BIOLOGICAL RESOURCE ASSESSMENT
WITH BOTANICAL SURVEY
for the
KONOCTI KIDS CAMP PROJECT
APNs 009-002-25 & 009-010-01
LAKE COUNTY, CALIFORNIA

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1.0 PROJECT DESCRIPTION

1.1 Proposed Project: This biological resource assessment and survey covers portions of two parcels proposed for a 20-foot access road from Soda Bay Road to the Konocti Kids Camp. Vegetation types are mapped for the entire parcel. Much of the area adjacent to the proposed development is currently developed with an unpaved roadway and parking areas.

The local permitting agency is requesting completion of a botanical survey and assessment of biological resources on the property as part of the California Environmental Quality Act (CEQA) review required for new development. The initial phase of this assessment evaluates the potential of the parcel to contain sensitive plant and wildlife habitat. The assessment will determine whether the property contains sensitive plants or potentially contains sensitive wildlife requiring mitigation under the California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA). As used here, the terms sensitive plant or wildlife includes all state or federal rare, threatened, or endangered species and all species listed in the California Natural Diversity Database (CNDDB) list of "Special Status Plants, Animals and Natural Communities".

The second phase consists of field surveys including a floristic-level botanical survey listing all plant taxa[1] within the survey boundaries.

A delineation of waters of the U.S. was not conducted for this project due to the lack of surface water in the project area.

1.2 Location: The project site is located at 8810 Soda Bay Road, Kelseyville, California (009-002-25 & 009-010-01; Sec. 10 T13N R8W, Clearlake Highlands, Calif. 7½' Topographic Map). A location map is provided in **Figure 1**.

[1] Many sensitive plants and wildlife are subspecies or varieties which are taxonomic subcategories of species. The term "taxa" refers to species and their sub-specific categories.


122°47.000' W
122°46.000' W
122°45.000' W
122°44.000' W
WGS84 122°43.000' W
THE NARROWS
Buckingham Point
Anderson Island
Fraser Pt
Survey Corridor
Ely Flat
Northwest Biosurvey
1905 Westlake Drive
Kelseyville, CA 96451
(707) 889-1061
nwbio98@gmail.com
LOCATION MAP
Figure 1
07/06/20

2.0 ASSESSMENT METHODOLOGY

The basis of the biological resource assessment is a comparison of existing habitat conditions within the project boundaries to the geographic range and habitat requirements of sensitive plants and wildlife. It includes all sensitive species that occupy habitats similar to those found in the project area and whose known geographic ranges encompass it. The approach is conservative in that it tends to over-estimate the actual number of sensitive species potentially present.

- Location of the project area with regard to the geographic range of sensitive plant and wildlife species
- Location(s) of known populations of sensitive plant and wildlife species as mapped in the California Natural Diversity Database (CNDDB)
- Soils of the project area
- Elevation
- Presence or absence of special habitat features such as vernal pools and serpentine soils
- Plant communities existing within the project area

In addition to knowledge of the local plants and wildlife, the following digital databases were used to analyze the suitability of the site for sensitive species:

- California Department of Fish and Wildlife (CDFW), *California Natural Diversity Database (CNDDB)*; RareFind 5, 2020
- California Native Plant Society's (CNPS) *Electronic Inventory of Rare and Endangered Vascular Plants of California* (2020 edition)
- California Department of Fish and Wildlife, *California Wildlife Habitat Relationships System (CWHR)*, Version 9.0

The **CNDDB** and **RareFind 5** databases consist of maps and records of all known populations of sensitive plants and wildlife in California. This data is continually updated by the CDFW with new sensitive species population data.

The **CNPS** database produces a list of sensitive plants potentially occurring at a site based on the various site characteristics listed above. While use of the CNPS inventory does not in itself eliminate the need for an in-season botanical survey, it can, when used in conjunction with other information, provide a very good indication of the suitability of a site as habitat for sensitive plant species.

The **CWHR database** operates on the same basis as the CNPS inventory. Input includes geographic area, plant community (including development stage), soil structure, and special features such as presence of water, snags, cover, and food (fruit, seeds, insects, etc.).

2.1 Botanical Survey Methods: A full, in-season floristic-level survey was conducted for the project site. The CNDDB report and maps for the Clearlake Highlands quadrangle were referenced prior to the survey. Vegetation communities were identified based on the nomenclature of *A Manual of California Vegetation* (Sawyer et al. 2009) as modified by the California Native Plant Society (CNPS) and mapped on a 1"=115' aerial photo. Vegetation community names are based on an assessment of dominant cover species.

Plants occurring on the site were identified using *The Jepson Manual of Higher Plants of California*. Where necessary, species names were updated based on the 6th edition, *CNPS Inventory of Rare and Endangered Plants of California*. A map of the plant communities is provided in **Figure 2.**

2.2 Survey Dates: Site visits for in-season floristic surveys and mapping were made on April 22, July 2, and July 6, 2020.

2.3 Biological Assessment Staff: Field surveys and plant taxonomy were conducted by Steve Zalusky, Northwest Biosurvey principal biologist. Mr. Zalusky has a Master of Science Degree in Biology from the California State University at Northridge and a Bachelor of Science Degree in Zoology from the University of California at Santa Barbara. Mr. Zalusky has over 35 years of experience as a biologist in the government and private sectors.

Mr. Zalusky was assisted in the field by Leigh Zalusky. Leigh Zalusky has a Bachelor of Science Degree in Engineering from the University of California, Davis. He has also developed extensive skills in plant taxonomy and ecology while managing and assisting in the development of the Seigler Valley Wetland Mitigation Bank and while assisting Northwest Biosurvey staff in field surveys and vegetation mapping over the past four years.

Database review and report preparation were conducted by Danielle Zalusky, Northwest Biosurvey principal planner. Ms. Zalusky has 15 years of experience as a planner in local government and the private sector and 18 years as a field biologist. She has a Bachelor of Arts Degree and all course work toward an M.A. Degree in Rural and Town Planning from Chico State University. Prior to joining Northwest Biosurvey in 2002, Ms. Zalusky was a senior planner for the Lake County Community Development Department.

3.0 SITE CHARACTERISTICS

3.1 **Topography and Drainage:** The survey corridor occupies the northern slope of Fraser Point, which extends eastward into Clear Lake from the eastern slope of Mount Konocti. Elevations along the corridor range from ~1,480 feet msl (mean sea level) along its eastern boundary with Soda Bay Road, to ~1,380 feet msl. The average surface of Clear Lake is 1,326 feet msl.

Drainage from the corridor is via sheet flow and road-side gutters to Clear Lake. Clear Lake drains east and south via Cache Creek through the Interior North Coast Range to the Sacramento River in the Sacramento Valley.

3.2 **Soils:** The property contains the following soil types:

- **Sodabay loam, 5-15% slopes (soil unit 221):**
  This very deep, well-drained soil is on hills. The Sodabay soil is very deep and well drained, and formed from material weathered from dacite, tuff, breccia, or volcanic ash. Permeability is moderately slow, and runoff is rapid. The hazard from soil erosion is severe. The surface layer is loam 6 inches deep. Vegetation is mainly brush with some oaks and annual grasses. The roadway contains this soil type.

- **Benridge-Konocti association, 15-30% slopes (soil unit 112):**
  This map unit is on hills. It is comprised of 40% Benridge loam, 20% Konocti cobbly loam, and 20% Konocti stony loam. The Konocti soils are on the upper part of side slopes, on ridgetops, and in ravines. Some Rock outcrop and boulders are including in this association. Typical vegetation is brush on south-and east-facing slopes, and brush with scattered conifers and hardwoods on north- and west-facing slopes. Both soils are moderately deep to very deep and well-drained. They formed in materials derived from volcanic ash, andesite, basalt, or dacite. Permeability is moderately slow, runoff is rapid, and the hazard of erosion is severe.

3.3 **Vegetation Types:** Vegetation mapping was conducted along the entire roadway corridor plus a 20-foot radius buffer extending outward from the proposed lot line adjustment boundary. The project contains two plant communities or vegetation types based on or derived from the "Standardized Classification" scheme described in the California Native Plant Society (CNPS) *A Manual of California Vegetation*. These vegetation types and other cover types are listed in **Table 1.** They are described below and shown in the vegetation map provided in **Figure 2.**

TABLE 1. PLANT COMMUNITIES AND OTHER COVER TYPES PRESENT

COVER TYPE	Acres of Cover Type on Property	Percent of Total Acres on Property
Interior Live Oak Woodland	0.75	22.52
Abandoned Landscaping	1.32	39.64
Ruderal (Disturbed Areas)	1.26	37.84
TOTAL ACRES OF COVER TYPE	3.33	100.00

- **Interior Live Oak Woodland:**

  This community is limited to a narrow strip south of the fence-line that separates the northern and southern parcels. It is dominated by interior live oak trees (*Quercus wislizeni var. wislizeni*) but includes a sub-dominant mix of ghost pine (*Pinus sabiniana*), knobcone pine (*Pinus attenuata*), and California bay (*Umbellularia californica*). The shrub layer is relatively dense and includes toyon (*Heteromeles arbutifolia*), coyote brush (*Baccharis pilularis*), and poison oak (*Toxicodendron diversilobum*).

  Widely-scattered **Konocti manzanita** (***Arctostaphylos manzanita ssp. elegans***) are also present but do not contribute significantly to the shrub layer as they do north of the fence-line. The ground cover is primarily leaf litter due to the dense tree and shrub canopy but includes scattered forbs and grasses including red brome (*Bromus madritensis ssp. rubens*), horehound (*Marrubium vulgare*), soft chess (*Bromus hordeaceus*), and climbing bedstraw (*Galium porrigens var. porrigens*).

- **Abandoned Landscaping:**

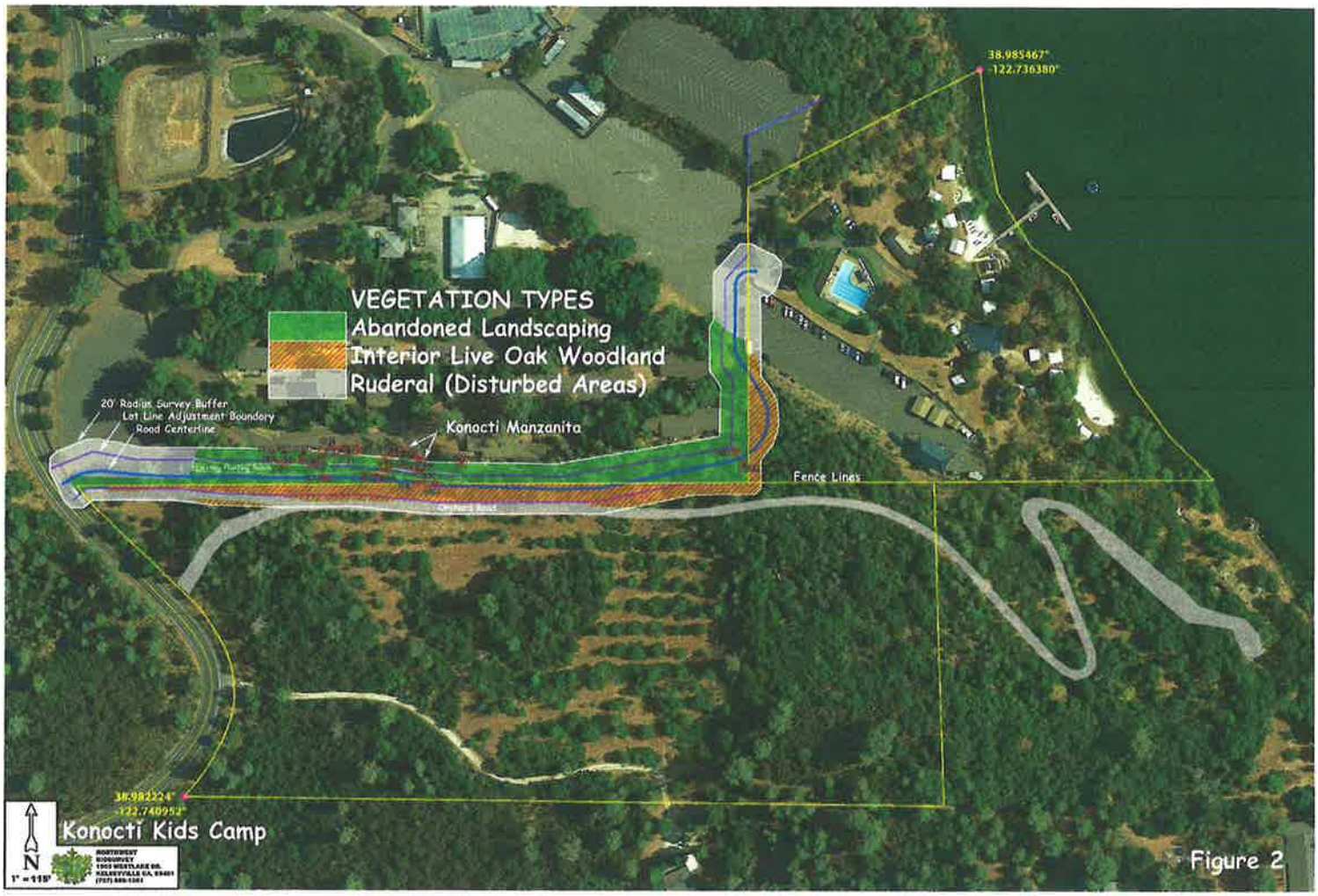
  The tree canopy north of the fence-line is dominated by Aleppo pines (*Pinus halepensis*), a landscape tree that appears to have been planted during construction of the Konocti Harbor Resort in the early 1970's. These occur along a planting bench which incorporated a cement drainage channel and irrigation sprinklers. Since the time of its planting, this landscape strip has been invaded by trees and shrubs from the adjacent interior live oak woodland which occupied the site prior to its conversion to landscaping. It now includes a sub-dominant mix of the trees and shrubs listed above for the interior live oak.

  Interestingly, this site contains a relatively dense contribution to the shrub layer by **Konocti manzanita**, a California Native Plant Society (CNPS) rank 1B.3 taxon with

sensitive regulatory status. This shrub has colonized areas above and below the existing planting bench (white polygon in Figure 2) with only one of these shrubs directly within the bench (Waypoint 85 – marked in yellow in the figure). It is assumed that these shrubs along with other invasive natives were routinely removed when the bench was maintained.

- **Ruderal:**

  This cover type consists of parking areas and roadways.


38.985467°
-122.736380°
VEGETATION TYPES
Abandoned Landscaping
Interior Live Oak Woodland
Ruderal (Disturbed Areas)
20' Radius Survey Buffer
Lot Line Adjustment Boundary
Road Centerline
Konocti Manzanita
Fence Lines
38.982224°
-122.740952°
Konocti Kids Camp
N
1" = 115'
Figure 2

4.0 PRE-SURVEY RESEARCH RESULTS

4.1 CNPS Electronic Inventory Analysis: A California Native Plant Society (CNPS) analysis was conducted for all plants with federal and state regulatory status, and all non-status plants on the CNPS Lists 1B through 4. The query included all plants within this area of Lake County occurring within the plant communities identified on the project site. The inventory lists species potentially occurring at the site; these are listed in **Table 2.** These species were included in the list of potentially sensitive species specifically searched for during field surveys. It is important to note that this list includes species for which appropriate habitat is not present on the parcel (including vernal pool species, etc.). The CNPS database search does not allow fine-tuning for specific soil types and many specific habitats.

Note: *The CNPS list is used to broaden the list of sensitive species considered during the subsequent field surveys; however, it must be used with discretion because the database search does not allow fine-tuning for specific soil types or for many specific habitats required by sensitive plant taxa (e.g. serpentine and vernal pools). Consequently, the CNPS list generated for a site may include several taxa for which the required habitat is not present.*

4.2 California Natural Diversity Database: The California Natural Diversity Database (CNDDB) and CDFW RareFind 5 data and maps for the Clearlake Highlands 7½' quadrangle were reviewed for this project. **Table 3** presents a list of sensitive plant and wildlife species known to occur within this quadrangle. In addition to listing the species present within these quadrangles, the table provides a brief description of the habitat requirements and blooming season, along with an assessment of whether the project area contains the necessary habitat requirements for each species. **Appendix A** at the end of this report lists the species within the nine quadrangles in the vicinity of this property.

TABLE 2. CALIFORNIA NATIVE PLANT SOCIETY'S INVENTORY OF RARE AND ENDANGERED PLANTS

Selected CNPS Plants by Scientific Name:

Konocti Kids Camp Project

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat/Micro-Habitat
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	Ericaceae	perennial evergreen shrub	1B.3	None	None	(Jan)Mar-May(Jul)	Chaparral, Cismontane woodland, Lower montane coniferous forest; volcanic
Cordylanthus tenuis ssp. brunneus	serpentine bird's-beak	Orobanchaceae	annual herb hemiparasitic	4.3	None	None	Jul-Aug	Closed-cone coniferous forest, Chaparral, Cismontane woodland; usually serpentinite
Eriastrum brandegeeae	Brandegee's eriastrum	Polemoniaceae	annual herb	1B.1	None	None	Apr-Aug	Chaparral, Cismontane woodland; volcanic, sandy
Hesperolinon adenophyllum	glandular western flax	Linaceae	annual herb	1B.2	None	None	May-Aug	Chaparral, Cismontane woodland, Valley and foothill grassland; usually serpentinite
Hesperolinon didymocarpum	Lake County western flax	Linaceae	annual herb	1B.2	CE	None	May-Jul	Chaparral, Cismontane woodland, Valley and foothill grassland; serpentinite
Layia septentrionalis	Colusa layia	Asteraceae	annual herb	1B.2	None	None	Apr-May	Chaparral, Cismontane woodland, Valley and foothill grassland; sandy, serpentinite
Leptosiphon acicularis	bristly leptosiphon	Polemoniaceae	annual herb	4.2	None	None	Apr-Jul	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland
Limnanthes floccosa ssp. floccosa	woolly meadow-foam	Limnanthaceae	annual herb	4.2	None	None	Mar-May(Jun)	Chaparral, Cismontane woodland, Valley and foothill grassland, Vernal pools; vernally mesic
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Polemoniaceae	annual herb	1B.1	None	None	Apr-Jul	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools; mesic
Sedella leiocarpa	Lake County stonecrop	Crassulaceae	annual herb	1B.1	CE	FE	Apr-May	Cismontane woodland, Valley and foothill grassland, Vernal pools; vernally mesic depressions in volcanic outcrops

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat/Micro-Habitat
Toxicoscordion fontanum	marsh zigadenus	Melanthiaceae	perennial bulbiferous herb	4.2	None	None	Apr-Jul	Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps; vernally mesic, often serpentinite
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2B.3	None	None	May-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest

Key for Table 2:

CNPS Rare Plant-Threat Rank Definitions:

1B.1 = Rare, threatened, or endangered in California and elsewhere; seriously threatened In California
1B.2 = Rare, threatened, or endangered in California and elsewhere; moderately threatened in California
1B.3 = Rare, threatened, or endangered in California and elsewhere; not very threatened in California
2A = Presumed extinct in California, but extant elsewhere
2B.1 = Rare, threatened, or endangered in Calif., but more common elsewhere; seriously threatened in Calif.
2B.2 = Rare, threatened, or endangered in Calif., but more common elsewhere; moderately threatened in Calif.
2B.3 = Rare, threatened, or endangered in Calif., but more common elsewhere; not very threatened in Calif.
3 = Plants about which we need more information (Review List)
3.1 = Plants about which we need more information (Review List); seriously threatened in California
3.2 = Plants about which we need more information (Review List); moderately threatened in California
3.3 = Plants about which we need more information (Review List); not very threatened in California
4.1 = Plants of limited distribution (watch list); seriously threatened in California
4.2 = Plants of limited distribution (watch list); moderately threatened in California
4.3 = Plants of limited distribution (watch list); not very threatened in California

State and Federal Status:

CESA = California Endangered Species Act
FESA = Federal Endangered Species Act
SR = State. Rare
ST = State. Threatened
SSC = CDFW Species of Special Concern
WL = CDFW Watch List
FT = Federal Threatened
SE = State Endangered.
SD = State Delisted
FP = CDFW Fully Protected
FE = Federal Endangered
FD = Federal Delisted

TABLE 3. CNDDB SENSITIVE PLANT AND WILDLIFE SPECIES WITHIN THE CLEARLAKE HIGHLANDS, CALIF. 7½' QUADRANGLE

Habitat Type	Habitat Present
Coastal and Valley Freshwater Marsh	no
Northern Basalt Flow Vernal Pool	no
Northern Volcanic Ash Vernal Pool	no
Clear Lake Drainage Resident Trout Stream	no

Plant Species	Common Name	Habitat Requirements, Fed/State/CNPS*/NatureServe Status	Blooming Season	Habitat Present
Antirrhinum virga	twig-like snapdragon	Chaparral, lower montane coniferous forest, /rocky, openings, often serpentinite; --/--/4.3	June-July per. herb	Habitat is not present
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	Chaparral, cismontane woodland, lower montane conif. forest/volcanic; --/--/1B.3	March-May everg. shrub	**Habitat is present – found during surveys**
Arctostaphylos stanfordiana ssp. raichei	Raiche's manzanita	Chaparral, lower montane coniferous forest/rocky, often serpentine; --/--/1B.1	Feb.-April ann. herb	Poor habitat present
Brasenia schreberi	watershield	Marshes & swamps/freshwater; –/--/2B.3	June-Sept. rhizom. herb, aquatic	Habitat is not present
Calochortus uniflorus	pink star-tulip	Northern Coastal scrub, North Coastal coniferous forest, mixed evergreen forest, redwood forest, closed-cone pine forest/ wetland-riparian; --/--/4.2	Apr-June per. herb	Habitat is not present
Calyptridium quadripetalum	four-petaled pussypaws	Chaparral, lower montane coniferous forest/sandy or gravelly, usually serpentinite; --/--/4.3	April-June ann. herb	Habitat is not present
Cordylanthus tenuis ssp. brunneus	serpentine bird's-beak	Closed-cone coniferous forest, chaparral, cismontane woodland/usually serpentinite; --/ --/4.3	July-Aug. ann. herb	Habitat is not present
Erlastrum brandegeeae	Brandegee's eriastrum	Chaparral, cismontane woodland, valley & foothill grassland/barren volcanic soils, often in open areas; –/–/1B.1	April-Aug. ann. herb	Habitat may be present
Eryngium constancei	Loch Lomond button-celery	Volcanic ash flow vernal pools; FE/SE/1B.1	April-June ann./per. herb	Habitat is not present

Plant Species	Common Name	Habitat Requirements, Fed/State/CNPS*/NatureServe Status	Blooming Season	Habitat Present
Gratiola heterosepala	Boggs Lake hedge-hyssop	Freshwater marsh, marshes & swamps (freshwater), vernal pools, sometimes lake margins/clay; --/SE/1B.2	April-Aug. ann. herb	Habitat is not present
Harmonia hallii	Hall's harmonia	Chaparral/serpentine hills & ridges, open rocky areas; --/--/1B.2	April-June ann. herb	Habitat is not present
Hemizonia congesta ssp. calyculata	Mendocino tarplant	Valley and foothill grassland, foothill woodland/often serpentine;--/--/4.3	July-Nov. ann. herb	Habitat is not present
Hesperolinon bicarpellatum	two-carpellate western flax	Chaparral/serpentine barrens at edge of chaparral; --/--/1B.2	May-July ann. herb	Habitat is not present
Horkelia bolanderi	Bolander's horkelia	Lower montane conif. forest, chaparral, meadows & seeps, valley & foothill grassland/grassy margins of vernal pools and meadows; --/ --/1B.2	June-Aug. per. herb	Habitat is not present
Imperata brevifolia	California satintail	Chaparral, coastal scrub, meadows & seeps (alkali), riparian scrub/mesic or riparian sites; --/--/2B.1	Sept.-May rhiz. herb	Habitat is not present
Lasthenia burkei	Burke's goldfields	Meadows and seeps, vernal pools, swales; FE/SE/1B.1	April-June ann. herb	Habitat is not present
Leptosiphon acicularis	bristly leptisiphon	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland; --/--/4.2	April-July ann. herb	Habitat may be present
Limnanthes floccosa ssp. floccosa	woolly meadowfoam	Chaparral, cismontane woodland, valley & foothill grassland, vernal pools/vernally mesic; --/--/4.2	March-May (June) ann. herb	Habitat is not present
Myosurus minimus ssp. apus	little mousetail	Valley foothill grassland, coastal sage scrub, freshwater wetlands, wetland-riparian/vernal pools; --/--/3.1	March-June ann. herb	Habitat is not present
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Cismontane woodland, lower montane conif. forest, meadows & seeps, valley & foothill grassland, vernal pools, swales/adobe or alkaline soils; --/--/1B.1	May-July ann. herb	Habitat is not present
Navarretia leucocephala ssp. pauciflora	few-flowered navarretia	Volcanic ash flow vernal pools; FE/ST/1B.1	May-June ann. herb	Habitat is not present
Navarretia leucocephala ssp. plieantha	many-flowered navarretia	Volcanic ash flow vernal pools; FE/SE/1B.2	May-June ann. herb	Habitat is not present

Plant Species	Common Name	Habitat Requirements, Fed/State/CNPS*/NatureServe Status	Blooming Season	Habitat Present
Piperia michaelii	Michael's rein orchid	Foothill woodland, yellow pine forest, northern coastal scrub, coastal sage scrub, closed-cone pine forest.;--/--/4.2	April-Aug per. herb	Habitat is not present
Potamogeton zosteriformis	eel-grass pondweed	Marshes & swamps, ponds, lakes & streams; --/--/2B.2	June-July ann. herb aquatic	Habitat is not present
Sedella leiocarpa	Lake County stonecrop	Cismontane woodland, valley & foothill grassland, vernal pools/vernally mesic depressions in volcanic outcrops; FE/SE/1B.1	April-May ann. herb	Habitat is not present
Sidalcea oregana ssp. hydrophila	marsh checkerbloom	Marshes & seeps, riparian forest/mesic; --/--/1B.2	July-Aug. per. herb	Habitat is not present
Toxicoscordion fontanum	marsh zigadenus	Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, marshes and swamps/vernally mesic, often serpentinite; --/--/4.2	April-July bulb. herb	Habitat is not present
Viburnum ellipticum	oval-leaved viburnum	Chaparral, cismontane woodland, lower montane coniferous forest; --/--/2B.3	May-June decid. shrub	Habitat may be present

*See CNPS list for key

Wildlife Species	Common Name	Habitat Requirements, Status	Season Present	Habitat Present
Dubiraphia brunnescens	brownish dubiraphian riffle beetle	Aquatic; inhabits exposed, wave-washed willow roots in shallow water. Known only from NE shore of Clear Lake; G1/S1	year-round	Habitat is not present
Hedychridium milleri	Borax Lake cuckoo wasp	External parasite of wasp and bee larva. Endemic to Central California. Possibly extirpated; G1?/S1?	year-round	Habitat is not present
Pyrgulopsis ventricosa	Clear Lake pyrg (snail)	Freshwater; inhabits springs and small spring-fed streams; G1/S1	year-round	Habitat is not present
Archoplites interruptus	Sacramento perch	Warm water: sloughs, slow-moving rivers, ponds; SSC/G2G3/S1	year-round	Habitat is not present
Hysterocarpus traskii lagunae	Clear Lake tule perch	Inhabit Clear Lake and Blue Lakes; require warm shallow lakes. Require cover provided by tules, rocks, other vegetation, etc.; SSC/G5T2/S2S3	year-round	Habitat is not present

Wildlife Species	Common Name	Habitat Requirements, Status	Season Present	Habitat Present
Lavinia exilicauda chi	Clear Lake hitch	Found only in Clear Lake, Lake County and assoc. ponds. Spawns in streams flowing to Clear Lake; SSC/ST/G4/S1	year-round	Habitat is not present
Lavinia symmetricus ssp. 4	Clear Lake – Russian River roach	Closely-related species found either in tributaries to Clear Lake, Lake County, or the Russian River and its tributaries; SSC/G4(T2-Imperiled)/S2S3	year-round	Habitat is not present
Rana boylii	foothill yellow-legged frog	Riparian/aquatic: partly-shaded, shallow streams & riffles with a rocky substrate in variety of habitats; SSC/SCT/G3/S2S3	year-round	Habitat is not present
Rana draytonii	California red-legged frog	Generally slow or ponded water, riparian; FT/SSC/G2G3/S2S3	year-round	Habitat is not present
Emys marmorata	western pond turtle	Aquatic turtle found in ponds, lakes, rivers, creeks, marshes & irrigation ditches with abundant vegetation and rocky or muddy bottoms; in woodland, forest, & grasslands; SSC/G3G4/S3	year-round	Habitat is not present
Ardea alba	great egret	Fresh & saline emergent wetlands, swampy woods, tidal estuaries, mangroves, streams, ponds; also fields and meadows; G5/S4	sometimes migratory	Habitat may be present
Ardea herodias	great blue heron	Shallow ponds and estuaries, & salt and fresh emergent wetlands; G5/S4	sometimes migratory	Habitat may be present
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Densely foliaged riparian thickets of willow and other deciduous trees and shrubs; FT/SE/G5/S1	year-round	Habitat is not present
Haliaeetus leucocephalus	bald eagle	Large bodies of water with adjacent snags. Nests in large old-growth or dominant live tree (often ponderosa pine) with open branches; FD/SE/SFP/G5/S2	wintering and nesting	Habitat is not present
Strix occidentalis caurina	northern spotted owl	Old-growth forests or mixed stands of old-growth & mature trees; occasionally in younger forests with patches of big trees; FT/ST/SSC	year-round	Habitat is not present
Antrozous pallidus	pallid bat	Open, dry habitats, forest habitats, in caves, tunnels, buildings, bridges; sensitive to human disturbance; SSC/G5/S3	local migrant	Poor habitat present within survey area
Corynorhinus townsendii	Townsend's big-eared bat	Roosts in open near relatively mesic sites, mainly montane forest habitats; SSC/G3/S2	year-round	Habitat is not present

Wildlife Species	Common Name	Habitat Requirements, Status	Season Present	Habitat Present
Myotis lucifugus	little brown bat	Roost in hollow trees, caves (in winter), human made features. Habitats are widely varied and include bogs, forested or herbaceous wetlands, riparian habitats, woodlands, chaparral, grasslands, orchards and fields in more urban areas. They forage over water; G3/S2S3	Migratory; usually hibernate during winter	Habitat is not present
Myotis yumanensis	Yuma myotis	Open conifer forests and riparian woodlands with nearby water. Roosts may be found in caves, mines, under bridges, and buildings; G5/S4	year-round	Habitat is not present

Key for Table 3:

SE/ST/SD=State Endangered/Threatened/Delisted
SC/SCD=State Candidate for Listing/Delisting
SSC=CDFW Species of Special Concern
SFP=CDFW Fully Protected
WL=CDFW Watch List
FE/FT/FD=Federal Endangered/Threatened/Delisted
FPE/FPT/FPD/FP=Federal Proposed Endangered/Threatened/Delisting

NatureServe Conservation Status:
G1/S1 = Global/State Critically Imperiled
G2/S2 = Global/State Imperiled
G3/S3 = Global/State Vulnerable
G4/S4 = Global/State Apparently Secure
G5/S5 = Global/State Secure
SNR=Not rated
FC=Federal Candidate

4.3 Wildlife Habitat Analysis Results: The California Wildlife Habitat Relationships analysis lists several sensitive and non-sensitive native wildlife species as potentially occurring on the site based on the geographic location and wildlife habitats present. Selected sensitive species are included in the wildlife assessment based on local knowledge and experience. The complete CWHR results are presented in **Appendix B.**

4.4 Wildlife Assessment: Based on the pre-survey research conducted for this study, no sensitive wildlife are likely to occur on the project site. A total of nineteen sensitive wildlife species need to be accounted for within the project area based on their inclusion in the Clearlake Highlands quadrangle by the CNDDB. Most of these species occur within or adjacent to Clear Lake. (Accepted protocol requires that all CNDDB species in the surrounding U.S.G.S. quadrangle be discussed even through suitable habitat may not occur on the site.) These species are:

- Brownish dubiraphian riffle beetle
- Borax Lake cuckoo wasp
- Clear Lake pyrg (snail)
- Sacramento perch
- Clear Lake tule perch
- Clear Lake hitch
- Clear Lake – Russian River roach
- Foothill yellow-legged frog
- California red-legged frog
- Western pond turtle
- Great egret
- Great blue heron
- Western yellow-billed cuckoo
- Bald eagle
- Northern spotted owl
- Pallid bat
- Townsend's big-eared bat
- Little brown bat
- Yuma myotis

Habitat is not found on the site for any of the listed species due to lack of water and the presence of adjacent "urban" and agricultural land uses. Osprey, which does not currently have sensitive regulatory status, may nest on the property or in the area, although the obvious nests of osprey were not seen, and the bird is unlikely to be there this year.

Even when lacking sensitive status, migratory birds and birds of prey are protected under the Migratory Bird Treaty Act and California Fish and Wildlife Code. Removal of trees and clearing of shrubs has a potential to result in an incidental take of eggs, or nestlings if clearing of trees or shrub habitat occurs during the nesting season (February 1 through August 31).

5.0 FIELD SURVEY RESULTS

5.1 Botanical Field Survey Results: **Table 4** presents the results of the floristic-level botanical survey within the survey area. Each of the sensitive plant taxa potentially occurring at the sites and listed in Tables 2 and 3 was specifically searched for during the survey. The survey identified a total of 29 plant taxa on the property, including native and introduced plants. The small number of identified plant taxa is due to the small survey area and the previous landscape maintenance on and around the survey area.

One plant taxon with sensitive status was identified within the survey area: **Konocti manzanita (*Arctostaphylos manzanita ssp. elegans;* CNPS Rank 1B.3).** Konocti manzanita occurs as a relatively dense shrub layer in the western half of the survey corridor. Plants ranked 1B are considered by regulatory agencies to qualify as rare under Section 15380(d) of the California Environmental Quality Act (CEQA) and thus require consideration and subsequent mitigation during CEQA review.

Forty of these shrubs occur within the survey corridor (the lot line adjustment boundary plus 20-foot radius survey buffer).

TABLE 4. FLORA FOR KONOCTI KIDS CAMP PROJECT

Habit	Species	Common Name	Family	Origin
forb	*Sanicula crassicaulis*	Pacific sanicle, Pacific blacksnakeroot	Apiaceae	N
forb	*Torilis arvensis*	field hedge parsley	Apiaceae	A
forb	*Cerastium glomeratum*	mouse-ear chickweed, sticky mouse-ear	Caryophyllaceae	A
forb	*Vicia villosa ssp. villosa*	winter vetch, hairy vetch	Fabaceae	A
forb	*Erodium cicutarium*	red-stem storksbill	Geraniaceae	A
forb	*Hypericum concinnum*	gold-wire	Hypericaceae	N
forb	*Marrubium vulgare*	horehound	Lamiaceae	A
forb	*Stachys albens*	cobwebby hedge nettle, white-stem hedge nettle	Lamiaceae	N
forb	*Zigadenus fremontii*	small-flowered star lily	Liliaceae	N
forb	*Claytonia perfoliata ssp. perfoliata*	miner's lettuce	Montiaceae	N
forb	*Galium porrigens var. porrigens*	climbing bedstraw, graceful bedstraw	Rubiaceae	N
grass	*Bromus diandrus*	ripgut grass, ripgut brome	Poaceae	A
grass	*Bromus hordeaceus*	soft chess	Poaceae	A
grass	*Bromus madritensis ssp. rubens*	red brome	Poaceae	A
grass	*Cynosurus echinatus*	hedgehog dogtail, annual dogtail	Poaceae	A
grass	*Elymus glaucus ssp. glaucus*	blue wildrye	Poaceae	N
shrub	*Toxicodendron diversilobum*	poison oak	Anacardiaceae	N
shrub	*Baccharis pilularis*	coyote brush, chaparral broom	Asteraceae	N
shrub	***Arctostaphylos manzanita ssp. elegans***	**Konocti manzanita, CNPS Rank 1B.3**	**Ericaceae**	**N**
shrub	*Arctostaphylos manzanita ssp. manzanita*	common manzanita	Ericaceae	N
shrub	*Lepechinia calycina*	pitcher sage	Lamiaceae	N
shrub	*Mimulus aurantiacus ssp. aurantiacus*	bush monkeyflower, sticky monkeyflower	Phrymaceae	N

Habit	Species	Common Name	Family	Origin
shrub	*Heteromeles arbutifolia*	toyon	Rosaceae	N
tree	*Quercus wislizeni var. wislizeni*	interior live oak	Fagaceae	N
tree	*Umbellularia californica*	California bay	Lauraceae	N
tree	*Pinus attenuata*	knobcone pine	Pinaceae	N
tree	*Pinus halepensis*	Aleppo pine	Pinaceae	A
tree	*Pinus sabiniana*	ghost pine, foothill pine	Pinaceae	N
tree	*Pseudotsuga menziesii var. menziesii*	Douglas fir	Pinaceae	N

A=Alien, N=Native

6.0 SUMMARY AND RECOMMENDATIONS

6.1 Summary: This biological resource assessment involved the following analyses and surveys for sensitive plants and wildlife potentially occurring in the vicinity of the project:

- Review of current California Natural Diversity Database (CNDDB) mapping of known sensitive plant and wildlife populations within the region.
- An analysis of the suitability of the site for sensitive plants and wildlife using the California Native Plant Society *Electronic Inventory of Rare and Endangered Vascular Plants of California*, and the California Department of Fish and Wildlife's *Wildlife Habitat Relations System*.
- A California Department of Fish and Wildlife protocol, floristic-level field survey of the plants occurring within and in the immediate vicinity of the project.

Sensitive Plants: A total of 29 native and introduced plant taxa were identified within the survey area during the in-season, floristic-level botanical surveys. One plant taxon with sensitive status was identified: **Konocti manzanita (*Arctostaphylos manzanita ssp. elegans*; CNPS Rank 1B.3).** As used here, the term sensitive includes species having state or federal regulatory status, included on Lists 1B through 4 by the California Native Plant Society, or otherwise listed in the California Natural Diversity Database. Plants ranked 1B are considered by regulatory agencies to qualify as rare under Section 15380(d) of the California Environmental Quality Act (CEQA) and thus require consideration and subsequent mitigation during CEQA review.

Sensitive Wildlife: A total of nineteen sensitive wildlife species were assessed for potential occurrence at the site because of inclusion in the CNDDB database for the Clearlake Highlands quadrangle. No wildlife species with sensitive regulatory status are likely to occur on due to the urban nature of the site, and its distance from sources of upland summer and fall water for all but bird species.

6.2 Recommendations:

A. Habitat Fragmentation

Potential Impacts:

The proposed roadway corridor is bordered along its northern edge by roadway and residential structures and along its southern edge by a ranch road and orchard. It is longitudinally bisected by a continuous chain link fence. Consequently, development of a roadway here will not result in additional habitat fragmentation.

B. Sensitive Plants and Wildlife

Potential Impacts:

Plants: Forty Konocti manzanita shrubs occur within the survey corridor. Depending on actual road width and ancillary cut and fill within the proposed lot line adjustment boundary, six of these shrubs may need to be removed and five would, at a minimum, require trimming. Twenty-nine shrubs are outside of the proposed work area but within the survey corridor. These shrubs also occur elsewhere throughout the parcel and on adjacent parcels. This taxon is a CNPS Rank 1B.3 plant with sensitive regulatory status pursuant to Section 15380(d) of the CEQA Guidelines.

Konocti manzanita is a locally common shrub found throughout much of Lake County and in portions of adjacent Sonoma and Mendocino Counties. Its sensitive status (CNPS Rank 1B.3) is based on its limited distribution within the state of California rather than on it being rare within its natural range. It is within the purview of the local permitting agency in consultation with the California Department of Fish and Wildlife to determine whether the incidental take of six of these plants and trimming of others would constitute a potentially significant adverse impact within the context of the CEQA Guidelines, and therefore require mitigation or avoidance. If mitigation is required, sufficient plants would remain on the property to allow 3-to-1, or more, preservation for plants removed.

Wildlife: No wildlife species with sensitive regulatory status are likely to be found on the project site in their sensitive (including nesting) regulatory status. Consequently, the proposed project does not have a significant potential to adversely impact wildlife with sensitive regulatory status.

While lacking sensitive status, migratory birds and birds of prey are protected under the Migratory Bird Treaty Act and California Fish and Game Code. Removal of trees and clearing of shrubs has a potential to result in an incidental take of eggs or nestlings if clearing of trees or shrub habitat occurs during the nesting season (February 1 through August 31).

Proposed Mitigation for Plants and Wildlife:

Measure 1: If it is determined by the permitting agencies that the incidental take of six Konocti manzanita and trimming of five additional plants would constitute a potentially significant adverse impact within the context of the CEQA

Guidelines, it is recommended that one of the following two design modifications be implemented:

1. Within the area mapped in **Figure 2** as Konocti manzanita habitat it is recommended that the proposed roadway corridor be limited to the existing planting bench (shown as a white polygon in the figure). One manzanita shrub (Waypoint 85 in the figure) will need to be removed and two or three others trimmed back from the roadway. The shrubs marked with Waypoints 38 and 39 should be avoidable or may require trimming. The roadway may be expanded to two lanes or to provide turnouts east and west of the area containing Konocti manzanita. Prior to the commencement of roadway construction and site preparation, Konocti manzanita should be flagged and construction personnel instructed regarding their protected status.

2. Move the proposed lot line adjustment south and incorporate the existing orchard road (mapped in **Figure 2**) into the proposed corridor. It is recommended that as much of this existing roadway be used as is practical but that it at least incorporates the roadway south of the area occupied by Konocti manzanita.

Measure 2: In order to avoid impacts passerines and raptors protected under the Migratory Bird Treaty Act and California Fish and Game Code, the following recommendation is made: Removal of trees during the nesting season (February 1 to August 31) must be preceded by a survey for nesting birds conducted by a qualified biologist. In the event that nesting birds are identified, a suitable construction buffer will be established around the nest site until either the end of the nesting season or upon determination by a qualified biologist that fledging has been completed, or that the nest has been abandoned. It is recommended that trees approved for removal be felled outside of the nesting season.

C. Erosion Control

Potential Impacts:

Vegetation clearing and grading activities have a potential to result in sediment runoff into waterways.

Proposed Mitigation for Erosion and Sedimentation:

Measure 3: All work should include extensive erosion control measures consistent with Lake County Grading Regulations in order to avoid erosion and the

potential for transport of sediments to Clear Lake. Coverage under the National Pollutant Discharge Elimination System (NPDES), General Permit for Storm Water Discharges associated with a Construction Activity (General Permit) and a Storm Water Pollution Prevention Plan (SWPPP) may be required.

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APPENDIX A

CNDDB SENSITIVE PLANT AND WILDLIFE SPECIES WITHIN THE SURROUNDING CALIF. 7½' QUADS.

Surrounding 9-Quad List: Clearlake Highlands Quadrangle

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
BENMORE CANYON	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
BENMORE CANYON	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
BENMORE CANYON	*Emys marmorata*	western pond turtle	None	None	SSC	-
BENMORE CANYON	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
BENMORE CANYON	*Asclepias solanoana*	serpentine milkweed	None	None	-	4.2
BENMORE CANYON	*Astragalus clevelandii*	Cleveland's milk-vetch	None	None	-	4.3
BENMORE CANYON	*Clarkia gracilis ssp. tracyi*	Tracy's clarkia	None	None	-	4.2
BENMORE CANYON	*Collomia diversifolia*	serpentine collomia	None	None	-	4.3
BENMORE CANYON	*Eriogonum tripodum*	tripod buckwheat	None	None	-	4.2
BENMORE CANYON	*Fritillaria purdyi*	Purdy's fritillary	None	None	-	4.3
BENMORE CANYON	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
BENMORE CANYON	*Horkelia bolanderi*	Bolander's horkelia	None	None	-	1B.2
BENMORE CANYON	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
BENMORE CANYON	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
BENMORE CANYON	*Malacothamnus helleri*	Heller's bush-mallow	None	None	-	3.3
BENMORE CANYON	*Potamogeton zosteriformis*	eel-grass pondweed	None	None	-	2B.2
CLEARLAKE HIGHLANDS	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
CLEARLAKE HIGHLANDS	*Rana draytonii*	California red-legged frog	Threat	None	SSC	-
CLEARLAKE HIGHLANDS	*Ardea alba*	great egret	None	None	-	-
CLEARLAKE HIGHLANDS	*Ardea herodias*	great blue heron	None	None	-	-
CLEARLAKE HIGHLANDS	*Coccyzus americanus occidentalis*	western yellow-billed cuckoo	Threat	End	-	-
CLEARLAKE HIGHLANDS	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
CLEARLAKE HIGHLANDS	*Strix occidentalis caurina*	Northern Spotted Owl	Threat	Threat	-	-
CLEARLAKE HIGHLANDS	*Archoplites interruptus*	Sacramento perch	None	None	SSC	-
CLEARLAKE HIGHLANDS	*Hysterocarpus traskii lagunae*	Clear Lake tule perch	None	None	SSC	-
CLEARLAKE HIGHLANDS	*Lavinia exilicauda chi*	Clear Lake hitch	None	Threat	-	-
CLEARLAKE HIGHLANDS	*Lavinia symmetricus ssp. 4*	Clear Lake - Russian River roach	None	None	SSC	-
CLEARLAKE HIGHLANDS	*Dubiraphia brunnescens*	brownish dubiraphian riffle beetle	None	None	-	-
CLEARLAKE HIGHLANDS	*Hedychridium milleri*	Borax Lake cuckoo wasp	None	None	-	-
CLEARLAKE HIGHLANDS	*Antrozous pallidus*	pallid bat	None	None	SSC	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
CLEARLAKE HIGHLANDS	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
CLEARLAKE HIGHLANDS	*Myotis lucifugus*	little brown bat	None	None	-	-
CLEARLAKE HIGHLANDS	*Myotis yumanensis*	Yuma myotis	None	None	-	-
CLEARLAKE HIGHLANDS	*Pyrgulopsis ventricosa*	Clear Lake pyrg	None	None	-	-
CLEARLAKE HIGHLANDS	*Emys marmorata*	western pond turtle	None	None	SSC	-
CLEARLAKE HIGHLANDS	*Clear Lake Drainage Resident Trout Stream*	Clear Lake Drainage Resident Trout Stream	None	None	-	-
CLEARLAKE HIGHLANDS	*Coastal and Valley Freshwater Marsh*	Coastal and Valley Freshwater Marsh	None	None	-	-
CLEARLAKE HIGHLANDS	*Northern Basalt Flow Vernal Pool*	Northern Basalt Flow Vernal Pool	None	None	-	-
CLEARLAKE HIGHLANDS	*Northern Volcanic Ash Vernal Pool*	Northern Volcanic Ash Vernal Pool	None	None	-	-
CLEARLAKE HIGHLANDS	*Antirrhinum virga*	twig-like snapdragon	None	None	-	4.3
CLEARLAKE HIGHLANDS	*Arctostaphylos manzanita ssp. elegans*	Konocti manzanita	None	None	-	1B.3
CLEARLAKE HIGHLANDS	*Arctostaphylos stanfordiana ssp. raichei*	Raiche's manzanita	None	None	-	1B.1
CLEARLAKE HIGHLANDS	*Brasenia schreberi*	watershield	None	None	-	2B.3
CLEARLAKE HIGHLANDS	*Calochortus uniflorus*	pink star-tulip	None	None	-	4.2
CLEARLAKE HIGHLANDS	*Calyptridium quadripetalum*	four-petaled pussypaws	None	None	-	4.3
CLEARLAKE HIGHLANDS	*Cordylanthus tenuis ssp. brunneus*	serpentine bird's-beak	None	None	-	4.3
CLEARLAKE HIGHLANDS	*Eriastrum brandegeeae*	Brandegee's eriastrum	None	None	-	1B.1
CLEARLAKE HIGHLANDS	*Eryngium constancei*	Loch Lomond button-celery	End	End	-	1B.1
CLEARLAKE HIGHLANDS	*Gratiola heterosepala*	Boggs Lake hedge-hyssop	None	End	-	1B.2
CLEARLAKE HIGHLANDS	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
CLEARLAKE HIGHLANDS	*Hemizonia congesta ssp. calyculata*	Mendocino tarplant	None	None	-	4.3
CLEARLAKE HIGHLANDS	*Hesperolinon bicarpellatum*	two-carpellate western flax	None	None	-	1B.2
CLEARLAKE HIGHLANDS	*Horkelia bolanderi*	Bolander's horkelia	None	None	-	1B.2
CLEARLAKE HIGHLANDS	*Imperata brevifolia*	California satintail	None	None	-	2B.1
CLEARLAKE HIGHLANDS	*Lasthenia burkei*	Burke's goldfields	End	End	-	1B.1
CLEARLAKE HIGHLANDS	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
CLEARLAKE HIGHLANDS	*Limnanthes floccosa ssp. floccosa*	woolly meadowfoam	None	None	-	4.2
CLEARLAKE HIGHLANDS	*Myosurus minimus ssp. apus*	little mousetail	None	None	-	3.1
CLEARLAKE HIGHLANDS	*Navarretia leucocephala ssp. bakeri*	Baker's navarretia	None	None	-	1B.1
CLEARLAKE HIGHLANDS	*Navarretia leucocephala ssp. pauciflora*	few-flowered navarretia	End	Threat	-	1B.1
CLEARLAKE HIGHLANDS	*Navarretia leucocephala ssp. plieantha*	many-flowered navarretia	End	End	-	1B.2
CLEARLAKE HIGHLANDS	*Piperia michaelii*	Michael's rein orchid	None	None	-	4.2

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
CLEARLAKE HIGHLANDS	*Potamogeton zosteriformis*	eel-grass pondweed	None	None	-	2B.2
CLEARLAKE HIGHLANDS	*Sedella leiocarpa*	Lake County stonecrop	End	End	-	1B.1
CLEARLAKE HIGHLANDS	*Sidalcea oregana ssp. hydrophila*	marsh checkerbloom	None	None	-	1B.2
CLEARLAKE HIGHLANDS	*Toxicoscordion fontanum*	marsh zigadenus	None	None	-	4.2
CLEARLAKE HIGHLANDS	*Viburnum ellipticum*	oval-leaved viburnum	None	None	-	2B.3
CLEARLAKE OAKS	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
CLEARLAKE OAKS	*Pandion haliaetus*	osprey	None	None	WL	-
CLEARLAKE OAKS	*Strix occidentalis caurina*	Northern Spotted Owl	Threat	Threat	-	-
CLEARLAKE OAKS	*Archoplites interruptus*	Sacramento perch	None	None	SSC	-
CLEARLAKE OAKS	*Hysterocarpus traskii lagunae*	Clear Lake tule perch	None	None	SSC	-
CLEARLAKE OAKS	*Lavinia exilicauda chi*	Clear Lake hitch	None	Threat	-	-
CLEARLAKE OAKS	*Dubiraphia brunnescens*	brownish dubiraphian riffle beetle	None	None	-	-
CLEARLAKE OAKS	*Antrozous pallidus*	pallid bat	None	None	SSC	-
CLEARLAKE OAKS	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
CLEARLAKE OAKS	*Myotis yumanensis*	Yuma myotis	None	None	-	-
CLEARLAKE OAKS	*Pekania pennanti*	fisher - West Coast DPS	None	Threat	SSC	-
CLEARLAKE OAKS	*Gonidea angulata*	western ridged mussel	None	None	-	-
CLEARLAKE OAKS	*Emys marmorata*	western pond turtle	None	None	SSC	-
CLEARLAKE OAKS	*Great Valley Mixed Riparian Forest*	Great Valley Mixed Riparian Forest	None	None	-	-
CLEARLAKE OAKS	*Arctostaphylos manzanita ssp. elegans*	Konocti manzanita	None	None	-	1B.3
CLEARLAKE OAKS	*Brasenia schreberi*	watershield	None	None	-	2B.3
CLEARLAKE OAKS	*Calyptridium quadripetalum*	four-petaled pussypaws	None	None	-	4.3
CLEARLAKE OAKS	*Erythronium helenae*	St. Helena fawn lily	None	None	-	4.2
CLEARLAKE OAKS	*Hemizonia congesta ssp. calyculata*	Mendocino tarplant	None	None	-	4.3
CLEARLAKE OAKS	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
CLEARLAKE OAKS	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
CLEARLAKE OAKS	*Potamogeton zosteriformis*	eel-grass pondweed	None	None	-	2B.2
KELSEYVILLE	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
KELSEYVILLE	*Taricha rivularis*	red-bellied newt	None	None	SSC	-
KELSEYVILLE	*Pandion haliaetus*	osprey	None	None	WL	-
KELSEYVILLE	*Progne subis*	purple martin	None	None	SSC	-
KELSEYVILLE	*Calasellus californicus*	An Isopod	None	None	-	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
KELSEYVILLE	*Linderiella occidentalis*	California linderiella	None	None	-	-
KELSEYVILLE	*Lavinia exilicauda chi*	Clear Lake hitch	None	Threat	-	-
KELSEYVILLE	*Lavinia symmetricus ssp. 4*	Clear Lake - Russian River roach	None	None	SSC	-
KELSEYVILLE	*Bombus caliginosus*	obscure bumble bee	None	None	-	-
KELSEYVILLE	*Hydrochara ricksecker*	Ricksecker's water scavenger beetle	None	None	-	-
KELSEYVILLE	*Erethizon dorsatum*	North American porcupine	None	None	-	-
KELSEYVILLE	*Emys marmorata*	western pond turtle	None	None	SSC	-
KELSEYVILLE	*Clear Lake Drainage Cyprinid/Catostomid Stream*	Clear Lake Drainage Cyprinid/Catostomid Stream	None	None	-	-
KELSEYVILLE	*Clear Lake Drainage Resident Trout Stream*	Clear Lake Drainage Resident Trout Stream	None	None	-	-
KELSEYVILLE	*Clear Lake Drainage Seasonal Lakefish Spawning Stream*	Clear Lake Drainage Seasonal Lakefish Spawning Stream	None	None	-	-
KELSEYVILLE	*Northern Volcanic Ash Vernal Pool*	Northern Volcanic Ash Vernal Pool	None	None	-	-
KELSEYVILLE	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
KELSEYVILLE	*Arctostaphylos manzanita ssp. elegans*	Konocti manzanita	None	None	-	1B.3
KELSEYVILLE	*Arctostaphylos stanfordiana ssp. raichei*	Raiche's manzanita	None	None	-	1B.1
KELSEYVILLE	*Astragalus breweri*	Brewer's milk-vetch	None	None	-	4.2
KELSEYVILLE	*Azolla microphylla*	Mexican mosquito fern	None	None	-	4.2
KELSEYVILLE	*Brasenia schreberi*	watershield	None	None	-	2B.3
KELSEYVILLE	*Calyptridium quadripetalum*	four-petaled pussypaws	None	None	-	4.3
KELSEYVILLE	*Clarkia gracilis ssp. tracyi*	Tracy's clarkia	None	None	-	4.2
KELSEYVILLE	*Cordylanthus tenuis ssp. brunneus*	serpentine bird's-beak	None	None	-	4.3
KELSEYVILLE	*Eriastrum brandegeeae*	Brandegee's eriastrum	None	None	-	1B.1
KELSEYVILLE	*Gratiola heterosepala*	Boggs Lake hedge-hyssop	None	End	-	1B.2
KELSEYVILLE	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
KELSEYVILLE	*Hesperolinon adenophyllum*	glandular western flax	None	None	-	1B.2
KELSEYVILLE	*Horkelia bolanderi*	Bolander's horkelia	None	None	-	1B.2
KELSEYVILLE	*Lasthenia burkei*	Burke's goldfields	End	End	-	1B.1
KELSEYVILLE	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
KELSEYVILLE	*Legenere limosa*	legenere	None	None	-	1B.1
KELSEYVILLE	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
KELSEYVILLE	*Limnanthes floccosa ssp. floccosa*	woolly meadowfoam	None	None	-	4.2

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
KELSEYVILLE	*Micropus amphibolus*	Mt. Diablo cottonweed	None	None	-	3.2
KELSEYVILLE	*Monardella viridis*	green monardella	None	None	-	4.3
KELSEYVILLE	*Navarretia leucocephala ssp. pauciflora*	few-flowered navarretia	End	Threat	-	1B.1
KELSEYVILLE	*Navarretia leucocephala ssp. plieantha*	many-flowered navarretia	End	End	-	1B.2
KELSEYVILLE	*Orcuttia tenuis*	slender Orcutt grass	Threat	End	-	1B.1
KELSEYVILLE	*Potamogeton zosteriformis*	eel-grass pondweed	None	None	-	2B.2
KELSEYVILLE	*Sidalcea oregana ssp. hydrophila*	marsh checkerbloom	None	None	-	1B.2
KELSEYVILLE	*Streptanthus barbiger*	bearded jewelflower	None	None	-	4.2
KELSEYVILLE	*Trichostema ruygtii*	Napa bluecurls	None	None	-	1B.2
LOWER LAKE	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
LOWER LAKE	*Taricha rivularis*	red-bellied newt	None	None	SSC	-
LOWER LAKE	*Aquila chrysaetos*	golden eagle	None	None	FP ; WL	-
LOWER LAKE	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
LOWER LAKE	*Lavinia exilicauda chi*	Clear Lake hitch	None	Threat	-	-
LOWER LAKE	*Lavinia symmetricus ssp. 4*	Clear Lake - Russian River roach	None	None	SSC	-
LOWER LAKE	*Saldula usingeri*	Wilbur Springs shorebug	None	None	-	-
LOWER LAKE	*Antrozous pallidus*	pallid bat	None	None	SSC	-
LOWER LAKE	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
LOWER LAKE	*Myotis lucifugus*	little brown bat	None	None	-	-
LOWER LAKE	*Myotis yumanensis*	Yuma myotis	None	None	-	-
LOWER LAKE	*Emys marmorata*	western pond turtle	None	None	SSC	-
LOWER LAKE	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
LOWER LAKE	*Astragalus rattanii var. jepsonianus*	Jepson's milk-vetch	None	None	-	1B.2
LOWER LAKE	*Delphinium uliginosum*	swamp larkspur	None	None	-	4.2
LOWER LAKE	*Fritillaria pluriflora*	adobe-lily	None	None	-	1B.2
LOWER LAKE	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
LOWER LAKE	*Hesperolinon sharsmithiae*	Sharsmith's western flax	None	None	-	1B.2
LOWER LAKE	*Lasthenia burkei*	Burke's goldfields	End	End	-	1B.1
LOWER LAKE	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
LOWER LAKE	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
LOWER LAKE	*Lomatium hooveri*	Hoover's lomatium	None	None	-	4.3
LOWER LAKE	*Malacothamnus hallii*	Hall's bush-mallow	None	None	-	1B.2

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
LOWER LAKE	*Malacothamnus helleri*	Heller's bush-mallow	None	None	-	3.3
LOWER LAKE	*Navarretia leucocephala ssp. bakeri*	Baker's navarretia	None	None	-	1B.1
LOWER LAKE	*Navarretia leucocephala ssp. pauciflora*	few-flowered navarretia	End	Threat	-	1B.1
LOWER LAKE	*Potamogeton zosteriformis*	eel-grass pondweed	None	None	-	2B.2
LUCERNE	*Rana draytonii*	California red-legged frog	Threat	None	SSC	-
LUCERNE	*Taricha rivularis*	red-bellied newt	None	None	SSC	-
LUCERNE	*Ardea herodias*	great blue heron	None	None	-	-
LUCERNE	*Branta hutchinsii leucopareia*	cackling (=Aleutian Canada) goose	Delisted	None	WL	-
LUCERNE	*Falco mexicanus*	prairie falcon	None	None	WL	-
LUCERNE	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
LUCERNE	*Pandion haliaetus*	osprey	None	None	WL	-
LUCERNE	*Phalacrocorax auritus*	double-crested cormorant	None	None	WL	-
LUCERNE	*Strix occidentalis caurina*	Northern Spotted Owl	Threat	Threat	-	-
LUCERNE	*Archoplites interruptus*	Sacramento perch	None	None	SSC	-
LUCERNE	*Hysterocarpus traskii lagunae*	Clear Lake tule perch	None	None	SSC	-
LUCERNE	*Lavinia exilicauda chi*	Clear Lake hitch	None	Threat	-	-
LUCERNE	*Dubiraphia brunnescens*	brownish dubiraphian riffle beetle	None	None	-	-
LUCERNE	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
LUCERNE	*Lasionycteris noctivagans*	silver-haired bat	None	None	-	-
LUCERNE	*Gonidea angulata*	western ridged mussel	None	None	-	-
LUCERNE	*Emys marmorata*	western pond turtle	None	None	SSC	-
LUCERNE	*Clear Lake Drainage Cyprinid/Catostomid Stream*	Clear Lake Drainage Cyprinid/Catostomid Stream	None	None	-	-
LUCERNE	*Clear Lake Drainage Seasonal Lakefish Spawning Stream*	Clear Lake Drainage Seasonal Lakefish Spawning Stream	None	None	-	-
LUCERNE	*Coastal and Valley Freshwater Marsh*	Coastal and Valley Freshwater Marsh	None	None	-	-
LUCERNE	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
LUCERNE	*Arctostaphylos manzanita ssp. elegans*	Konocti manzanita	None	None	-	1B.3
LUCERNE	*Hesperolinon adenophyllum*	glandular western flax	None	None	-	1B.2
LUCERNE	*Hesperolinon bicarpellatum*	two-carpellate western flax	None	None	-	1B.2
LUCERNE	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
LUCERNE	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
LUCERNE	*Leptosiphon latisectus*	broad-lobed leptosiphon	None	None	-	4.3

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
LUCERNE	*Lupinus antoninus*	Anthony Peak lupine	None	None	-	1B.2
LUCERNE	*Potamogeton zosteriformis*	eel-grass pondweed	None	None	-	2B.2
MIDDLETOWN	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
MIDDLETOWN	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
MIDDLETOWN	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
MIDDLETOWN	*Lasionycteris noctivagans*	silver-haired bat	None	None	-	-
MIDDLETOWN	*Lasiurus cinereus*	hoary bat	None	None	-	-
MIDDLETOWN	*Myotis yumanensis*	Yuma myotis	None	None	-	-
MIDDLETOWN	*Margaritifera falcata*	western pearlshell	None	None	-	-
MIDDLETOWN	*Emys marmorata*	western pond turtle	None	None	SSC	-
MIDDLETOWN	*Northern Basalt Flow Vernal Pool*	Northern Basalt Flow Vernal Pool	None	None	-	-
MIDDLETOWN	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
MIDDLETOWN	*Astragalus breweri*	Brewer's milk-vetch	None	None	-	4.2
MIDDLETOWN	*Astragalus rattanii var. jepsonianus*	Jepson's milk-vetch	None	None	-	1B.2
MIDDLETOWN	*Calamagrostis ophitidis*	serpentine reed grass	None	None	-	4.3
MIDDLETOWN	*Calochortus uniflorus*	pink star-tulip	None	None	-	4.2
MIDDLETOWN	*Calystegia collina ssp. oxyphylla*	Mt. Saint Helena morning-glory	None	None	-	4.2
MIDDLETOWN	*Castilleja rubicundula var. rubicundula*	pink creamsacs	None	None	-	1B.2
MIDDLETOWN	*Collomia diversifolia*	serpentine collomia	None	None	-	4.3
MIDDLETOWN	*Delphinium uliginosum*	swamp larkspur	None	None	-	4.2
MIDDLETOWN	*Erigeron greenei*	Greene's narrow-leaved daisy	None	None	-	1B.2
MIDDLETOWN	*Erythranthe nudata*	bare monkeyflower	None	None	-	4.3
MIDDLETOWN	*Erythronium helenae*	St. Helena fawn lily	None	None	-	4.2
MIDDLETOWN	*Gratiola heterosepala*	Boggs Lake hedge-hyssop	None	End	-	1B.2
MIDDLETOWN	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
MIDDLETOWN	*Helianthus exilis*	serpentine sunflower	None	None	-	4.2
MIDDLETOWN	*Hemizonia congesta ssp. congesta*	congested-headed hayfield tarplant	None	None	-	1B.2
MIDDLETOWN	*Hesperolinon bicarpellatum*	two-carpellate western flax	None	None	-	1B.2
MIDDLETOWN	*Hesperolinon didymocarpum*	Lake County western flax	None	End	-	1B.2
MIDDLETOWN	*Hesperolinon sharsmithiae*	Sharsmith's western flax	None	None	-	1B.2
MIDDLETOWN	*Lasthenia burkei*	Burke's goldfields	End	End	-	1B.1
MIDDLETOWN	*Legenere limosa*	legenere	None	None	-	1B.1

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
MIDDLETOWN	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
MIDDLETOWN	*Leptosiphon jepsonii*	Jepson's leptosiphon	None	None	-	1B.2
MIDDLETOWN	*Leptosiphon latisectus*	broad-lobed leptosiphon	None	None	-	4.3
MIDDLETOWN	*Lomatium repostum*	Napa lomatium	None	None	-	4.3
MIDDLETOWN	*Navarretia cotulifolia*	cotula navarretia	None	None	-	4.2
MIDDLETOWN	*Navarretia jepsonii*	Jepson's navarretia	None	None	-	4.3
MIDDLETOWN	*Navarretia leucocephala ssp. bakeri*	Baker's navarretia	None	None	-	1B.1
MIDDLETOWN	*Navarretia leucocephala ssp. plieantha*	many-flowered navarretia	End	End	-	1B.2
MIDDLETOWN	*Navarretia paradoxinota*	Porter's navarretia	None	None	-	1B.3
MIDDLETOWN	*Orcuttia tenuis*	slender Orcutt grass	Threat	End	-	1B.1
MIDDLETOWN	*Sedella leiocarpa*	Lake County stonecrop	End	End	-	1B.1
MIDDLETOWN	*Streptanthus hesperidis*	green jewelflower	None	None	-	1B.2
MIDDLETOWN	*Trifolium hydrophilum*	saline clover	None	None	-	1B.2
THE GEYSERS	*Dicamptodon ensatus*	California giant salamander	None	None	SSC	-
THE GEYSERS	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
THE GEYSERS	*Taricha rivularis*	red-bellied newt	None	None	SSC	-
THE GEYSERS	*Progne subis*	purple martin	None	None	SSC	-
THE GEYSERS	*Entosphenus tridentatus*	Pacific lamprey	None	None	SSC	-
THE GEYSERS	*Hysterocarpus traskii pomo*	Russian River tule perch	None	None	SSC	-
THE GEYSERS	*Lavinia symmetricus ssp. 4*	Clear Lake - Russian River roach	None	None	SSC	-
THE GEYSERS	*Oncorhynchus mykiss irideus pop. 8*	steelhead - central California coast DPS	Threat	None	-	-
THE GEYSERS	*Bombus occidentalis*	western bumble bee	None	Cand End	-	-
THE GEYSERS	*Emys marmorata*	western pond turtle	None	None	SSC	-
THE GEYSERS	*Clear Lake Drainage Resident Trout Stream*	Clear Lake Drainage Resident Trout Stream	None	None	-	-
THE GEYSERS	*Antirrhinum virga*	twig-like snapdragon	None	None	-	4.3
THE GEYSERS	*Arctostaphylos manzanita ssp. elegans*	Konocti manzanita	None	None	-	1B.3
THE GEYSERS	*Asclepias solanoana*	serpentine milkweed	None	None	-	4.2
THE GEYSERS	*Astragalus breweri*	Brewer's milk-vetch	None	None	-	4.2
THE GEYSERS	*Astragalus clevelandii*	Cleveland's milk-vetch	None	None	-	4.3
THE GEYSERS	*Calamagrostis ophitidis*	serpentine reed grass	None	None	-	4.3
THE GEYSERS	*Calyptridium quadripetalum*	four-petaled pussypaws	None	None	-	4.3
THE GEYSERS	*Calystegia collina ssp. oxyphylla*	Mt. Saint Helena morning-glory	None	None	-	4.2

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
THE GEYSERS	*Calystegia collina ssp. tridactylosa*	three-fingered morning-glory	None	None	-	1B.2
THE GEYSERS	*Ceanothus confusus*	Rincon Ridge ceanothus	None	None	-	1B.1
THE GEYSERS	*Ceanothus divergens*	Calistoga ceanothus	None	None	-	1B.2
THE GEYSERS	*Clarkia gracilis ssp. tracyi*	Tracy's clarkia	None	None	-	4.2
THE GEYSERS	*Collomia diversifolia*	serpentine collomia	None	None	-	4.3
THE GEYSERS	*Cordylanthus tenuis ssp. brunneus*	serpentine bird's-beak	None	None	-	4.3
THE GEYSERS	*Eriastrum brandegeeae*	Brandegee's eriastrum	None	None	-	1B.1
THE GEYSERS	*Erythronium helenae*	St. Helena fawn lily	None	None	-	4.2
THE GEYSERS	*Fritillaria purdyi*	Purdy's fritillary	None	None	-	4.3
THE GEYSERS	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
THE GEYSERS	*Hesperolinon adenophyllum*	glandular western flax	None	None	-	1B.2
THE GEYSERS	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
THE GEYSERS	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
THE GEYSERS	*Lupinus sericatus*	Cobb Mountain lupine	None	None	-	1B.2
THE GEYSERS	*Navarretia leucocephala ssp. pauciflora*	few-flowered navarretia	End	Threat	-	1B.1
THE GEYSERS	*Panicum acuminatum var. thermale*	Geysers panicum	None	End	-	1B.2
THE GEYSERS	*Sidalcea oregana ssp. hydrophila*	marsh checkerbloom	None	None	-	1B.2
THE GEYSERS	*Streptanthus barbiger*	bearded jewelflower	None	None	-	4.2
THE GEYSERS	*Streptanthus brachiatus ssp. brachiatus*	Socrates Mine jewelflower	None	None	-	1B.2
THE GEYSERS	*Streptanthus glandulosus ssp. hoffmanii*	Hoffman's bristly jewelflower	None	None	-	1B.3
WHISPERING PINES	*Dicamptodon ensatus*	California giant salamander	None	None	SSC	-
WHISPERING PINES	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
WHISPERING PINES	*Rana draytonii*	California red-legged frog	Threat	None	SSC	-
WHISPERING PINES	*Taricha rivularis*	red-bellied newt	None	None	SSC	-
WHISPERING PINES	*Progne subis*	purple martin	None	None	SSC	-
WHISPERING PINES	*Strix occidentalis caurina*	Northern Spotted Owl	Threat	Threat	-	-
WHISPERING PINES	*Bombus occidentalis*	western bumble bee	None	Cand End	-	-
WHISPERING PINES	*Antrozous pallidus*	pallid bat	None	None	SSC	-
WHISPERING PINES	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
WHISPERING PINES	*Lasiurus blossevillii*	western red bat	None	None	SSC	-
WHISPERING PINES	*Lasiurus cinereus*	hoary bat	None	None	-	-
WHISPERING PINES	*Myotis evotis*	long-eared myotis	None	None	-	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
WHISPERING PINES	*Myotis thysanodes*	fringed myotis	None	None	-	-
WHISPERING PINES	*Emys marmorata*	western pond turtle	None	None	SSC	-
WHISPERING PINES	*Central Valley Drainage Rainbow Trout/Cyprinid Stream*	Central Valley Drainage Rainbow Trout/Cyprinid Stream	None	None	-	-
WHISPERING PINES	*Clear Lake Drainage Resident Trout Stream*	Clear Lake Drainage Resident Trout Stream	None	None	-	-
WHISPERING PINES	*Grimmia torenii*	Toren's grimmia	None	None	-	1B.3
WHISPERING PINES	*Mielichhoferia elongata*	elongate copper moss	None	None	-	4.3
WHISPERING PINES	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
WHISPERING PINES	*Antirrhinum subcordatum*	dimorphic snapdragon	None	None	-	4.3
WHISPERING PINES	*Antirrhinum virga*	twig-like snapdragon	None	None	-	4.3
WHISPERING PINES	*Arabis blepharophylla*	coast rockcress	None	None	-	4.3
WHISPERING PINES	*Arctostaphylos manzanita ssp. elegans*	Konocti manzanita	None	None	-	1B.3
WHISPERING PINES	*Arctostaphylos stanfordiana ssp. raichei*	Raiche's manzanita	None	None	-	1B.1
WHISPERING PINES	*Asclepias solanoana*	serpentine milkweed	None	None	-	4.2
WHISPERING PINES	*Astragalus breweri*	Brewer's milk-vetch	None	None	-	4.2
WHISPERING PINES	*Astragalus clevelandii*	Cleveland's milk-vetch	None	None	-	4.3
WHISPERING PINES	*Astragalus rattanii var. jepsonianus*	Jepson's milk-vetch	None	None	-	1B.2
WHISPERING PINES	*Calamagrostis ophitidis*	serpentine reed grass	None	None	-	4.3
WHISPERING PINES	*Calyptridium quadripetalum*	four-petaled pussypaws	None	None	-	4.3
WHISPERING PINES	*Calystegia collina ssp. oxyphylla*	Mt. Saint Helena morning-glory	None	None	-	4.2
WHISPERING PINES	*Carex praticola*	northern meadow sedge	None	None	-	2B.2
WHISPERING PINES	*Ceanothus confusus*	Rincon Ridge ceanothus	None	None	-	1B.1
WHISPERING PINES	*Ceanothus divergens*	Calistoga ceanothus	None	None	-	1B.2
WHISPERING PINES	*Chlorogalum pomeridianum var. minus*	dwarf soaproot	None	None	-	1B.2
WHISPERING PINES	*Collomia diversifolia*	serpentine collomia	None	None	-	4.3
WHISPERING PINES	*Cordylanthus tenuis ssp. brunneus*	serpentine bird's-beak	None	None	-	4.3
WHISPERING PINES	*Cordylanthus tenuis ssp. capillaris*	Pennell's bird's-beak	End	Rare	-	1B.2
WHISPERING PINES	*Delphinium uliginosum*	swamp larkspur	None	None	-	4.2
WHISPERING PINES	*Downingia willamettensis*	Cascade downingia	None	None	-	2B.2
WHISPERING PINES	*Erigeron greenei*	Greene's narrow-leaved daisy	None	None	-	1B.2
WHISPERING PINES	*Eriogonum nervulosum*	Snow Mountain buckwheat	None	None	-	1B.2
WHISPERING PINES	*Eryngium constancei*	Loch Lomond button-celery	End	End	-	1B.1

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
WHISPERING PINES	*Erythranthe nudata*	bare monkeyflower	None	None	-	4.3
WHISPERING PINES	*Erythronium helenae*	St. Helena fawn lily	None	None	-	4.2
WHISPERING PINES	*Fritillaria purdyi*	Purdy's fritillary	None	None	-	4.3
WHISPERING PINES	*Helianthus exilis*	serpentine sunflower	None	None	-	4.2
WHISPERING PINES	*Hesperolinon adenophyllum*	glandular western flax	None	None	-	1B.2
WHISPERING PINES	*Hesperolinon bicarpellatum*	two-carpellate western flax	None	None	-	1B.2
WHISPERING PINES	*Horkelia bolanderi*	Bolander's horkelia	None	None	-	1B.2
WHISPERING PINES	*Imperata brevifolia*	California satintail	None	None	-	2B.1
WHISPERING PINES	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
WHISPERING PINES	*Legenere limosa*	legenere	None	None	-	1B.1
WHISPERING PINES	*Leptosiphon acicularis*	bristly leptosiphon	None	None	-	4.2
WHISPERING PINES	*Leptosiphon grandiflorus*	large-flowered leptosiphon	None	None	-	4.2
WHISPERING PINES	*Leptosiphon jepsonii*	Jepson's leptosiphon	None	None	-	1B.2
WHISPERING PINES	*Lupinus sericatus*	Cobb Mountain lupine	None	None	-	1B.2
WHISPERING PINES	*Navarretia leucocephala ssp. bakeri*	Baker's navarretia	None	None	-	1B.1
WHISPERING PINES	*Navarretia leucocephala ssp. pauciflora*	few-flowered navarretia	End	Threat	-	1B.1
WHISPERING PINES	*Navarretia leucocephala ssp. plieantha*	many-flowered navarretia	End	End	-	1B.2
WHISPERING PINES	*Panicum acuminatum var. thermale*	Geysers panicum	None	End	-	1B.2
WHISPERING PINES	*Penstemon newberryi var. sonomensis*	Sonoma beardtongue	None	None	-	1B.3
WHISPERING PINES	*Sedella leiocarpa*	Lake County stonecrop	End	End	-	1B.1
WHISPERING PINES	*Sidalcea oregana ssp. hydrophila*	marsh checkerbloom	None	None	-	1B.2
WHISPERING PINES	*Streptanthus brachiatus ssp. brachiatus*	Socrates Mine jewelflower	None	None	-	1B.2
WHISPERING PINES	*Streptanthus brachiatus ssp. hoffmanii*	Freed's jewelflower	None	None	-	1B.2
WHISPERING PINES	*Streptanthus hesperidis*	green jewelflower	None	None	-	1B.2

Key for 9-Quad Table:

CNPS Rare Plant-Threat Rank Definitions:

1B.1 = Rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2 = Rare, threatened, or endangered in California and elsewhere; fairly threatened in California
1B.3 = Rare, threatened, or endangered in California and elsewhere; not very threatened in California
2A = Presumed extinct in California, but extant elsewhere
2B.1 = Rare, threatened, or endangered in Calif., but more common elsewhere; seriously threatened in Calif.
2B.2 = Rare, threatened, or endangered in Calif., but more common elsewhere; fairly threatened in Calif.
2B.3 = Rare, threatened, or endangered in Calif., but more common elsewhere; not very threatened in Calif.
3 = Plants about which we need more information (Review List)
3.1 = Plants about which we need more information (Review List); seriously threatened in California
3.2 = Plants about which we need more information (Review List); fairly threatened in California
3.3 = Plants about which we need more information (Review List); not very threatened in California
4.1 = Plants of limited distribution (watch list); seriously threatened in California
4.2 = Plants of limited distribution (watch list); fairly threatened in California
4.3 = Plants of limited distribution (watch list); not very threatened in California

CDFW / State and Federal Status:

SE/ST/SD = State Endangered/Threatened/Delisted
SSC = CDFW Species of Special Concern
WL = CDFW Watch List
FPE/FPT/FPD/FP = Federal Proposed Endangered/Threatened/Delisting
SC/SCD = State Candidate for Listing/Delisting
SFP = State Fully Protected
FE/FT/FD = Federal Endangered/Threatened/Delisted
FC = Federal Candidate

State and Federal Status:

Threat = Threatened
Prop = Proposed
Cand End/Threat = State Candidate for Endangered/Threatened
End = Endangered
Cand = Candidate

APPENDIX B

REGIONAL WHR DATABASE RESULTS

CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
supported by the
CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP
and maintained by the
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
Database Version: 9.0

SPECIES SUMMARY REPORT

FE = Federal Endangered
FT = Federal Threatened
CE = California Endangered
CT = California Threatened
CF = California Fully Protected
CP = Callfornia Protected
SC = California Species of Special Concern
PE = Federally-Proposed Endangered
PT = Federally-Proposed Threatened
FC = Federal Candidate
BL = BLM Sensitive
FS = USFS Sensitive
CD = CDF Sensitive
HA = Harvest

Note: Any given status code for a species may apply to the full species or to only one or more subspecies or distinct population segments.

ID	Species Name	Status	Native/ Introduced
B115	SHARP-SHINNED HAWK		NATIVE
B116	COOPER'S HAWK		NATIVE
B124	FERRUGINOUS HAWK		NATIVE
B125	ROUGH-LEGGED HAWK		NATIVE
B251	BAND-TAILED PIGEON	HA	NATIVE
B260	GREATER ROADRUNNER		NATIVE
B265	GREAT HORNED OWL		NATIVE
B277	COMMON POORWILL		NATIVE
B291	RUFOUS HUMMINGBIRD		NATIVE
B294	LEWIS' S WOODPECKER		NATIVE
B309	OLIVE-SIDED FLYCATCHER	SC	NATIVE
B317	HAMMOND'S FLYCATCHER		NATIVE
B318	DUSKY FLYCATCHER		NATIVE
B326	ASH-THROATED FLYCATCHER		NATIVE
B337	HORNED LARK		NATIVE
B346	STELLER'S JAY		NATIVE
B348	WESTERN SCRUB-JAY		NATIVE
B350	CLARK'S NUTCRACKER		NATIVE
B360	BUSHTIT		NATIVE
B368	BEWICK'S WREN	SC	NATIVE
B375	GOLDEN-CROWNED KINGLET		NATIVE
B376	RUBY-CROWNED KINGLET		NATIVE
B377	BLUE-GRAY GNATCATCHER		NATIVE
B381	MOUNTAIN BLUEBIRD		NATIVE
B389	AMERICAN ROBIN		NATIVE
B390	VARIED THRUSH		NATIVE
B391	WRENTIT		NATIVE
B393	NORTHERN MOCKINGBIRD		NATIVE

ID	Species Name	Status					Native/ Introduced
B410	LOGGERHEAD SHRIKE	FE		SC			NATIVE
B425	ORANGE-CROWNED WARBLER						NATIVE
B426	NASHVILLE WARBLER						NATIVE
B436	BLACK-THROATED GRAY WARBLER						NATIVE
B437	TOWNSEND'S WARBLER						NATIVE
B438	HERMIT WARBLER						NATIVE
B471	WESTERN TANAGER						NATIVE
B475	BLACK-HEADED GROSBEAK						NATIVE
B477	LAZULI BUNTING						NATIVE
B489	CHIPPING SPARROW						NATIVE
B495	LARK SPARROW						NATIVE
B499	SAVANNAH SPARROW		CE	SC			NATIVE
B506	LINCOLN'S SPARROW						NATIVE
B509	GOLDEN-CROWNED SPARROW						NATIVE
B510	WHITE-CROWNED SPARROW						NATIVE
B521	WESTERN MEADOWLARK						NATIVE
B524	BREWER'S BLACKBIRD						NATIVE
B536	PURPLE FINCH						NATIVE
B537	CASSIN'S FINCH						NATIVE
B538	HOUSE FINCH						NATIVE
B539	RED CROSSBILL						NATIVE
B542	PINE SISKIN						NATIVE
B543	LESSER GOLDFINCH						NATIVE
B544	LAWRENCE'S GOLDFINCH						NATIVE
B546	EVENING GROSBEAK						NATIVE
B773	AMERICAN REDSTART						NATIVE
B798	WHITE-THROATED SPARROW						NATIVE
B799	HARRIS'S SPARROW						NATIVE
B809	INDIGO BUNTING						NATIVE
M006	ORNATE SHREW	FE		SC			NATIVE
M030	SILVER-HAIRED BAT						NATIVE
M034	HOARY BAT						NATIVE
M037	TOWNSEND'S BIG-EARED BAT			SC	BL FS		NATIVE
M045	BRUSH RABBIT	FE	CE			HA	NATIVE
M047	AUDUBON'S COTTONTAIL					HA	NATIVE
M051	BLACK-TAILED JACKRABBIT			SC		HA	NATIVE
M055	YELLOW-PINE CHIPMUNK						NATIVE

ID	Species Name	Status					Native/ Introduced
M057	SHADOW CHIPMUNK						NATIVE
M059	SONOMA CHIPMUNK						NATIVE
M075	GOLDEN-MANTLED GROUND SQUIRREL						NATIVE
M080	NORTHERN FLYING SQUIRREL			SC	FS		NATIVE
M113	WESTERN HARVEST MOUSE						NATIVE
M117	DEER MOUSE			SC			NATIVE
M119	BRUSH MOUSE						NATIVE
M120	PINYON MOUSE						NATIVE
M134	CALIFORNIA VOLE	FE	CE	SC	BL		NATIVE
M151	BLACK BEAR					HA	NATIVE
M181	MULE DEER					HA	NATIVE

Total Number of Species: 76

Query Parameters

Included Locations
Lake Co

Included Location Seasons
Migrant, Summer, Winter, Yearlong

Included Habitats & (Stages)
Coastal Oak Woodland, Deciduous Orchard, Douglas-fir, Urban

Habitat Suitability Threshold
Reproduction - Low, Cover - Low, Feeding – Low

Included Habitat Seasons
Migrant, Summer, Winter, Yearlong

Excluded Elements
Algae, Amphibians, Aquatics - Emergent, Aquatics - Submerged, Bank, Barren, Brush Pile, Burrow, Carrion, Cave, Cliff, Duff, Dump, Fern, Fish, Grass/water, Invertebrates - Aquatic, Jetty, Kelp, Lithic, Litter, Log - Large (hollow), Log - Large (rotten), Log - Large (sound), Log - Medium (hollow), Log - Medium (rotten), Log - Medium (sound), Mine, Nest Box, Nest Island, Nest Platform, Pack Stations, Riparian Inclusion, Rock, Salt Ponds, Sand Dune, Shrub/water, Slash - Large (hollow), Slash - Large (rotten), Slash - Large (sound), Slash - Small, Snag - Large (rotten), Snag - Large (sound), Snag - Medium (rotten), Snag - Medium (sound), Snag - Small (rotten), Snag - Small (sound), Soil - Aerated, Soil - Friable, Soil - Gravelly, Soil - Organic, Soil - Saline, Soil - Sandy, Steep Slope, Stump (rotten), Stump (sound), Talus, Tree - Broken Top Live, Tree - With Loose Bark, Tree/water, Water - Created Body, Water/agriculture, Wharf

Included Species All Species Included

Included Special Statuses Native