweed fields are defined in the CWHR as being a subcategory of "annual grassland," however, these areas are composed primarily of tarweed plants and contain few grass species. Areas of annual grassland within the project area, especially those dominated by native annual herbaceous plants such as tarweed, are not outside of the natural fire regime. Additionally, the areas where clustered tarweed dominates appear to be actively grazed and current land management practices are effectively maintaining this sensitive natural community.

Pursuant to MM BIO-3a, ecological restoration treatments will not occur in areas within their natural fire regime. The ecological treatment area proposed is composed primarily of mixed chaparral and coastal scrub habitats that are outside of their natural fire regime (PEIR Section 3.6 Biological Resources, table 3.6-1). Clustered tarweed fields located in the ecological restoration treatment area may be treated because they are located between patches of coastal scrub and chaparral that are outside of their fire return interval. Per SPR BIO-9, treatment in clustered tarweed fields (which are included within areas mapped as annual grassland habitat based on CWHR), will be designed to maximize success in killing or removing the invasive plants present, and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatment in these areas may include manual and mechanical vegetation removal but is most likely to be conducted with prescribed burning. However, areas of clustered tarweed habitat will not be the primary target for treatment. With implementation of SPR BIO-9, treatment

in clustered tarweed habitat will be designed to discourage invasive species recruitment, which indirectly may encourage the growth of and improve overall coverage by clustered tarweed within the annual grassland habitat. If treatment activities occur within clustered tarweed fields, Mitigation Measure BIO-3a would apply in these areas, which provides addition direction for designing treatments to avoid loss of sensitive natural communities.

Coastal Oak Woodland

Coastal oak woodland is mapped throughout the project area and is the most common habitat in the project area, representing 186 of the 448 total acres. One sensitive natural community, California sycamore-coast live oak riparian woodland, was observed in the project area. Additionally, California walnut groves and California bay forest and woodland are sensitive natural communities which have potential to occur in the project area (Table B-1, B-3). Coast live oak woodland community was also observed in project area; although this community is not designated as a sensitive natural community, it is a sensitive habitat type pursuant to CEQA.

Oak trees (*Quercus agrifolia*) would be retained during treatments. Lower limbs of mature oak trees would be removed to reduce ladder fuels to prevent canopy scorching. Oak woodlands are protected by Ventura County ordinances, as described in Impact BIO-7, and pursuant to SPR BIO-7 and SPR AD-3, the project will comply with local policies and ordinances. If treatment activities occur in coastal oak woodland, then Mitigation Measure BIO-3a would apply in these areas to design treatments to maintain habitat function of oak woodlands. If habitat function would not be maintained through implementation of Mitigation Measure BIO-3a, unavoidable losses of these resources will be compensated through implementation of MM BIO-3b.

Riparian and Wetland Habitats

Riparian and wetland habitat is present in the project area. During the reconnaissance survey, several areas that may potentially qualify as wetlands were observed, including a fresh emergent wetland, a forested wetland, and a subshrub wetland. In addition, several riparian areas were observed near Coyote Creek and its tributaries, and the presence of sycamore trees indicate that some of these areas may qualify as forested wetlands. A full wetland delineation has not been conducted and a definitive determination of wetland status was not made during the reconnaissance survey. The project area may contain permanent (Class I), intermittent (Class II), and ephemeral (Class III) streams including Coyote Creek and its tributaries. During the reconnaissance survey, Coyote Creek contained small amounts of pooled water, and all other waterways observed were dry. Although riparian and wetland habitats are not considered sensitive natural communities, these areas are considered sensitive habitat types pursuant to CEQA.

Pursuant to SPR BIO-4, the project will be designed to retain or improve riparian habitat function, and a qualified professional will characterize all waterways prior to project activities and appropriate WLPZs and ELZs would be implemented. WLPZs ranging from 50 to 100 feet will be established adjacent to all Class II streams within the project area (e.g., the unnamed creek passing through the ecological restoration treatment area, unnamed tributaries to Coyote Creek in the fuel break treatment area). While these measures would reduce potential impacts on riparian habitat, the extent of riparian habitat within the project area has not been mapped and riparian habitat that exist without the defining characteristics of WLPZs may be present outside of the areas encompassed by WLPZs. If treatment is necessary within riparian habitat, then Mitigation Measure BIO-3a would apply in these areas to design treatments to maintain habitat function. If habitat function of riparian areas would not be maintained through implementation of Mitigation Measure BIO-3a, unavoidable losses of these resources will be compensated through implementation of Mitigation Measure BIO-3b. Additionally. Implementation of Mitigation Measure BIO-4 will require that state and federally protected wetlands are avoided with a minimum 25-foot buffer.

Chaparral and Coastal Scrub

As described in Tables B-1 and B-3, chaparral habitat (mixed chaparral) and coastal scrub habitat are present in the project area. The 448-acre project area contains approximately 20 acres of mixed chaparral and 159 acres of coastal scrub. One sensitive natural community was observed in the coastal scrub habitat area: sawtooth golden bush scrub. In addition, there is potential for fourteen sensitive natural communities to occur within the chaparral and coastal scrub habitats in the project area (CNPS 2022a; Table B-1 and B-3). Coastal scrub habitat in the project area was dominated by California sagebrush and purple sage, and also contained California buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), and coyote brush (*Baccharis pilularis*). Mixed chaparral habitat in the project area was dominated by laurel sumac (*Malosma laurina*) and also contained deerweed (*Lotus scoparius*), silver lupine (*Lupinus albifrons*), yerba santa (*Eriodictyon* spp.), poison oak (*Toxicodendron diversilobum*), and scrub oak (*Quercus berberidifolia*).

Pursuant to SPR BIO-3, treatments will be designed to maintain the characteristics and membership rules of any vegetation alliance that is designated as a sensitive natural community. SPR BIO-5 requires avoidance of the environmental effects of type conversion within chaparral and coastal scrub and that the habitat function of these communities be maintained. The spatial scale within which the effects of type conversion are evaluated for this project comprises Haley family-owned lands within the Los Sauces Cree-Frontal Pacific Ocean and Lower Ventura River Watersheds. This spatial scale is appropriate because the Haley family owns more than 6,000 acres of land containing more than 3,100 acres of chaparral and coastal scrub habitat within the watersheds. This is a substantial landscape scale at which ecologically functional habitat capable of meeting the resource needs of species that rely on these habitats can be maintained within the watershed. Fuel break treatments could be expected to permanently remove up to a maximum of 2.5 acres of coastal scrub habitat, and WUI fuel reduction treatments have the potential to remove up to 0.5 acre of mixed chaparral (Table B-1). The treatment of this vegetation either through manual treatment, mechanical treatment, or prescribed burning will not represent a substantial change in the composition of chaparral and coastal scrub habitat at the scale of the Haley family properties. Type conversion would not occur.

Shaded fuel break treatments are proposed in forested habitat such as the coast live oak woodland where upper tree canopy can be retained to maintain shaded cover and prevent understory growth over the long-term. Due to the lack of upper canopy cover, shaded fuel breaks are not expected to be created in coastal scrub and chaparral communities. Non-shaded fuel breaks remove all vegetation and may be implemented in coastal scrub or chaparral communities. Although the expectation for a non-shaded fuel break is that it will be permanently cleared, fuel breaks typically regenerate and will need to be retreated every 5-10 years. The result is a landscape level mosaic of regenerating chaparral and coastal scrub in various levels of recovery adding needed complexity to a system that is dominated by decadent and dense chaparral and coastal scrub. The WUI fuel reduction treatment will consist of strategic removal of vegetation to prevent or slow the spread of non-wind driven wildfire between structures and wildlands; therefore, treatment in the WUI fuel reduction treatment area may selectively avoid sections of chaparral if they are not determined to be at significant risk for wildfire. The fuel break treatment constitutes approximately 1.5 percent of the total 158.9 acres of coastal scrub within combined treatment areas, and the WUI fuel reduction treatment area represents approximately 2.2 percent of the total 20.4 acres of mixed combined treatment areas. Additional coastal scrub and mixed chaparral are also present in the surrounding landscape outside of the project area, throughout the Haley property. Therefore, fuel break and WUI fuel reduction treatments in coastal scrub and mixed chaparral ecosystems would not constitute a landscape-level conversion to other habitat types because these ecotypes will exist in a younger regenerative and vigorous state with a greater frequency of treatment intervals to maintain these areas as fuel break and WUI fuel reduction.

The remaining 156.3 acres of coastal scrub and 20.0 acres of mixed chaparral in the treatment area will be subject to ecological restoration treatments. In these areas, VCFPD will design treatments to maintain chaparral and coastal scrub habitat function. This includes maintaining at least 35 percent relative density of chaparral vegetation within ecological restoration treatment areas and implementing maintenance treatments at a frequency that allows regeneration of the characteristic species of each coastal sage and mixed chaparral community. All ecological restoration treatments within chaparral and coastal scrub communities will be designed to replicate the natural disturbance regime of the vegetation type present. Because California sagebrush, coyote brush, and sage species comprise most of these habitat areas, and these species are adapted to resprouting after physical or fire disturbance,

treatment in coastal scrub and chaparral dominated by these species is not expected to cause long-term changes in composition of coastal scrub and chaparral species when maintenance treatments are applied at a frequency that allows reestablishment of the characteristic shrubs.

California sagebrush and sage species are facultative seeders: these species can resprout after fire from either seeds or from the surviving root system. These species are dominant in the coastal scrub habitat in the project area and are known to resprout moderately well after low-intensity fires, but are less likely to survive high-intensity fires and other high-intensity disturbances (Sawyer et al 2009). During the reconnaissance survey, the sawtooth goldenbush was observed in densities that could meet the criteria of the sawtooth goldenbush scrub sensitive natural community during. This species is also a facultative seeder. It is known to sprout vigorously after fire, and flowers bloom for 2 years following fires. This species is known to thrive following mechanical and prescribed burn treatments (Sawyer et al 2009). Therefore, this natural community is expected to reestablish naturally following prescribed burning or mechanical treatments.

Some plant species in coastal scrub and chaparral communities (i.e., laurel sumac) produce new sprouts from an established lignotuber, or root system (Sawyer et al 2009); therefore, manual and mechanical treatments within coastal scrub and chaparral characterized by laurel sumac will be designed to maintain the root system and root crown of the dominant coastal scrub and chaparral shrubs. Manual treatments may include lopping and scattering, pruning, and hand cutting of existing vegetation. Mechanical treatments may include chipping, cutting, crushing/compacting, or chopping existing vegetation. For both manual and mechanical treatments, coastal scrub and chaparral shrubs would not be uprooted during treatments and the root crown would be maintained to allow dominant shrubs with lignotubers to sprout new shoots following treatment.

Obligate seeding species such as bigberry manzanita were not observed during the reconnaissance survey but may occur in the project area. Obligate seeding species rely on seeds to resprout; therefore, retention of mature, seed-bearing individuals in the population are essential for maintaining the population. If chaparral communities dominated by obligate seeders are identified in the project area during the SPR BIO-3 surveys, treatment in these areas would be designed to retain mature nurse shrubs and a mixture of shrubs in all age classes to allow for reseeding and regeneration of the characteristic shrub species.

Coastal scrub and chaparral alliances in the ecological treatment areas are composed of a mix of facultative seeders (e.g., California sagebrush – black sage scrub and California buckwheat – white sage scrub, sawtooth golden bush), and obligate sprouters (e.g., laurel sumac and California brittle bush - Ashy buckwheat scrub). However, no obligate seeders were observed during the reconnaissance survey, and it is anticipated that the majority of habitat in the project area is dominated by facultative seeders and obligate sprouters, indicating that these areas will maintain habitat characteristics of coastal shrub and chaparral alliances following manual, mechanical, and prescribed burning treatments.

Because the treatments would be designed to maintain 35 percent relative density of coastal scrub and chaparral vegetation in treatment areas, replicate the natural disturbance regime of the vegetation type present, and maintain root crowns of resprouting shrubs, vegetation would reestablish following treatment activities, and ecological function of the chaparral and coastal scrub communities within the ecological restoration treatments would be maintained over the long-term.

REFERENCES

Biogeographic Information and Observation System. 2016. Yellow-billed Cuckoo Range – CWHR B258 [ds940]. California Department of Fish and Wildlife. Sacramento. Accessed November 15, 2022.

Calflora. 2022. Calflora. Available: https://www.calflora.org/. Accessed August 2022.

California Department of Fish and Wildlife. 2019 (April 4). *Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act*. Report to the Fish and Game Commission.

California Native Plant Society. 2022a. *A Manual of California Vegetation* Online. Available: http://vegetation.cnps.org/.

_____. 2022b. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available: http://www.rareplants.cnps.org. Accessed August 10, 2022.

California Natural Diversity Database. 2022. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed August 10, 2022.

CCH. *See* Consortium of California Herbaria.

CDFW. *See* California Department of Fish and Wildlife.

CNDDB. *See* California Natural Diversity Database.

CNPS. *See* California Native Plant Society.

Consortium of California Herbaria. 2022. *Data provided by the participants of the Consortium of California Herbaria*. Available: ucjeps.berkeley.edu/consortium/. Accessed August 10, 2022.

Cornell University. 2022. All About Birds Online Database. Available: https://www.allaboutbirds.org/ Accessed August 10, 2022.

eBird. 2022. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: http://www.ebird.org. Accessed August 10, 2022.

Hall, R. E. 1981. *The Mammals of North America*. John Wiley & Sons. New York, NY.

Howe, George F. 1981. Death of chamise *(Adenostoma fasciculatum)* shrubs after sire or cutting as a result of herbivore browsing. Bulletin of the Southern California Academy of Sciences. 79(1): 5-13.

iNaturalist. 2022. An online database of crowdsourced organism occurrences [web application]. Available: http://www.inaturalist.org. Accessed July 13, 2022.

Kelly, Audrey. Environmental Scientist with the California Department of Fish and Wildlife – South Coast Region. March 9, 2023 – email with Grace Mannell and Stephanie Rasmussen of Ascent Environmental regarding guidance for surveying for Crotch bumble bee in California.

Los Padres ForestWatch, Inc. 2013. Crotch's Bumblebee, *Bombus crotchii*. [Online]. Available: https://lpfw.org/our-region/wildlife/crotchs-bumblebee/. Accessed August 10, 2022.

National Oceanic and Atmospheric Administration (NOAA). 2006 (January). Final Critical Habitat for Steelhead – Southern California DPS. 70 FR 52487

Natural Resources Conservation Service. 2022. *Soil Classification Maps*. Available: https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/class/maps/. Accessed August 10, 2022.

_____. 2019. *Web Soil Survey*. Available: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed August 10, 2022.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. *A Manual of California Vegetation*. Second edition. California Native Plant Society Press, Sacramento, California, USA.

Sibley, David Allen. 2001. *The Sibley Guide to Bird Life and Behavior*. The National Audubon Society.

Shuford, W. D., and Gardali, T. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. *Studies of Western Birds* 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Thomson, Robert C., Wright, Amber N., and Shaffer, H. Bradley. 2019. California Amphibian and Reptile Species of Special Concern. Published for California Department of Fish and Wildlife (CDFW). Arroyo Toad, *Bufo californicus* CAMP 1915, pp 64-68.

USFWS. *See* U.S. Fish and Wildlife Service.

Ulev, E. D. 2005. Asclepias speciosa. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Available: https://www.fs.usda.gov/database/feis/plants/forb/ascspe/all.html. Accessed October 4, 2022.

USGS. *See* United States Geologic Survey.

U.S. Fish and Wildlife Service. 2022. Information for Planning and Consultation electronic records search. Available: https://ecos.fws.gov/ipac/. Accessed July 2022.

_____. 2007 (December 19). Federal Register, Part II, 50 CFR Part 17. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*); Final Rule. Available: https://www.govinfo.gov/content/pkg/FR-2007-12-19/pdf/07-6003.pdf#page=2. Accessed August 31, 2022.

United States Geologic Survey (USGS). 2022. Arroyo Toad, *Anaxyrus californicus*. Retrieved August 10, 2022. Available: https://www.sciencebase.gov/catalog/item/imap/58fa3f16e4b0b7ea54524866.

Winchell, Clark S. and Doherty, Paul F. 2018. Restoring habitat for coastal California Gnatcatcher (*Poliptilla californica californica).* American Ornithological Society, The Condor. Vol 120 p 581-595.

Xerces Society, Idaho Department of Fish and Game, and Washington Department of Fish and Wildlife. 2022. Western Monarch Milkweed Mapper. Available: https://www.monarchmilkweedmapper.org/. Accessed August 10, 2022.

This page intentionally left blank.