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Initial Biological Assessment:

**Planned Timber Operation
3800 Mitchell Rd. - Eureka, CA**

Humboldt County

APN: 017-192-006

**Prepared by
Hohman and Associates
July 18, 2024**

Setting

This document assesses habitats and potentially occurring special-status animals and plants; and identifies potential impacts of operation-related activities on biological resources for the proposed timber operation at 3800 Mitchell Rd. in Eureka, CA. The tree removal would occur around a clearing which contains structures, decorative landscaping, and a mowed lawn in the otherwise forested parcel.

The proposed tree removal location borders an approximately 0.5 acre clearing located at 3800 Mitchell Rd. in Eureka, CA. The property is located in Section 31, Township 5 North, Range 1 East; HB&M, approximately 1 mile east of Eureka, CA in Humboldt County on the Arcata South USGS 7.5' Quad. The property lies within the California Floristic Province, Northwestern California region, and North Coast sub-region. No watercourses exist in the project area, and no fish-bearing streams exist in the parcel. Elevation ranges from approximately 110 feet to 200 feet, with gentle slopes. The aspect is primarily east-facing. The parcel is composed of approximately one acre of coast redwood (*Sequoia sempervirens*) forest and more than a half-acre of structures, landscaping, and mowed lawn. This project will involve the removal of approximately 60 redwood trees ranging in size from 10 inches to 40 inches DBH, with only the stems immediately bordering the house, garage, and lawn facing removal. Additionally, 8 redwoods will have crowns cut back, all of which have been topped within the past 15 years.

Methods

Hohman and Associates conducted a field review in July of 2024 of the project footprint and surrounding habitat in the parcel. This included looking for signs of listed species and available habitat.

This Biological Scoping report considers the potentially occurring species and communities that could be affected by project activities in the proposed footprint based on available spatial data and habitat requirements. Focused site visits may be necessary to further evaluate potential habitat value to special-status species and finalize survey recommendations for proposed project activity. A list of special-status species was downloaded from CNDDDB BIOS for the Fields Landing 9-quad area. Species on the CNDDDB list were primarily included based on State or Federal listing status or CDFW designation. Native pollinators found in the area were also included based on State rarity and their potential to be impacted by project activities. The U.S. Fish and Wildlife Service IPac was queried and generated a scoping list to consider. Additional species were added to the special-status list for consideration based on potential habitat or high levels of conservation concern. Habitats within the 0.7-mile Biological Assessment Area (BAA) for potentially occurring species were evaluated based on CALVEG vegetation mapping and aerial photos.

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Table 1. Birds

Scientific Name	Common Name	FedList	CalList	GRank	SRank	Potential in BAA
<i>Accipiter cooperii</i>	Cooper's hawk	None	None	G5	S4	Yes
<i>Accipiter striatus</i>	sharp-shinned hawk	None	None	G5	S4	Yes
<i>Aquila chrysaetos</i>	golden eagle	None	None	G5	S3	No
<i>Ardea alba</i>	great egret	None	None	G5	S4	Yes
<i>Ardea herodias</i>	great blue heron	None	None	G5	S4	Yes
<i>Brachyramphus marmoratus</i>	marbled murrelet	Threatened	Endangered	G3	S2	Yes
<i>Charadrius montanus</i>	mountain plover	None	None	G3	S2	No
<i>Charadrius nivosus nivosus</i>	western snowy plover	Threatened	None	G3T3	S3	No
<i>Circus hudsonius</i>	northern harrier	None	None	G5	S3	Yes
<i>Coturnicops noveboracensis</i>	yellow rail	None	None	G4	S2	No
<i>Egretta thula</i>	snowy egret	None	None	G5	S4	Yes
<i>Elanus leucurus</i>	white-tailed kite	None	None	G5	S3S4	Yes
<i>Falco peregrinus anatum</i>	American peregrine falcon	Delisted	Delisted	G4T4	S3S4	No
<i>Haliaeetus leucocephalus</i>	bald eagle	Delisted	Endangered	G5	S3	Yes
<i>Nannopterum auritum</i>	double-crested cormorant	None	None	G5	S4	No
<i>Nycticorax nycticorax</i>	black-crowned night heron	None	None	G5	S4	Yes
<i>Pandion haliaetus</i>	osprey	None	None	G5	S4	Yes
<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	Endangered	Endangered	G3T1	S2	No
<i>Riparia riparia</i>	bank swallow	None	Threatened	G5	S3	No

Table 2. Mammals

Scientific Name	Common Name	FedList	CalList	GRank	SRank	Potential in BAA
<i>Aplodontia rufa humboldtiana</i>	Humboldt mountain beaver	None	None	G5TNR	SNR	No
<i>Arborimus albipes</i>	white-footed vole	None	None	G3G4	S2	No
<i>Arborimus pomos</i>	Sonoma tree vole	None	None	G3	S3	Yes
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	G4	S2	No
<i>Erethizon dorsatum</i>	North American porcupine	None	None	G5	S3	No
<i>Martes caurina humboldtensis</i>	Humboldt marten	Threatened	Endangered	G4G5T1	S1	No
<i>Myotis evotis</i>	long-eared myotis	None	None	G5	S3	No
<i>Pekania pennanti</i>	Fisher	None	None	G5	S2S3	Yes

Table 3. Reptiles and Amphibians

Scientific Name	Common Name	FedList	CalList	GRank	SRank	Potential in BAA
<i>Actinemys marmorata</i>	northwestern pond turtle	Proposed Threatened	None	G2	SNR	No
<i>Ascaphus truei</i>	Pacific tailed frog	None	None	G4	S3S4	Yes
<i>Plethodon elongatus</i>	Del Norte salamander	None	None	G4	S3	No
<i>Rana aurora</i>	northern red-legged frog	None	None	G4	S3	Yes
<i>Rana boylei</i> pop. 1	foothill yellow-legged frog - north coast DPS	None	None	G3T4	S4	No
<i>Rhyacotriton variegatus</i>	southern torrent salamander	None	None	G3?	S2S3	Yes

Table 4. Fish

Scientific Name	Common Name	Federal Listing	CA Listing	Global Rank	State Rank	Potential in BAA
<i>Acipenser medirostris</i> pop. 1	green sturgeon - southern DPS	Threatened	None	G2T1	S1	No
<i>Anodonta californiensis</i>	California floater	None	None	G3	S2?	No
<i>Entosphenus tridentatus</i>	Pacific lamprey	None	None	G4	S3	Yes
<i>Eucyclogobius newberryi</i>	tidewater goby	Endangered	None	G3	S3	No
<i>Lampetra richardsoni</i>	western brook lamprey	None	None	G4G5	S3S4	Yes
<i>Margaritifera falcata</i>	western pearlshell	None	None	G3G4	S1S2	No
<i>Oncorhynchus clarkii clarkii</i>	coast cutthroat trout	None	None	G5T4	S3	Yes
<i>Oncorhynchus kisutch</i> pop. 2	coho salmon - southern Oregon / northern California ESU	Threatened	Threatened	G5T2Q	S2	Yes
<i>Oncorhynchus mykiss irideus</i> pop. 48	steelhead - northern California DPS summer-run	Threatened	Endangered	G5T2Q	S2	Yes
<i>Oncorhynchus mykiss irideus</i> pop. 49	steelhead - northern California DPS winter-run	Threatened	None	G5T3Q	S3	Yes

Table 5. Invertebrates

Scientific Name	Common Name	FedList	CalList	GRank	SRank	Potential in BAA
<i>Bombus caliginosus</i>	obscure bumble bee	None	None	G2G3	S1S2	Yes
<i>Bombus crotchii</i>	Crotch's bumble bee	None	Candidate Endangered	G2	S2	No
<i>Bombus occidentalis</i>	western bumble bee	None	Candidate Endangered	G3	S1	Yes
<i>Cicindela hirticollis</i> grvida	sandy beach tiger beetle	None	None	G5T2	S2	No
<i>Scaphinotus behrensi</i>	Behrens' snail-eating beetle	None	None	G2G4	S2S4	No

Table 6. Plants

Scientific Name	Common Name	FedList	CalList	GRank	SRank	RPlantRank	GenHab	Potential in BAA
<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	None	None	G4G5T2	S2	1B.1	Coastal dunes and coastal strand.	No
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>	coastal marsh milk-vetch	None	None	G2T2	S2	1B.2	Coastal dunes, marshes and swamps, coastal scrub.	Yes
<i>Cardamine angulata</i>	seaside bittercress	None	None	G4G5	S3	2B.1	North coast coniferous forest, lower montane coniferous forest.	No
<i>Carex arcta</i>	northern clustered sedge	None	None	G5	S1	2B.2	Bogs and fens, north coast coniferous forest.	No
<i>Carex leptalea</i>	bristle-stalked sedge	None	None	G5	S1	2B.2	Bogs and fens, meadows and seeps, marshes and swamps.	No
<i>Carex lyngbyei</i>	Lyngbye's sedge	None	None	G5	S3	2B.2	Marshes and swamps (brackish or freshwater).	Yes
<i>Carex praticola</i>	northern meadow sedge	None	None	G5	S2	2B.2	Meadows and seeps.	Yes
<i>Castilleja ambigua</i> var. <i>humboldtiensis</i>	Humboldt Bay owl's-clover	None	None	G4T2	S2	1B.2	Marshes and swamps.	Yes
<i>Castilleja litoralis</i>	Oregon coast paintbrush	None	None	G3	S3	2B.2	Coastal bluff scrub, coastal dunes, coastal scrub.	No
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	None	None	G4?T2	S2	1B.2	Coastal salt marsh.	Yes
<i>Collinsia corymbosa</i>	round-headed collinsia	None	None	G1	S1	1B.2	Coastal dunes.	No
<i>Coptis laciniata</i>	Oregon goldthread	None	None	G4?	S3?	4.2	North coast coniferous forest, meadows and seeps.	Yes

<i>Erysimum menziesii</i>	Menzies' wallflower	Endangered	Endangered	G1	S1	1B.1	Coastal dunes.	No
<i>Erythronium oregonum</i>	giant fawn lily	None	None	G5	S2	2B.2	Cismontane woodland, meadows and seeps.	Yes
<i>Erythronium revolutum</i>	coast fawn lily	None	None	G4G5	S3	2B.2	Bogs and fens, broadleaved upland forest, north coast coniferous forest.	Yes
<i>Fissidens pauperculus</i>	minute pocket moss	None	None	G3?	S2	1B.2	North coast coniferous forest.	No
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	None	None	G5T3	S3	1B.2	Coastal bluff scrub, chaparral, coastal prairie, valley and foothill grassland.	No
<i>Gilia millefoliata</i>	dark-eyed gilia	None	None	G2	S2	1B.2	Coastal dunes.	No
<i>Hesperis matronalis</i> var. <i>brevifolia</i>	short-leaved evax	None	None	G4T3	S3	1B.2	Coastal bluff scrub, coastal dunes, coastal prairie.	No
<i>Iliamna latibracteata</i>	California globe mallow	None	None	G2G3	S2	1B.2	North coast coniferous forest, chaparral, lower montane coniferous forest, riparian scrub (streambanks).	No
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	None	None	G3T2	S2	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub.	No
<i>Lathyrus japonicus</i>	seaside pea	None	None	G5	S2	2B.1	Coastal dunes.	No
<i>Lathyrus palustris</i>	marsh pea	None	None	G5	S2	2B.2	Bogs and fens, lower montane coniferous forest, marshes and swamps, north coast coniferous forest, coastal prairie, coastal scrub.	Yes
<i>Layia carnosa</i>	beach layia	Threatened	Endangered	G2	S2	1B.1	Coastal dunes, coastal scrub.	No

<i>Lilium occidentale</i>	western lily	Endangered	Endangered	G1G2	S1	1B.1	Coastal scrub, freshwater marsh, bogs and fens, coastal bluff scrub, coastal prairie, north coast coniferous forest, marshes and swamps.	Yes
<i>Lycopodium clavatum</i>	running-pine	None	None	G5	S3	4.1	Lower montane coniferous forest, north coast coniferous forest, marshes and swamps.	Yes
<i>Mitellastrum caulescens</i>	leafy-stemmed mitrewort	None	None	G5	S4	4.2	Broadleafed upland forest, lower montane coniferous forest, meadows and seeps, north coast coniferous forest.	Yes
<i>Monotropa uniflora</i>	ghost-pipe	None	None	G5	S2	2B.2	Broadleafed upland forest, north coast coniferous forest.	No
<i>Montia howellii</i>	Howell's montia	None	None	G3G4	S2	2B.2	Meadows and seeps, north coast coniferous forest, vernal pools.	Yes
<i>Noccaea fendleri</i> ssp. <i>californica</i>	Kneeland Prairie pennycress	Endangered	None	G5?T1	S1	1B.1	Coastal prairie.	No
<i>Oenothera wolfii</i>	Wolf's evening-primrose	None	None	G2	S1	1B.1	Coastal bluff scrub, coastal dunes, coastal prairie, lower montane coniferous forest.	No
<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	None	None	G4T4	S2S3	2B.2	Coastal scrub, north coast coniferous forest.	Yes
<i>Piperia candida</i>	white-flowered rein orchid	None	None	G3?	S3	1B.2	North Coast coniferous forest, lower montane coniferous forest, broadleafed upland forest.	Yes

<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	None	None	G3	S3	4.2	Broadleafed upland forest, coastal prairie, coastal scrub, north coast coniferous forest, riparian forest.	Yes
<i>Sidalcea malviflora</i> ssp. <i>patula</i>	Siskiyou checkerbloom	None	None	G4G5T2	S2	1B.2	Coastal bluff scrub, coastal prairie, north coast coniferous forest.	No
<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	None	None	G5T1	S1	1B.2	Meadows and seeps, north coast coniferous forest, lower montane coniferous forest.	No
<i>Silene scouleri</i> ssp. <i>scouleri</i>	Scouler's catchfly	None	None	G5T4T5	S2S3	2B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland.	No
<i>Spergularia canadensis</i> var. <i>occidentalis</i>	western sand-spurrey	None	None	G5T4	S1	2B.1	Marshes and swamps (coastal salt marshes).	Yes
<i>Trichodon cylindricus</i>	cylindrical trichodon	None	None	G4G5	S2	2B.2	Broadleafed upland forest, upper montane coniferous forest, meadows and seeps.	No
<i>Viola palustris</i>	alpine marsh violet	None	None	G5	S1S2	2B.2	Coastal scrub, bogs and fens.	No

Potential Special-Status Species Details

Birds

Cooper's hawk (*Accipiter cooperii*)

Special Status: CDFW Watch List; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S4

Habitat/Life-history Requirements: Cooper's hawks are common year-round residents in wooded areas of California, and they can be found in urban and suburban areas as well (Cornell Lab). The medium-sized hawk builds nests made of piles of sticks over two feet wide in tall trees, typically 25-50 feet off the ground (Cornell Lab). Nesting trees include pines, oaks and Douglas firs (Cornell Lab). Dense stands are typically used for nesting and patchy open areas are commonly used for hunting (Zeiner et al. 1988).

Status within the Project Area: No likely nesting habitat exists within the project area due to frequent disturbance from roadway and activities around home clearing.

Potential Impact/Mitigation: Tree removal surrounding the mowed lawn may temporarily decrease the viability of hunting in the clearing, however, trees will be retained immediately behind the ones being removed thus limiting any impact of operations.

Sharp-shinned hawk (*Accipiter striatus*)

Special Status: CDFW Fully Protected; Protected under Migratory Bird Treaty Act.

Habitat/Life-history Requirements: The sharp-shinned hawk roosts in intermediate to high-canopy forest and nests in dense, even-aged, single-layered forest canopy. Nest is a platform or cup in dense foliage against trunk, or in main crotch of tree, usually 6-80 ft above ground.

Status within the Project Area: Roosting is possible within the winter in trees surrounding the open field of the potential project site. Nesting is highly unlikely given their typical seasonality.

Potential Impact/Mitigation Tree removal surrounding the mowed lawn may temporarily decrease the viability of hunting in the clearing, however, trees will be retained immediately behind the ones being removed thus limiting any impact of operations

Great egret (*Ardea alba*)

Special Status: Protected under Migratory Bird Treaty Act.

Habitat/Life-history Requirements: The great egret is a common yearlong resident throughout California, except for high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. Nests in large trees, and roosts in trees. Nests are usually near water at a height of 10-80ft and nesting activity is very sensitive to frequent human disturbance.

Status within the Project Area: No nesting or foraging locations exist within the project area. Noise from nearby Mitchell Rd. would prevent nesting.

Potential Impact/Mitigation Project operations would not significantly impact nesting habitat, no mitigation is necessary.

Great blue heron (*Ardea herodias*)

Special Status: USFS.S.

Habitat/Life-history Requirements: The great blue heron is fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. Usually nests in colonies in tops of secluded large snags or live trees, usually among the tallest available; rarely nests on ground, rock ledges, sea cliffs, mats of tules, or shrubs. Nesting activity is sensitive to human disturbance.

Status within the Project Area: No nesting or foraging locations exist within the project area. Noise from nearby Mitchell Rd. would prevent nesting.

Potential Impact/Mitigation: Project operations would not significantly impact nesting habitat, no mitigation is necessary.

Northern harrier (*Circus hudsonius*)

Special Status: CDF – Sensitive.

Habitat/Life-history Requirements: Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Permanent resident of the northeastern plateau and coastal areas; less common resident of the Central Valley. Widespread winter resident and migrant in suitable habitat. California population has decreased in recent decades. Nests on the ground in shrubby vegetation or tall grasses, often near wetlands.

Status within the Project Area: No suitable nesting or foraging sites exist within the project area, as the lawn is mowed to a length insufficient for nesting or harboring prey animals.

Potential Impact/Mitigation: Project operations would have no significant impact to nesting or foraging.

Snowy egret (*Egretta thula*)

Special Status: CDF – Species of Special Concern; Protected under Migratory Bird Treaty Act.

Habitat/Life-history Requirements: The snowy egret is widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. Feeds in shallow water or along shores of wetlands or aquatic habitats, and is the most active feeder of the California herons. Can nest either low in trees or on the ground in dense marshes.

Status within the Project Area: No nesting or foraging locations exist within the project area. Noise from nearby Mitchell Rd. would prevent nesting.

Potential Impact/Mitigation: Project operations would have no significant impact to nesting or foraging.

White-tailed kite (*Elanus leucurus*)

Special Status: CDFW – Species of Special Concern.

Habitat/Life-history Requirements: Common to uncommon, yearlong resident in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous and open stages of most habitats mostly in cismontane California. Typically nests near the top of available tree species adjacent to foraging ground (e.g. grassland and meadows).

Status within the Project Area: No nesting or foraging locations exist within the project area. Noise from nearby Mitchell Rd. would prevent nesting.

Potential Impact/Mitigation: Project operations would have no significant impact to nesting or foraging.

Bald Eagle (*Haliaeetus leucocephalus*)

Status: State Endangered, Federally Delisted August 8, 2007, CDFW “Fully Protected”, and BOF Sensitive Species

Habitat/Life-history Requirements: Requires large bodies of water or free flowing rivers with abundant fish populations, with adjacent snags or other perches. Fish are a primary source of prey, and bald eagles are typically found in forested areas near large fish-bearing waters. Bald eagles build large nests about 6 feet wide. Nests are typically found in large trees, but may be built on other available vegetation or structures.

Status within the Project Area: No suitable dead tops or snags exist within the project area, thus no suitable nesting site exists.

Potential Impact/Mitigation: The project will not significantly impact nesting Bald Eagles or their habitat.

Black-crowned night heron (*Nycticorax nycticorax*)

Special Status: CDFW – Watchlist.

Habitat/Life-history Requirements: The black-crowned night-heron is a fairly common, yearlong resident in lowlands and foothills throughout most of California. Can nest either low in trees or on the ground in dense marshes. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats.

Status within the Project Area: Suitable foraging and nesting habitat exists within the field that comprises the project area as well as adjacent Monterey cypress.

Potential Impact/Mitigation: Project operations would significantly impact nesting habitat, thus nesting bird surveys or activities outside of nesting season are recommended.

Osprey (*Pandion haliaetus*)

Special Status: CDFW Watch List; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S4

Family: Accipitridae

Habitat/Life-history Requirements: Ospreys primarily prey on fish and they require large fish-bearing waters for hunting (Zeiner et al. 1988). Ospreys typically make large nests in tall snags or trees high off the ground in open forest habitats (Zeiner et al.).

Status within the Project Area: Ospreys are unlikely to occur in the area directly impacted by the project due to the lack of suitable snags or dead tree tops for nesting.

Potential Impact/Mitigation: The project will not significantly impact nesting Osprey or their habitat.

Mammals

Sonoma tree vole (*Arborimus pomo*)

Special status: G3, S3

Family: Muridae

Habitat/Life History Requirements: Sonoma tree voles occur in old-growth and other forests, mainly Douglas-fir, redwood, and montane hardwood-conifer habitats. Males nest most frequently in a tree nest constructed of fir needles, or, less frequently, in shallow burrows at the base of fir trees, beneath litter. Males nest most frequently in a tree nest constructed of fir needles, or, less frequently, in shallow burrows at the base of fir trees, beneath litter.

Status within the Project Area: No Douglas-fir or grand fir trees were present within the parcel when surveyed, thus no suitable foraging or nesting material was present in the project area.

Potential Impact/Mitigation: The project will not significantly impact Sonoma tree vole habitat.

Fisher - West Coast DPS (*Pekania pennanti*)

Special Status: CDFW Species of Special Concern; NatureServe Ranks: G5, S2S3

Habitat/Life-history Requirements: The fisher uses large expanses of forest with moderate to high canopy closure, and will avoid open forest, grasslands, and wetlands. Fishers use cavities in live trees, snags and down logs for reproductive dens. Structural complexity is a critical element of fisher habitat, necessary to provide cover for resting and denning, and habitat for prey.

Status within the Project Area: The project area does not contain fisher habitat due to the lack of structural complexity in the young second growth forest surrounding the project area.

Potential Impact/Mitigation: No impact to Fisher habitat is expected.

Fishes

No suitable year-round watercourse exists within or adjacent to the project area, thus no fishes will be present or impacted by project activity. Suitable streams exist within the BAA, however the project area lies entirely outside of the County Streamside Management Areas (SMA).

Amphibians

Northern red-legged frog (*Rana aurora*)

Special Status: CDFW “Species of Special Concern”; NatureServe Ranks: G4, S3

Habitat/Life-history Requirements: Found in riparian areas and permanent bodies of relatively quiet water such as ponds, pools along streams, reservoirs, springs, lakes and marshes. This frog is highly aquatic, preferring shorelines with extensive vegetation for terrestrial cover and escaping to pools 3 feet or deeper.

Status within the Project Area: The parcel contains a small, developed spring with water rights owned by an adjoining landowner. No pools, streams, or overland flow exist within the parcel. The spring is 138’ from the closest tree slated for removal.

Potential Impact/Mitigation: The project footprint does not intersect or impact areas of Northern red-legged frog habitat.

Pacific tailed frog (*Ascaphus truei*)

Special Status: CDFW “Species of Special Concern”; G4, S3/S4

Habitat/Life-history Requirements: In California, coastal tailed frogs occur in permanent streams of low temperatures in conifer-dominated habitats including redwood, Douglas fir, Klamath mixed-conifer, and ponderosa pine habitats. During the day adults seek cover under submerged rocks and logs in the stream or occasionally under similar surface objects close to the stream. Individuals have also been found in crevices in spray-drenched cliff walls near waterfalls.

Status within the Project Area: The parcel contains no permanent streams, thus no suitable habitat exists.

Potential Impact/Mitigation: Project activity will not impact Pacific tailed frog populations.

Southern torrent salamander (*Rhyacotriton variegatus*)

Special Status: CDFW “Species of Special Concern”; G3, S2/S3

Habitat/Life-history Requirements: This species occurs in coastal forests of northwestern California south to Point Arenain Mendocino Co. and is common in prime habitat. It is found primarily in cold, well-shaded permanent streams and spring seepages) in redwood, Douglas fir, mixed conifer, montane riparian and montane hardwood-conifer habitats.

Status within the Project Area: The parcel contains no permanent streams, thus no suitable habitat exists.

Potential Impact/Mitigation: Project activity will not impact Southern torrent salamander populations.

Invertebrates

Obscure bumble bee (*Bombus caliginosus*)

Special Status: CDFW Special Animals List; NatureServe Ranks: G2G3, S1

Habitat/Life-history Requirements: The obscure bumble bee occupies open grassy coastal prairies and Coast Range meadows (IUCN). This long-tongued species may pollinate flowers with elongated corollas, such as *Keckiella* spp. (IUCN). The obscure bumblebee does not fare well in agricultural or urban/suburban environments, where it is often outcompeted by more common bumblebees (NatureServe 2017). The obscure bumblebee has declined in the San Francisco Bay area, and may be threatened by habitat loss from development (NatureServe 2017).

Potential Impact/Mitigation: The property has the potential to support many native pollinators, however, the project footprint currently consists of a large mowed field with minimal nectar sources. The project is not expected to have significant impacts on *Bombus* species.

Western bumble bee (*Bombus occidentalis*)

Special Status: State Candidate Endangered, NatureServe Ranks: G3, S1

Habitat/Life-history Requirements: The western bumble bee is a generalist short-tongued forager that may be found in open habitats such as grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows. Like many bumble bees, the western bumble bee nests underground in abandoned rodent holes. The western bumble bee is threatened by disease, habitat loss and degradation, and insecticides.

Potential Impact/Mitigation: The property has the potential to support many native pollinators, however, the project footprint currently consists of a large mowed field with minimal nectar sources. The project is not expected to have significant impacts on *Bombus* species.

Conclusion

The proposed tree removal is planned for an approximate 60 redwood trees located at the periphery of an existing clearing, which houses a homesite and manicured open area (lawn). Based upon the lack of canopy structure, noise from adjacent Mitchell Road (log trucks were present throughout the site visit), and the presence of an additional acre or more of forest within the parcel, no impacts to special status species are anticipated from project activity. Areas around planned tree removal or pruning were surveyed for any signs of nesting birds such as whitewash, pellets, or visible nesting structures; no indications of suitable nesting habitat were observed. For this reason, no nesting bird surveys are recommended. The open lawn was surveyed for signs of suitable prey habitat, and gopher mounds were only found in the lowest 10% of the yard indicating that this is not ideal foraging ground for raptors.

The property contains a developed spring with nearby riparian vegetation (*Lysichiton americanus*) indicating the presence of a wetland in its vicinity. This spring, however, does not yield any surface flow or pools suitable for fishes, amphibians, or aquatic reptiles. The spring is also approximately 138 feet from the closest tree slated for removal in this timber operation.

Areas surrounding the trees marked for removal were also surveyed for evidence of listed plant species. No such species were found based on floral or foliar characteristics, thus no botanical surveys are recommended prior to project activity.

Lastly, the forest which comprises the property does not contain adequate structural complexity to harbor species which require late-seral forest for nesting and foraging habitat. The removal of these peripheral trees will not negatively impact the overall forest structure. It is possible, however, that the removal of these trees may provide openings in the canopy that could improve structural heterogeneity in the forest, thereby creating new niches to be occupied by a greater diversity of flora and fauna. Additionally, the planned crown removal of 8 redwoods located adjacent to Mitchell Rd will only serve to create a more diverse crown structure for these trees as reiterated tops grow in the place of the crown.

Appendix A: Photos of Project Area



Picture 1. View of the project area looking west. The trees directly adjacent to the mowed field are slated for removal, however, the larger redwood to the left of the frame is only slated for a pruning.



Picture 2. These four redwoods located in the east of the parcel are slated to be topped, which is unlikely to have any habitat impact given their lack of structural complexity.



Picture 3. View of the project area looking southeast. The large redwoods are slated to be topped, which will be the second time this has occurred in 15 years. Minimal structure exists in their crowns.



Picture 4. The first row of trees located behind the house is slated for removal. This may serve as additional structure or wildland defense in the event of a fire.



Picture 5. The developed spring located in the northern end of the parcel has wetland plant species, however does not have any aboveground flow suitable for riparian species.

Appendix B: Maps

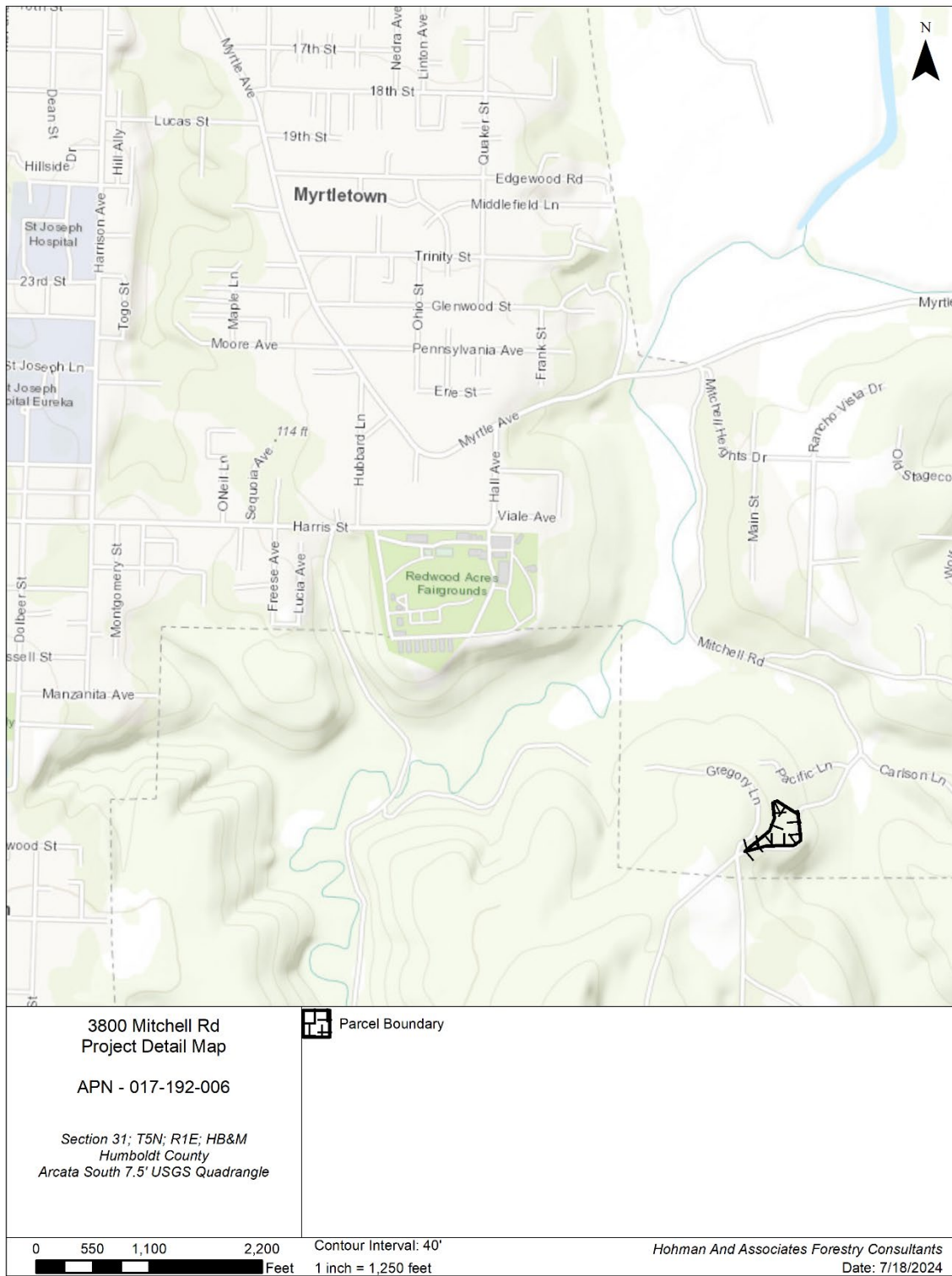


Figure 1. Location of 3800 Mitchell Rd. parcel.

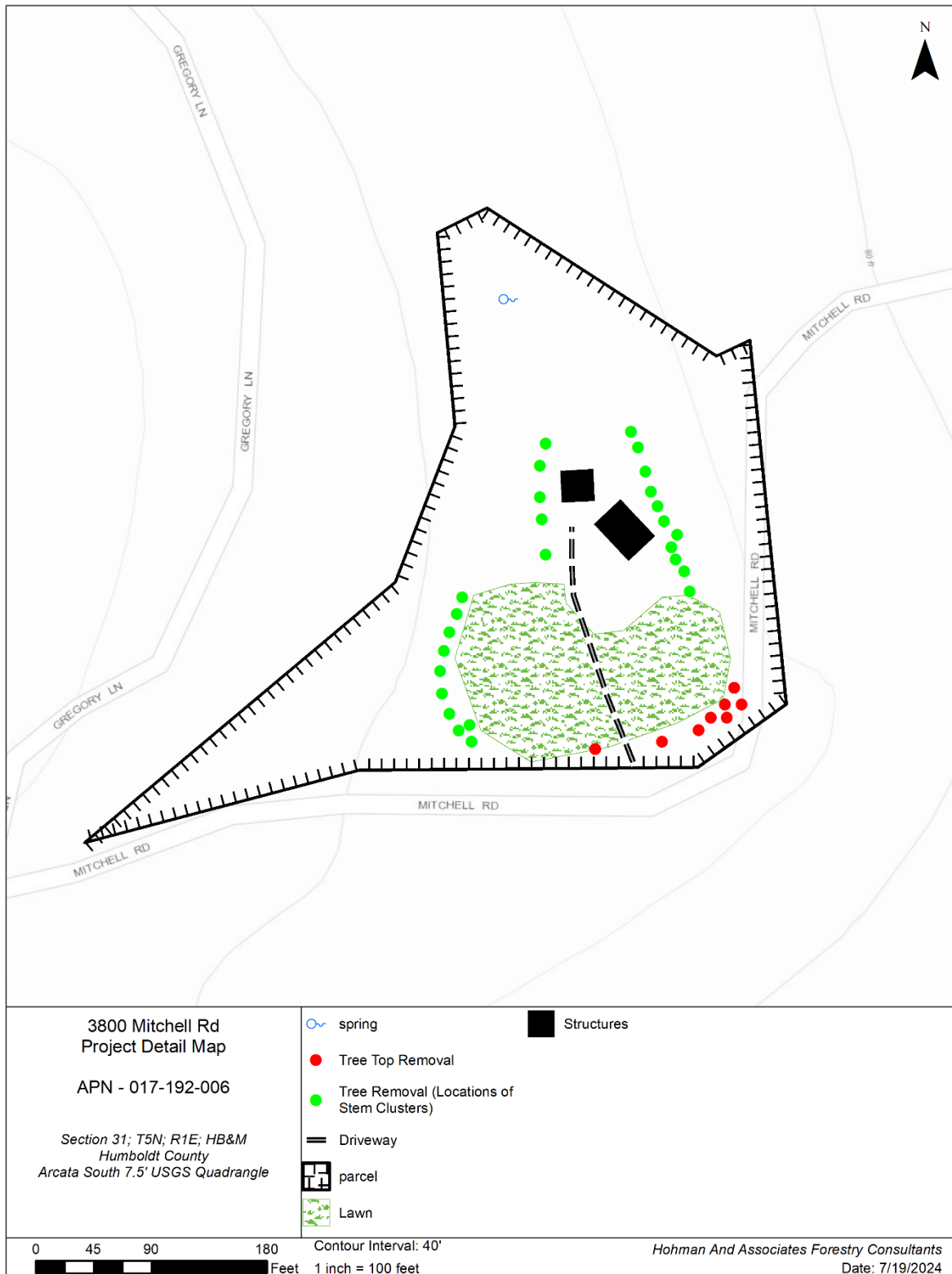


Figure 2. Detail map of planned project activities and features of the project area including a stem map (Note: this stem map denotes locations of stump sprout clusters for legibility).

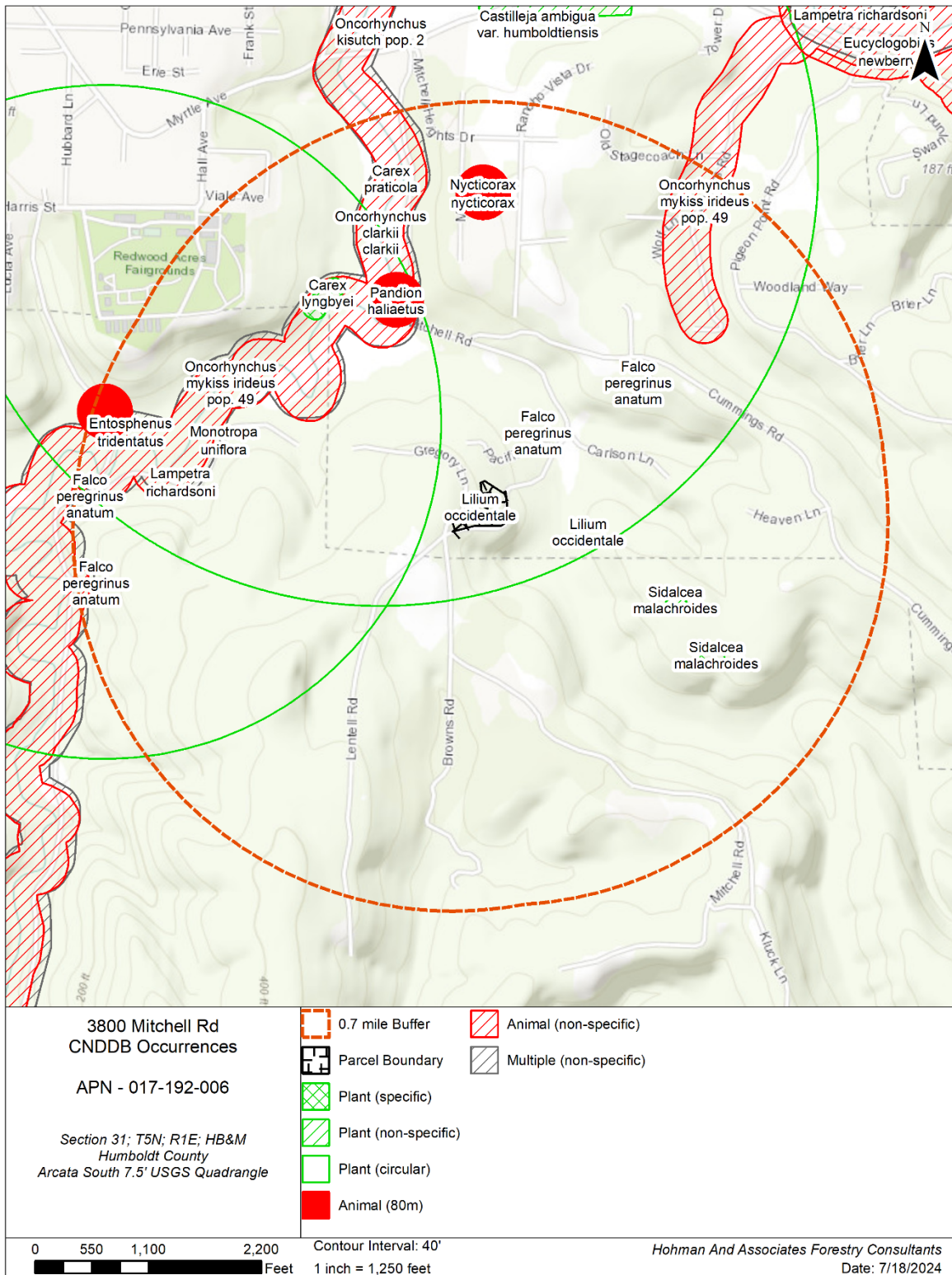


Figure 3. CNDDDB occurrences map of 0.7 mile buffer surrounding parcel

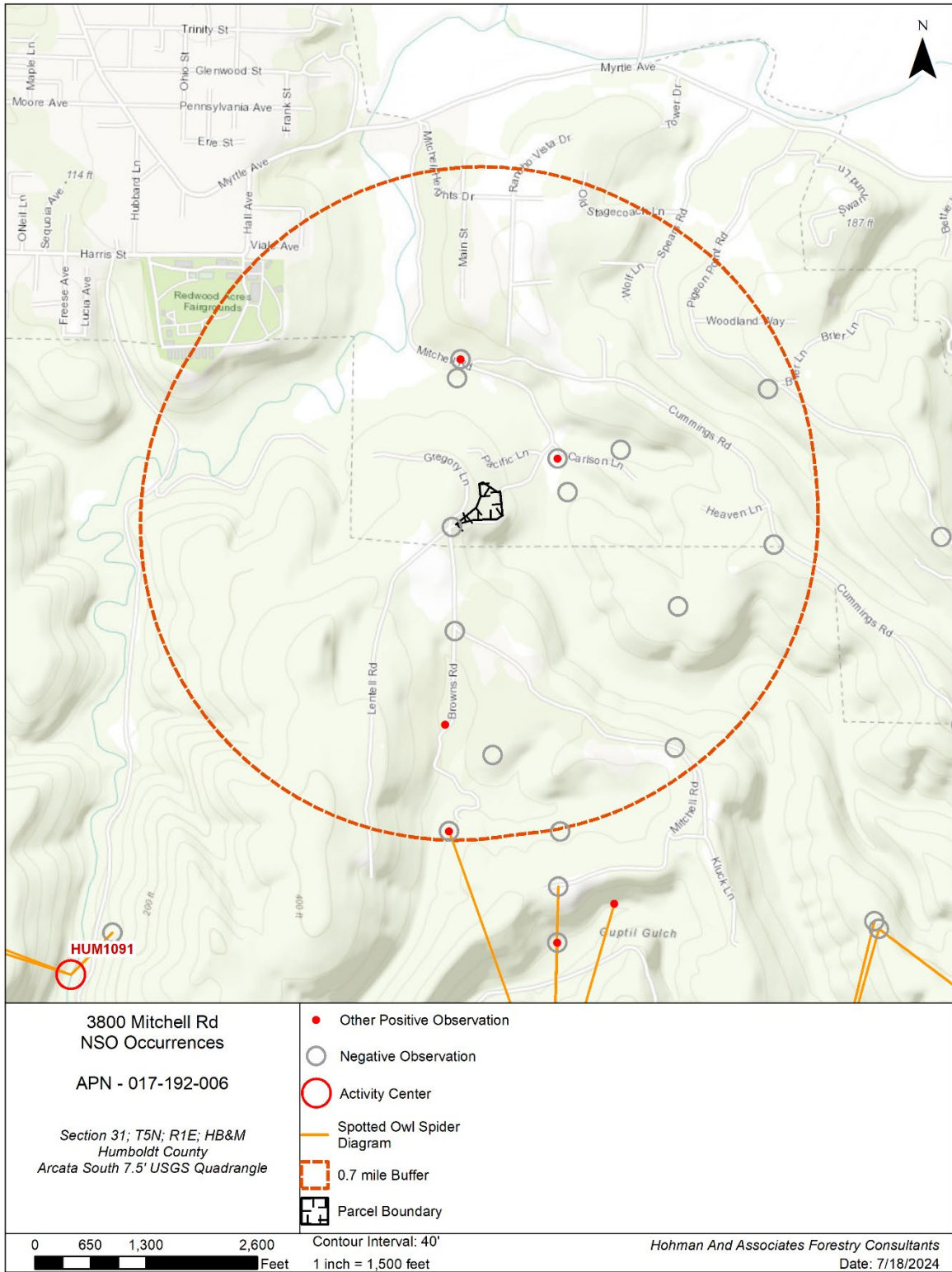


Figure 4. NSO activity centers in the vicinity of the parcel

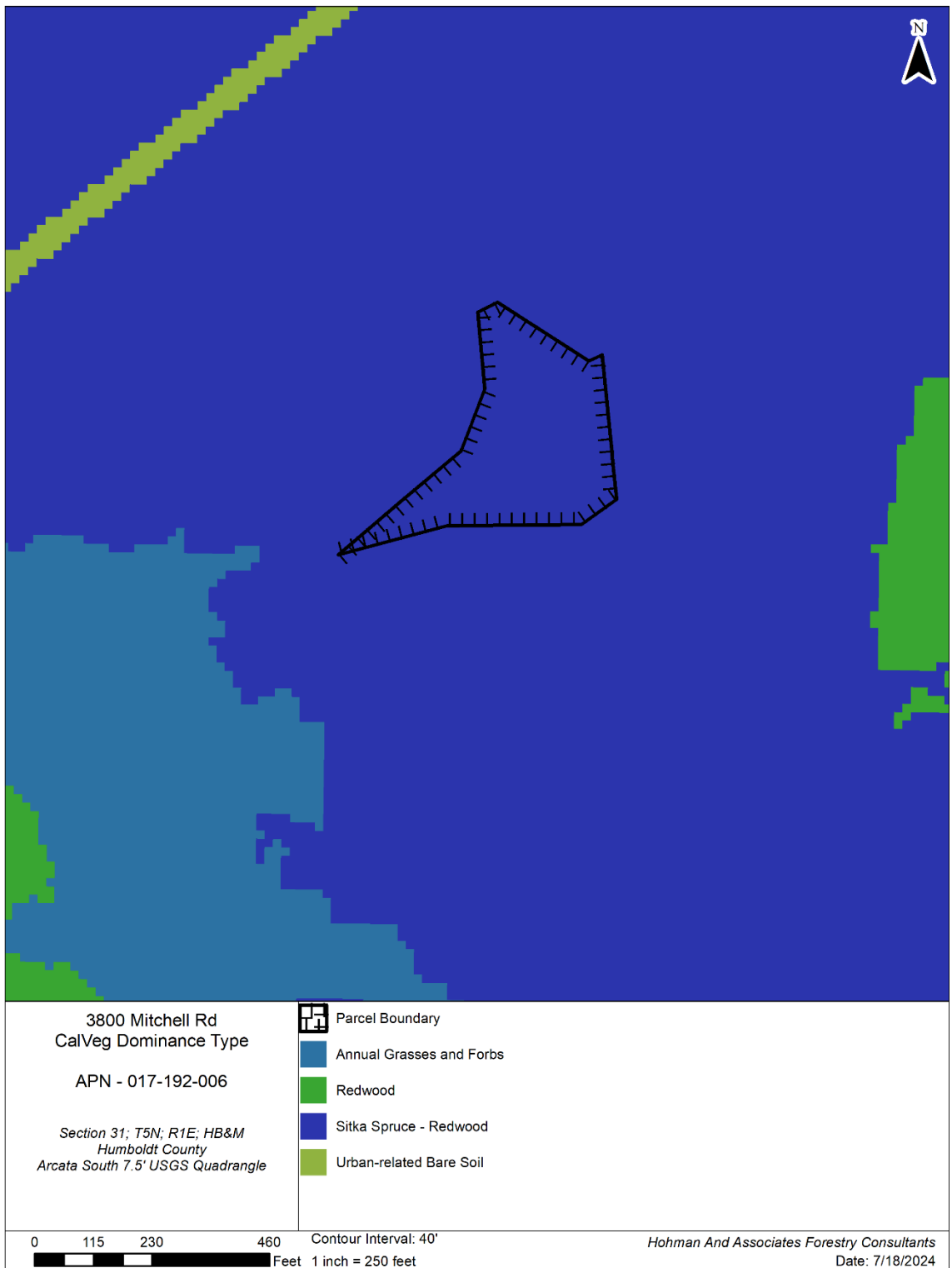


Figure 5. Calveg cover type of area surrounding 3800 Mitchell Rd. parcel.



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS OR Arcata South (4012471) OR Eureka (4012472) OR Korb (4012378) OR Blue Lake (4012388) OR Arcata North (4012481) OR Yee City (4012482) OR Fields Landing (4012462) OR McWhinney Creek (4012461) OR laqua Buttes (4012368) AND Taxonomic Group (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Abronia umbellata var. breviflora</i> pink sand-verbena	G4G5T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 236	61 S:16	0	9	2	1	1	3	8	8	15	1	0
<i>Accipiter cooperii</i> Cooper's hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	880 880	118 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Accipiter striatus</i> sharp-shinned hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	200 1,860	22 S:5	0	3	2	0	0	0	3	2	5	0	0
<i>Acipenser medirostris pop. 1</i> green sturgeon - southern DPS	G2T1 S1	Threatened None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	0 0	14 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Actinemys marmorata</i> northwestern pond turtle	G2 SNR	Proposed Threatened None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	17 1,640	1082 S:10	1	3	1	0	0	5	4	6	10	0	0
<i>Anodonta californiensis</i> California floater	G3 S2?	None None	USFS_S-Sensitive	41 41	6 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Aplodontia rufa humboldtiana</i> Humboldt mountain beaver	G5TNR SNR	None None		50 1,700	28 S:16	0	0	0	0	0	16	14	2	16	0	0
<i>Aquila chrysaetos</i> golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern	2,000 2,000	332 S:1	1	0	0	0	0	0	0	1	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Arborimus albipes</i> white-footed vole	G3G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	15 800	3 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Arborimus pomio</i> Sonoma tree vole	G3 S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	40 2,200	222 S:25	0	0	0	0	0	25	25	0	25	0	0
<i>Ardea alba</i> great egret	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	443 194	S:5	1	0	0	0	0	4	3	2	5	0	0
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	445 450	156 S:12	6	0	0	0	0	6	9	3	12	0	0
<i>Ascaphus truei</i> Pacific tailed frog	G4 S3S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	100 2,100	491 S:30	0	0	0	0	0	30	5	25	30	0	0
<i>Astragalus pycnostachyus var. pycnostachyus</i> coastal marsh milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley		24 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bombus caliginosus</i> obscure bumble bee	G2G3 S1S2	None None	IUCN_VU-Vulnerable	0 2,700	181 S:10	0	0	0	0	0	10	10	0	10	0	0
<i>Bombus crotchii</i> Crotch's bumble bee	G2 S2	None Candidate Endangered	IUCN_EN-Endangered	10 10	441 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bombus occidentalis</i> western bumble bee	G3 S1	None Candidate Endangered	IUCN_VU-Vulnerable USFS_S-Sensitive	10 2,100	306 S:9	0	0	0	0	0	9	9	0	9	0	0
<i>Brachyramphus marmoratus</i> marbled murrelet	G3 S2	Threatened Endangered	CDF_S-Sensitive IUCN_EN-Endangered	1,200 1,800	110 S:9	0	2	0	0	0	7	9	0	9	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Cardamine angulata</i> seaside bittercress	G4G5 S3	None None	Rare Plant Rank - 2B.1	310 310	38 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Carex arcta</i> northern clustered sedge	G5 S1	None None	Rare Plant Rank - 2B.2 IUCN_LC-Least Concern	200 500	13 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Carex leptalea</i> bristle-stalked sedge	G5 S1	None None	Rare Plant Rank - 2B.2 IUCN_LC-Least Concern	300 300	8 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Carex lyngbyei</i> Lyngbye's sedge	G5 S3	None None	Rare Plant Rank - 2B.2 IUCN_LC-Least Concern	3 20	37 S:16	2	3	4	0	0	7	10	6	16	0	0
<i>Carex praticola</i> northern meadow sedge	G5 S2	None None	Rare Plant Rank - 2B.2		14 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Castilleja ambigua var. humboldtensis</i> Humboldt Bay owl's-clover	G4T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley	5 65	31 S:18	1	8	2	0	0	7	13	5	18	0	0
<i>Castilleja litoralis</i> Oregon coast paintbrush	G3 S3	None None	Rare Plant Rank - 2B.2	500 500	44 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Charadrius montanus</i> mountain plover	G3 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFWS_BCC-Birds of Conservation Concern	4 7	94 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Charadrius nivosus nivosus</i> western snowy plover	G3T3 S3	Threatened None	CDFW_SSC-Species of Special Concern	10 23	140 S:5	0	1	0	0	0	4	3	2	5	0	0
<i>Chloropyron maritimum ssp. palustre</i> Point Reyes salty bird's-beak	G4?T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 8	80 S:15	1	6	1	1	0	6	9	6	15	0	0
<i>Cicindela hirticollis grvida</i> sandy beach tiger beetle	G5T2 S2	None None		10 10	34 S:1	0	0	0	0	1	0	1	0	0	0	1



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Circus hudsonius</i> northern harrier	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	682 6	S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Collinsia corymbosa</i> round-headed collinsia	G1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		13 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Coptis laciniata</i> Oregon goldthread	G4? S3?	None None	Rare Plant Rank - 4.2	698 3,000	122 S:13	1	5	6	1	0	0	0	13	13	0	0
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	30 250	635 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Coturnicops noveboracensis</i> yellow rail	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	445 24	S:3	0	0	0	0	0	3	2	1	3	0	0
<i>Egretta thula</i> snowy egret	G5 S4	None None	IUCN_LC-Least Concern	4 47	20 S:3	1	0	0	0	0	2	1	2	3	0	0
<i>Elanus leucurus</i> white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	23 60	190 S:3	0	1	0	0	0	2	0	3	3	0	0
<i>Entosphenus tridentatus</i> Pacific lamprey	G4 S3	None None	AFS_VU-Vulnerable BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	14 43	9 S:5	0	0	0	0	0	5	1	4	5	0	0
<i>Erethizon dorsatum</i> North American porcupine	G5 S3	None None	IUCN_LC-Least Concern	13 2,061	523 S:10	0	0	0	0	0	10	6	4	10	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Erysimum menziesii</i> Menzies' wallflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	519 30	19 S:5	2	2	1	0	0	0	1	4	5	0	0
<i>Erythronium oregonum</i> giant fawn lily	G5 S2	None None	Rare Plant Rank - 2B.2 SB_UCSC-UC Santa Cruz	2,000 2,500	37 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Erythronium revolutum</i> coast fawn lily	G4G5 S3	None None	Rare Plant Rank - 2B.2 SB_UCSC-UC Santa Cruz	330 2,875	172 S:23	1	13	7	1	0	1	2	21	23	0	0
<i>Eucyclogobius newberryi</i> tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	0 12	127 S:8	0	0	0	1	0	7	1	7	8	0	0
<i>Falco peregrinus anatum</i> American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive	40 902	75 S:8	0	5	0	0	0	3	2	6	8	0	0
<i>Fissidens pauperculus</i> minute pocket moss	G3? S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	100 650	22 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Gilia capitata ssp. pacifica</i> Pacific gilia	G5T3 S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	250 2,500	91 S:6	2	2	0	0	0	2	2	4	6	0	0
<i>Gilia millefoliata</i> dark-eyed gilia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5 50	54 S:11	1	4	1	0	0	5	9	2	11	0	0
<i>Haliaeetus leucocephalus</i> bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive	29 580	333 S:4	1	1	0	0	0	2	1	3	4	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Hesperevax sparsiflora</i> var. <i>brevifolia</i> short-leaved evax	G4T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	10 12	72 S:4	0	0	0	0	0	4	2	2	4	0	0
<i>Iliamna latibracteata</i> California globe mallow	G2G3 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive		40 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lampetra richardsoni</i> western brook lamprey	G4G5 S3S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	35 350	4 S:4	0	0	0	0	0	4	1	3	4	0	0
<i>Lasthenia californica</i> ssp. <i>macrantha</i> perennial goldfields	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		59 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lathyrus japonicus</i> seaside pea	G5 S2	None None	Rare Plant Rank - 2B.1 IUCN_LC-Least Concern	5 200	24 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Lathyrus palustris</i> marsh pea	G5 S2	None None	Rare Plant Rank - 2B.2	10 10	13 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Layia carnosa</i> beach layia	G2 S2	Threatened Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	10 40	25 S:6	0	3	1	0	0	2	1	5	6	0	0
<i>Lilium occidentale</i> western lily	G1G2 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_BerrySB-Berry Seed Bank	30 350	16 S:8	0	2	1	1	3	1	3	5	5	3	0
<i>Lycopodium clavatum</i> running-pine	G5 S3	None None	Rare Plant Rank - 4.1	160 2,100	120 S:61	3	14	21	5	0	18	61	0	61	0	0



Summary Table Report
California Department of Fish and Wildlife
California Natural Diversity Database



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Margaritifera falcata</i> western pearlshell	G3G4 S1S2	None None	IUCN_NT-Near Threatened	75 317	78 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Martes caurina humboldtensis</i> Humboldt marten	G4G5T1 S1	Threatened Endangered	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	1,100 1,100	44 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Mitellastrca caulescens</i> leafy-stemmed mitrewort	G5 S4	None None	Rare Plant Rank - 4.2	1,100 2,000	21 S:3	0	2	0	0	0	1	3	0	3	0	0
<i>Monotropa uniflora</i> ghost-pipe	G5 S2	None None	Rare Plant Rank - 2B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	100 100	115 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Montia howellii</i> Howell's montia	G3G4 S2	None None	Rare Plant Rank - 2B.2	39 2,700	123 S:23	1	11	4	3	3	1	7	16	20	3	0
<i>Myotis evotis</i> long-eared myotis	G5 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern	40 429	139 S:2	0	1	0	0	0	1	2	0	2	0	0
<i>Nannopterum auritum</i> double-crested cormorant	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	10 10	39 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Noccaea fendleri ssp. californica</i> Kneeland Prairie pennycress	G5?T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	2,725 2,725	1 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Nycticorax nycticorax</i> black-crowned night heron	G5 S4	None None	IUCN_LC-Least Concern	4 194	37 S:8	1	0	0	0	0	7	6	2	8	0	0
<i>Oenothera wolfii</i> Wolf's evening-primrose	G2 S1	None None	Rare Plant Rank - 1B.1 SB_BerrySB-Berry Seed Bank	10 25	29 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Oncorhynchus clarkii clarkii</i> coast cutthroat trout	G5T4 S3	None None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern USFS_S-Sensitive	5 317	45 S:16	0	0	1	0	0	15	10	6	16	0	0
<i>Oncorhynchus kisutch pop. 2</i> coho salmon - southern Oregon / northern California ESU	G5T2Q S2	Threatened Threatened	AFS_TH-Threatened	35 117	10 S:6	0	0	2	0	0	4	1	5	6	0	0
<i>Oncorhynchus mykiss irideus pop. 48</i> steelhead - northern California DPS summer- run	G5T2Q S2	Threatened Endangered	AFS_TH-Threatened	200 700	10 S:2	0	0	2	0	0	0	0	2	2	0	0



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Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Oncorhynchus mykiss irideus pop. 49</i> steelhead - northern California DPS winter- run	G5T3Q S3	Threatened None	AFS_TH-Threatened CDFW_SSC-Species of Special Concern	16 1,993	96 S:11	0	0	7	1	0	3	2	9	11	0	0
<i>Packera bolanderi var. bolanderi</i> seacoast ragwort	G4T4 S2S3	None None	Rare Plant Rank - 2B.2	1,020 2,400	72 S:2	2	0	0	0	0	0	0	2	2	0	0
<i>Pandion haliaetus</i> osprey	G5 S4	None None	CDF_S-Sensitive CDFW_WL-Watch List IUCN_LC-Least Concern	10 1,240	504 S:81	14	25	8	2	1	31	74	7	80	1	0
<i>Pekania pennanti</i> Fisher	G5 S2S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	41 2,720	555 S:8	1	3	0	0	0	4	3	5	8	0	0
<i>Piperia candida</i> white-flowered rein orchid	G3? S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,200 2,200	222 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Platismatia lacunosa</i> crinkled rag lichen	G4 S2?	None None	Rare Plant Rank - 2B.3		4 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Plethodon elongatus</i> Del Norte salamander	G4 S3	None None	CDFW_WL-Watch List IUCN_NT-Near Threatened	400 2,400	151 S:9	0	0	0	0	0	9	9	0	9	0	0
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	G3T1 S2	Endangered Endangered	CDFW_FP-Fully Protected		99 S:2	0	0	0	0	2	0	2	0	0	0	2
<i>Rana aurora</i> northern red-legged frog	G4 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	4 2,000	292 S:79	0	4	0	1	0	74	27	52	79	0	0
<i>Rana boylei pop. 1</i> foothill yellow-legged frog - north coast DPS	G3T4 S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern USFS_S-Sensitive	7 2,100	1608 S:32	3	1	0	0	0	28	14	18	32	0	0
<i>Rhyacotriton variegatus</i> southern torrent salamander	G3? S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	200 2,300	416 S:53	0	3	2	0	0	48	15	38	53	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Riparia riparia</i> bank swallow	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	50 114	299 S:4	0	1	0	0	0	3	2	2	4	0	0
<i>Scaphinotus behrensi</i> Behrens' snail-eating beetle	G2G4 S2S4	None None		400 400	4 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Sidalcea malachroides</i> maple-leaved checkerbloom	G3 S3	None None	Rare Plant Rank - 4.2	100 2,500	136 S:43	2	7	13	13	0	8	43	0	43	0	0
<i>Sidalcea malviflora ssp. patula</i> Siskiyou checkerbloom	G4G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_UCSC-UC Santa Cruz	50 2,800	60 S:10	1	1	4	0	0	4	4	6	10	0	0
<i>Sidalcea oregana ssp. eximia</i> coast checkerbloom	G5T1 S1	None None	Rare Plant Rank - 1B.2	20 2,600	19 S:5	0	0	2	0	0	3	4	1	5	0	0
<i>Silene scouleri ssp. scouleri</i> Scouler's catchfly	G5T4T5 S2S3	None None	Rare Plant Rank - 2B.2		23 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Spergularia canadensis var. occidentalis</i> western sand-spurrey	G5T4 S1	None None	Rare Plant Rank - 2B.1	5 10	4 S:4	0	0	1	0	0	3	4	0	4	0	0
<i>Spirinchus thaleichthys</i> longfin smelt	G5 S1	Proposed Endangered Threatened	IUCN_LC-Least Concern	0 10	46 S:6	0	0	0	0	0	6	5	1	6	0	0
<i>Sulcaria spiralifera</i> twisted horsehair lichen	G3G4 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	30 43	18 S:3	0	0	0	0	0	3	1	2	3	0	0
<i>Thaleichthys pacificus</i> eulachon	G5 S1	Threatened None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern		10 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Trichodon cylindricus</i> cylindrical trichodon	G4G5 S2	None None	Rare Plant Rank - 2B.2		14 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Usnea longissima</i> Methuselah's beard lichen	G4 S4	None None	Rare Plant Rank - 4.2 BLM_S-Sensitive	520 2,600	206 S:26	4	4	4	7	0	7	26	0	26	0	0
<i>Viola palustris</i> alpine marsh violet	G5 S1S2	None None	Rare Plant Rank - 2B.2	100 100	10 S:2	0	0	0	0	0	2	2	0	2	0	0