
**BIOLOGICAL RESOURCE ASSESSMENT
WITH BOTANICAL SURVEY
and DELINEATION OF WATERS OF THE U.S.
for the
GETAWAY HOUSE PROJECT
APNS 048-270-22 (PTN.), 048-270-23 & 048-270-24
HOPLAND, CALIFORNIA**

June 25, 2020

Prepared by
Northwest Biosurvey



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1.0 PROJECT DESCRIPTION

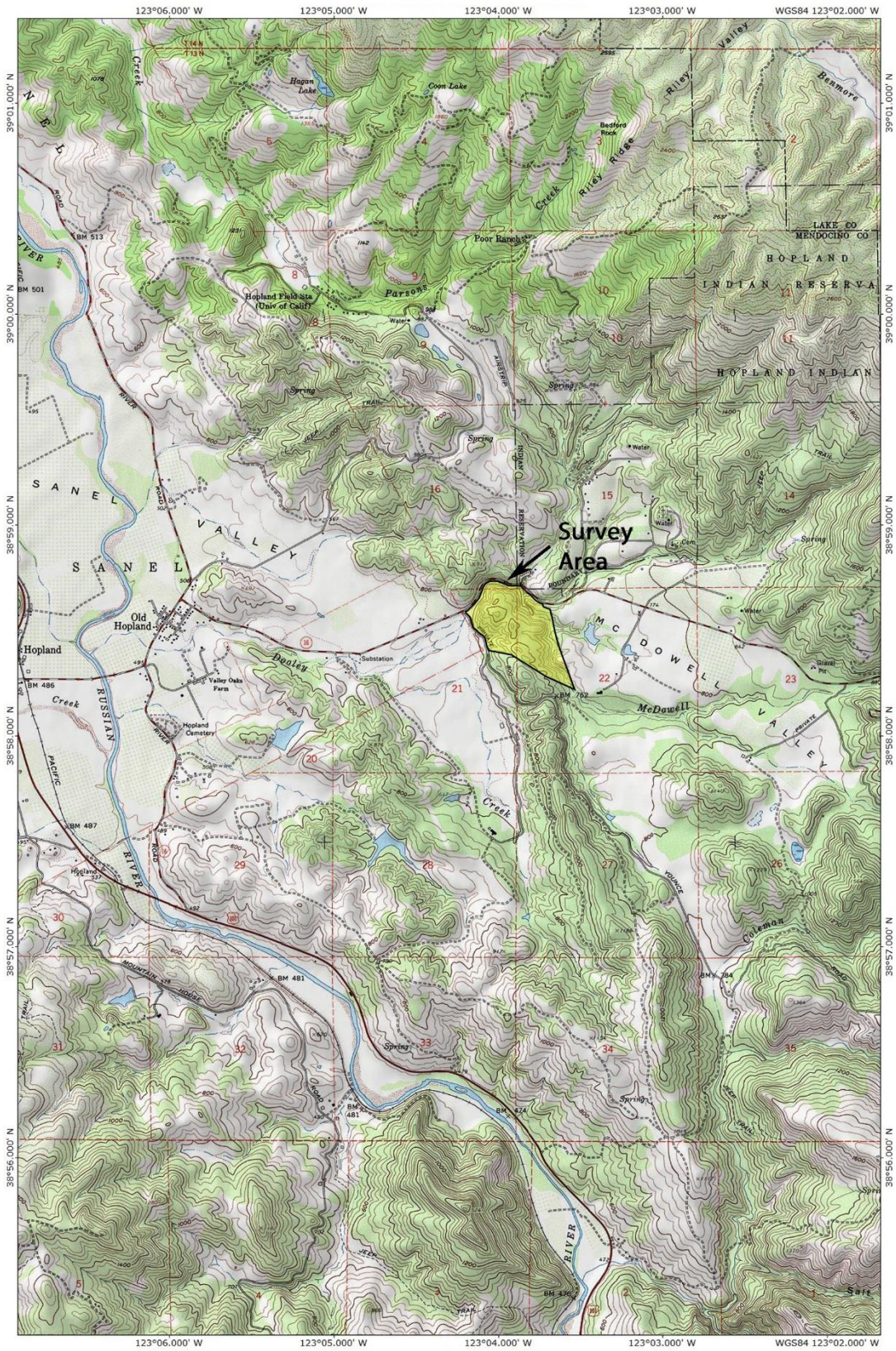
1.1 Proposed Project: This biological resource assessment and survey covers three parcels totaling approximately 97 acres which is proposed for a micro-cabin and recreational vehicle development. Vegetation types are mapped for the entire parcel.

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 property to contain sensitive plant and wildlife habitat. The second phase consists of field surveys, including a botanical survey listing all plant taxa¹. The biological resource 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 (CNDDDB) list of "Special Status Plants, Animals, and Natural Communities".

A delineation of waters of the U.S. was conducted as part of the assessment because of the presence of streams within the parcel. Due to the fact that delineations are prepared with a standard format for U.S. Army Corps of Engineers review, the delineation is provided as a separate report in **Appendix C**.

1.2 Location: The project site is located on Highway 175, east of Hopland in Mendocino County, California (APNs 048-270-22 (ptn.), 048-270-23 & 24; T13N R11W, Hopland, 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.




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LOCATION MAP
Figure 1

TIN MN
14 1/2°
06/19/20

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.

The analysis includes the following site characteristics:

- 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 (CNDDDB)
- Soils of the project area
- Elevation
- Presence or absence of special habitat features such as vernal pools and serpentine soils

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

- California Department of Fish and Wildlife (CDFW), *California Natural Diversity Database (CNDDDB)*; 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 CNDDDB 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 CNDDDB report and maps for the Hopland 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"=180' 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 Delineation Methods: The delineation was conducted as prescribed in the *Corps of Engineers Wetlands Delineation Manual*, January 1987 and the *Arid West 2008 Supplement*. Plant taxonomy and nomenclature is from the *Jepson Manual, Higher Plants of California*, 2012. Other texts, such as Munz's *A California Flora and Supplement*, 1973, and Mason's *Flora of the Marshes of California*, 1957, were used as supplemental texts. The survey included use of lidar mapped overlays and an extensive foot survey.

2.3 Survey Dates: Site visits for in-season floristic surveys, mapping, and the delineation were made on March 31 and June 11, 2020.

2.4 Biological Assessment Staff: The assessment, botanical field surveys, plant taxonomy, and the delineation 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. He completed his wetland delineation training under Terry Huffman of Huffman & Associates, Inc.

Mr. Zalusky was assisted in the field and with mapping and the delineation by Leigh Zalusky. Leigh Zalusky has a Bachelor of Science Degree in Engineering from the University of California, Davis. He has 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.

Danielle Zalusky, Northwest Biosurvey principal planner, assisted with database review and report preparation. Ms. Zalusky has 15 years of experience as a planner in local government and the private sector and 16 years as a field biologist. She has a Bachelor of Arts Degree 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 Getaway House property straddles a narrow spur-ridge extending southward from the western base of the Mayacamas Mountains between the Sanel and McDowell Valleys. Elevations on the property range from ~840 feet msl (mean sea level) along the ridgetop to ~640 feet msl along the valley floors. The terrain is relatively steep and is cut by a number of narrow drainages.

Drainage from the eastern side of the property drains to McDowell Creek which flows north along the eastern base of the ridge and then turns west along the northern edge of the property before entering Sanel Valley; it eventually joins Dooley Creek to continue west across the valley floor to the Russian River. Flows from the western side of the property are collected in a north-flowing channel extending along the base of the slope. This channel joins Dooley Creek at the northwestern edge of the property.

3.2 Soils: The survey area contains the following soil unit:

- **Hopland-Woodin complex, 50-75% slopes:**

These well-drained soils occur on hills and mountains. This unit includes about 40% Hopland and similar soils and 30% Woodin and similar soils. Parent material is residuum from sandstone and shale. Surface runoff is high to very high.

3.3 Vegetation Types: The entire property was mapped for vegetation in order to provide project context. The project contains four 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**.

It should be noted that an inholding that is not included in this project has been mapped for context but is not included in the assessment. Plant community colors in this inholding are shown faded in **Figure 2** to make the distinction clear.

TABLE 1. PLANT COMMUNITIES AND OTHER COVER TYPES PRESENT

COVER TYPE	Acres of Cover Type on Property	Percent of Total Acres on Property
Mixed Oak Woodland	51.38	52.73
Blue Oak Woodland	30.58	31.39
Chamise Chaparral	0.41	0.42
Wild Oat Grassland	12.85	13.19
Ruderal (disturbed areas)	2.21	2.27
TOTAL ACRES OF COVER TYPE	97.43	100.00

- **Mixed Oak Woodland:**

Mixed oak woodland forms a dense woodland/forest on the steeper and more shaded slopes. Dominance among the tree species present shifts depending on the amount of shading. California black oak (*Quercus kelloggii*) dominates the most shaded areas but transitions into dominance by either interior live oak (*Quercus wislizeni* var. *wislizeni*), or Oregon white oak (*Quercus garryana* var. *garryana*) on the less shaded slopes. The ground cover is generally wild oat grassland but with a shift to the more shade-tolerant grasses and forbs. These include hedgehog dogtail (*Cynosurus echinatus*), blue-eyed grass (*Sisyrinchium bellum*), bowl-tubed iris (*Iris macrosiphon*), blue wildrye (*Elymus glaucus* ssp. *glaucus*), grand hounds-tongue (*Cynoglossum grande*), Pacific black snakeroot (*Sanicula crassicaulis*), and purple sanicle (*Sanicula bipinnatifida*).

Along the course of McDowell Creek, the shaded banks adjacent to the channel support scattered red willow (*Salix laevigata*), white alder (*Alnus rhombifolia*), and Fremont cottonwood (*Populus fremontii* var. *fremontii*). The channel itself supports occasional clumps of scouring rush (*Equisetum hyemale* ssp. *affine*) and mugwort (*Artemesia douglasiana*). This was not mapped as a separate riparian community because these riparian components are widely scattered within an otherwise zonal community of mixed oak woodland. In early spring, the channel still contained shallow isolated pools.

- **Blue Oak Woodland:**

Blue oak (*Quercus douglasii*) provides a nearly homogenous cover in this open woodland. These are mature but moderate-sized oaks to an average height ranging from 40-50 feet and a dbh (diameter at breast height) of ~20 inches. On the more level open slopes, it occurs as savannah while the steeper slopes support woodland. The shrub layer is moderate and consists of a mix of birch leaf mountain mahogany (*Cercocarpus betuloides* var. *betuloides*), common manzanita (*Arctostaphylos manzanita* ssp. *manzanita*), and poison oak (*Toxicodendron diversilobum*). The ground cover is wild oat grassland.

- **Chamise Chaparral:**

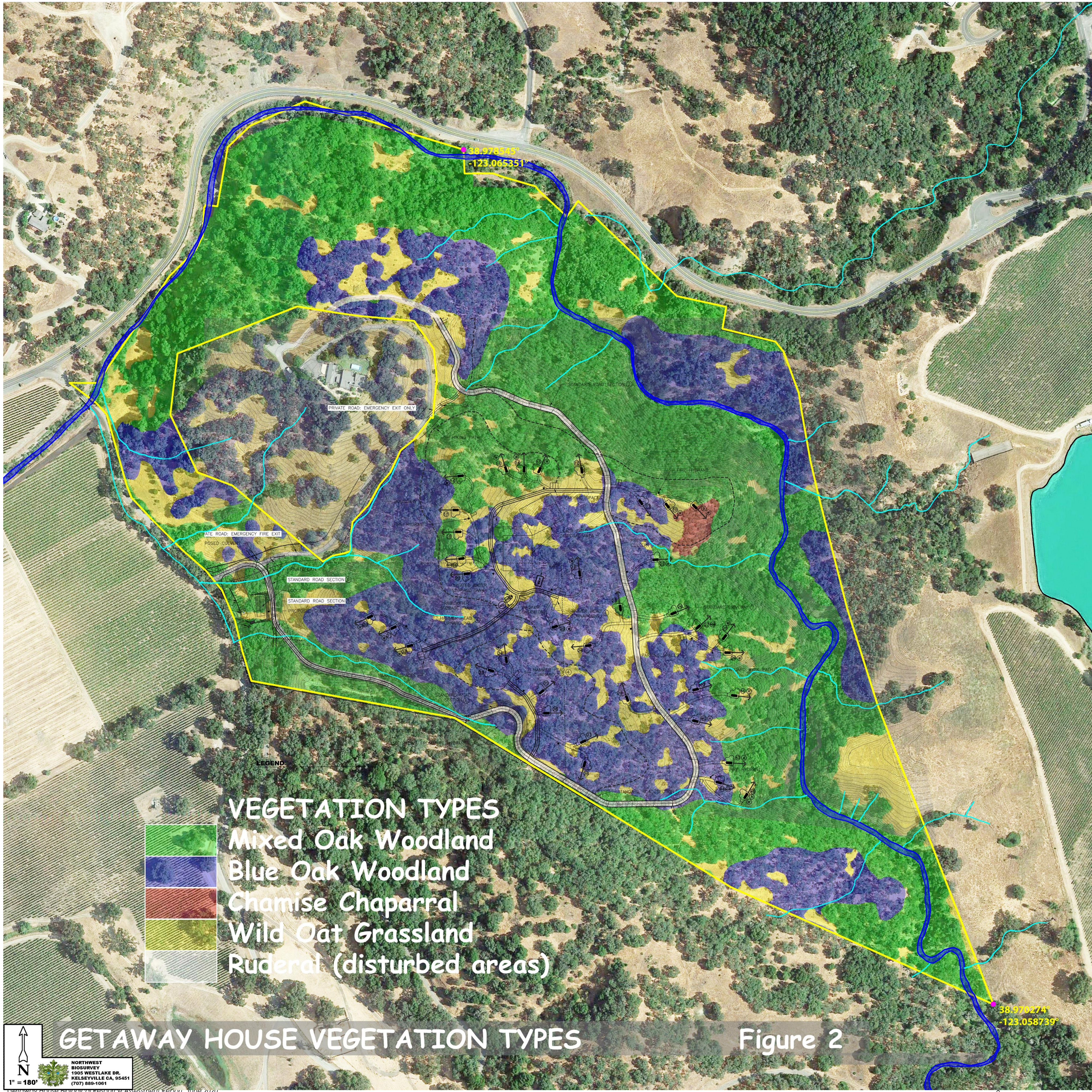
This small chamise community occupies the crest of a south-facing slope. It is heavily dominated by chamise (*Adenostoma fasciculatum*) with scattered common manzanita. The community is atypical in that the spacing is relatively open with a ground cover of wild oat grassland. These are typically dense communities with leaf litter and bare earth for ground cover.

- **Wild Oat Grassland:**

This open grassland is heavily dominated by slender wild oat (*Avena barbata*). Other species include a diverse mix of forbs and grasses which shift in dominance based on aspect and shading. These include big quaking grass (*Briza maxima*), blue wild rye, California brome (*Bromus carinatus* var. *carinatus*), hedgehog dogtail, blue-eyed grass, and California fescue (*Festuca californica*).

- **Ruderal:**

Ruderal (disturbed habitat) within the property is limited to a ranch road that loops through the upper elevations of the parcel.



VEGETATION TYPES
 Mixed Oak Woodland
 Blue Oak Woodland
 Chamise Chaparral
 Wild Oat Grassland
 Ruderal (disturbed areas)



GETAWAY HOUSE VEGETATION TYPES

Figure 2


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 1" = 180'

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 Mendocino 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 serpentine species, 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 Hopland 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:

Getaway House Project

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat/Micro-Habitat
<i>Bryum chryseum</i>	brassy bryum	Bryaceae	moss	4.3	None	None	na	Chaparral (openings), Cismontane woodland, Valley and foothill grassland
<i>Calystegia collina</i> <i>ssp. oxyphylla</i>	Mt. Saint Helena morning-glory	Convolvulaceae	perennial rhizo. herb	4.2	None	None	Apr-Jun	Chaparral, Lower montane coniferous forest, Valley and foothill grassland; serpentine
<i>Carex comosa</i>	bristly sedge	Cyperaceae	perennial rhizo. herb	2B.1	None	None	May-Sep	Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	1B.1	None	None	Feb-Jun	Closed-cone coniferous forest, Chaparral, Cismontane woodland; volcanic or serpentinite
<i>Collomia diversifolia</i>	serpentine collomia	Polemoniaceae	annual herb	4.3	None	None	May-Jun	Chaparral, Cismontane woodland; serpentinite, rocky or gravelly
<i>Entosthodon kochii</i>	Koch's cord moss	Funariaceae	moss	1B.3	None	None		Cismontane woodland (soil)
<i>Epilobium septentrionale</i>	Humboldt County fuchsia	Onagraceae	perennial herb	4.3	None	None	Jul-Sep	Broadleafed upland forest, North Coast coniferous forest; sandy or rocky
<i>Iris longipetala</i>	coast iris	Iridaceae	perennial rhizo. herb	4.2	None	None	Mar-May	Coastal prairie, Lower montane coniferous forest, Meadows and seeps; mesic
<i>Layia septentrionalis</i>	Colusa layia	Asteraceae	annual herb	1B.2	None	None	Apr-May	Chaparral, Cismontane woodland, Valley and foothill grassland; sandy, serpentinite
<i>Streptanthus glandulosus</i> <i>ssp. hoffmanii</i>	Hoffman's bristly jewelflower	Brassicaceae	annual herb	1B.3	None	None	Mar-Jul	Chaparral, Cismontane woodland, Valley and foothill grassland (often serpentinite); rocky

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat/Micro-Habitat
<i>Tracyina rostrata</i>	beaked tracyina	Asteraceae	annual herb	1B.2	None	None	May-Jun	Chaparral, Cismontane woodland, Valley and foothill grassland
<i>Viburnum ellipticum</i>	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

Rhizo. = rhizomatous

TABLE 3. CNDDDB SENSITIVE PLANT AND WILDLIFE SPECIES WITHIN THE HOPLAND, CALIF. 7½' QUADRANGLE

Plant Species	Common Name	Habitat Requirements, Fed/State/CNPS* Status	Blooming Season	Habitat Present
<i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	Raiche's manzanita	Chaparral, lower montane coniferous forest/rocky, often serpentine; --/--/1B.1	Feb.-April ann. herb	Poor habitat present
<i>Bryum chryseum</i>	brassy bryum	Chaparral (openings); cismontane woodland/valley and foothill grassland; --/--/4.3	NA-moss	Habitat present – not found
<i>Calystegia collina</i> ssp. <i>oxyphylla</i>	Mt. Saint Helena morning-glory	Chaparral, lower montane conif. forest, valley & foothill grassland/serpentine; --/--/4.2	April-June rhizom. herb	Habitat not present
<i>Carex comosa</i>	bristly sedge	Coastal prairie, marshes and swamps (lake margins), valley and foothill grassland; --/--/2B.1	May-Sept. per. rhizom. herb	Habitat not present
<i>Collomia diversifolia</i>	serpentine collomia	Chaparral, cismontane woodland/serpentine, rocky or gravelly; --/--/4.3	May-June ann. herb	Habitat not present
<i>Entosthodon kochii</i>	Koch's cord moss	Cismontane woodland (soil); --/--/1B.3	NA-moss	Habitat present – not found
<i>Epilobium septentrionale</i>	Humboldt County fuschia	Broadleaved upland forest; North Coast coniferous forest/sandy or rocky; --/--/4.3	July-Sept. per. herb	Habitat not present
<i>Erythranthe nudata</i>	bare monkeyflower	Chaparral, cismontane woodland, serpentine seeps; --/--/4.3	May-June ann. herb	Habitat not present
<i>Iris longipetala</i>	coast iris	Coastal prairie; lower montane coniferous forest; meadows and seeps/mesic; --/--/4.2	March-May per. rhizo. herb	Habitat not present
<i>Kopsiopsis hookeri</i>	small groundcone	North Coast coniferous forest/redwood forest; --/--/2B.3 (parasitic)	April-August per. rhizom. herb	Habitat not present
<i>Layia septentrionalis</i>	Colusa layia	Chaparral, cismontane woodland, valley & foothill grassland/sandy or serpentine; --/--/1B.2	April-May ann. herb	Habitat not present
<i>Leptosiphon jepsonii</i>	Jepson's leptisiphon	Chaparral, cismontane woodland, grassy slopes/volcanic or serpentine edge; --/--/1B.2	May-July ann. herb	Habitat not present
<i>Streptanthus glandulosus</i> ssp. <i>hoffmanii</i>	Hoffman's bristly jewelflower	Chaparral, cismontane woodland, valley and foothill grassland/rocky, often serpentine; --/--/1B.3	March-July ann. herb	Poor habitat present
<i>Tracyina rostrata</i>	beaked tracyina	Cismontane woodland, valley & foothill grassland; -/--/1B.2	May-June ann. herb	Habitat present – not found

Plant Species	Common Name	Habitat Requirements, Fed/State/CNPS* Status	Blooming Season	Habitat Present
<i>Viburnum ellipticum</i>	oval-leaved viburnum	Chaparral, cismontane woodland, lower montane coniferous forest; --/--/2B.3	May-June decid. shrub	Habitat present – not found

*See CNPS list for key

Wildlife Species	Common Name	Habitat Requirements/Status	Season Present	Habitat Present
<i>Bombus caliginosus</i>	obscure bumble bee	A black and yellow bee found in California, Oregon, Washington. Food plant genera: Baccharis, Cirsium, Lupinus, Lotus, Grindelia, Phacelia; G3G4/CA-SNR	year-round	Poor habitat present
<i>Lavinia symmetricus ssp. 4</i>	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/S2S3	year-round	Habitat not present
<i>Oncorhynchus mykiss irideus pop. 8</i>	steelhead-Central California Coast DPS	Small cool fast-flowing tributary streams with gravel beds. Steelhead are anadromous species that require streams that are contiguous with the ocean. Russian River so. to Soquel Creek and to no. of Pajaro River, San Francisco and San Pablo bay basins; FT/G5/S2S3	migratory	Habitat not present
<i>Oncorhynchus tshawytscha (pop. 17)</i>	chinook salmon - California coastal ESU	Freshwater fish of rivers and streams extending from Humboldt County south to Sonoma County (Russian River); FT/G5/S1	non-migratory	Habitat not present
<i>Hysterocarpus traski pomo</i>	Russian River tule perch	Russian River: Requires clear, flowing water with deep pools or runs and abundant cover for refuge from predators; SSC/G5/S2	year-round	Habitat not present
<i>Taricha rivularis</i>	red-bellied newt	Occurs near high to moderate gradient streams and rivers, riffles, pools. Burrows in soil or debris near water, emerges during fall rains to water to breed; SSC/G4/SNR	year-round	Mesic habitat not present
<i>Emys marmorata</i>	western pond turtle	Ponds, lakes, rivers, creeks, marshes & irrigation ditches with abundant vegetation and rocky or muddy bottoms; in woodland, forest, & grassland; SSC	year-round	Mesic habitat not present
<i>Rana boylei</i>	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	Mesic habitat not present

Wildlife Species	Common Name	Habitat Requirements/Status	Season Present	Habitat Present
<i>Agelaius tricolor</i>	tricolored blackbird	Fresh emergent wetland (marshes) with cattails, tules, sedges. Largely endemic to California; SSC/ST/G2G3/S1S2	year-round	Mesic habitat not present
<i>Ammodramus savannarum</i>	grasshopper sparrow	Prefers open grassland habitats with patches of bare ground and shrubby vegetation. Breeds in various types of grassland vegetation. Eats insects, grain, and seeds on the ground; SSC/G5/S3	sometimes migratory	Habitat may be present
<i>Asio otus</i>	long-eared owl	Riparian habitat, densely canopied trees; SSC/G5/S3	local and long-distance migrant	Mesic habitat not present
<i>Aquila chrysaetos</i>	golden eagle	Secluded cliffs with overhanging ledges and large trees near open terrain; SFP/WL/G5/S3	sometimes migratory	Habitat not present
<i>Ardea herodias</i>	great blue heron	Shallow ponds and estuaries, & salt and fresh emergent wetlands; G5/S4	sometimes migratory	Mesic habitat not present
<i>Antrozous pallidus</i>	pallid bat	Open, dry habitats, forest habitats, in caves, tunnels, buildings, bridges; sensitive to human disturbance; SSC/G5/S3	local migrant	Habitat may be present
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Roosts in open near relatively mesic sites, mainly montane forest habitats; SSC/G3/S2	local migrant	Mesic habitat not present
<i>Erethizon dorsatum</i>	North American porcupine	Occurs in a wide variety of coniferous and mixed woodland habitats in Sierra Nevada, Cascade, and Coast Ranges/ uses fallen and standing dead trees as cover; G5/S3	year-round	Habitat not present

Key for Table 3:

State and Federal Status:

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 a large number of sensitive and non-sensitive native wildlife species as potentially occurring on the site based on the general 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, a total of 16 sensitive wildlife species need to be accounted for within the project area. These consist of the species identified as present within the Hopland quadrangle by the CNDDDB and by the CWHR. Accepted protocol requires that all CNDDDB species in the surrounding U.S.G.S. quadrangle be discussed even though suitable habitat may not occur on the site.

Habitat for the following species is absent or very poor on the property. Most of these species require perennial water, ponds, lakes, or marshes. Large raptors like eagles require large nesting platforms or ledges. These species include:

- Obscure bumble bee (lack of food sources)
- Clear Lake – Russian River roach (fish – lakes and/or perennial streams)
- Steelhead-Central California Coast DPS (fish – lakes and/or perennial streams)
- Chinook salmon - California coastal ESU (fish – lakes and/or perennial streams)
- Russian River tule perch (fish – lakes and/or perennial streams)
- Red-bellied newt (herptile – mesic habitat not perennially present)
- Western pond turtle (herptile – pond habitat not present)
- Foothill yellow-legged frog (herptile – mesic habitat not perennially present)
- Tricolored blackbird (no ponds on site)
- Long-eared owl (no riparian habitat)
- Golden eagle (no suitable roosting sites)
- Great blue heron (no ponds on site)
- Townsend's big-eared bat (mesic habitat not present)
- North American porcupine (conifer habitat not present)

There is a pond on an adjacent property that may provide habitat for many of the above-listed species, and these animals may occasionally occur in non-sensitive status on the Getaway property. Additionally, a Coast Range newt (*Taricha torosa*) was seen during the first site visit; however, this species often occurs in dryer habitats and may be found under rocks, on roads, etc. It does not have sensitive status.

The potential for occurrence of the remaining wildlife species is addressed below. The sensitive wildlife species with a potential to occur on this property may be found in oak woodlands and grasslands.

- **Grasshopper sparrow (*Ammodramus savannarum*):**

This sparrow is a summer resident in foothills and lowlands west of the Cascade-Sierra Nevada crest from Mendocino and Trinity counties to southern California. It occurs in dry, dense grasslands with scattered shrubs for singing perches. Grasshopper sparrows are secretive in winter. They need thick grasslands and forbs for cover, and nest in small depressions on the ground. They breed from April to mid-July. Sparrows feed primarily on insects but also eat other invertebrates, grains, and forb seeds. They search for food on the ground. The sparrow has sensitive status while nesting.

- **Pallid bat (*Antrozous pallidus*):**

Optimal habitat for these bats consists of open, dry habitats with rocky areas, but the bats are also found in oak savanna grasslands, and in open forest and woodlands with access to riparian and open water for feeding and drinking in northern California. Foraging occurs over open country. These bats prefer the cool summer temperatures of caves, crevices, and mines as roosting sites where they are known to wedge themselves into small spaces; they will also roost in buildings, bridges, and hollow trees. Preferred roosts are high above the ground and inaccessible to terrestrial predators, although they are occasionally found roosting on the ground underneath sacks and other items left by humans.

Pallid bats take a variety of prey, including insects, reptiles, and rodents. Maternity colonies tend to be in the more protected, isolated locations and may consist of more than 100 individuals. The bats have a home range of 1 to 3 miles and, like the Townsend's bat, are known to roost with other bat species. This species of bat does not migrate long distances between seasons. This species is extremely sensitive to human disturbance of roosting sites. Populations in California have declined due to habitat destruction and use of pesticides. The woodlands on the property contain potential roosting habitat for bats, and the pond on the adjacent property may provide feeding habitat.

Raptors and passerines with non-sensitive status are likely to nest on the property due to the woodland habitats present. These birds may include red-tailed hawks, crows and ravens, and woodpeckers. Regardless of state and federal status, all nesting raptors and many passerines are protected under the Migratory Bird Treaty Act and Fish and Game Code.

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 82 plant taxa on the property, including native and introduced plants. No sensitive species were identified.

TABLE 4. FLORA OF THE GETAWAY HOUSE PROJECT

Habit	Species	Common Name	Family	Origin
fern	<i>Equisetum hyemale ssp. affine</i>	common scouring rush	Equisetaceae	N
fern	<i>Polypodium glycyrrhiza</i>	licorice fern	Polypodiaceae	N
fern	<i>Adiantum jordanii</i>	California maiden-hair fern	Pteridaceae	N
fern	<i>Pentagramma triangularis ssp. triangularis</i>	gold-back fern	Pteridaceae	N
forb	<i>Conium maculatum</i>	poison hemlock	Apiaceae	A
forb	<i>Petroselinum crispum</i>	parsley	Apiaceae	A
forb	<i>Sanicula bipinnatifida</i>	purple sanicle	Apiaceae	N
forb	<i>Sanicula crassicaulis</i>	Pacific sanicle, Pacific blacksnakeroot	Apiaceae	N
forb	<i>Torilis arvensis</i>	field hedge parsley	Apiaceae	A
forb	<i>Achillea millefolium</i>	common yarrow	Asteraceae	N
forb	<i>Agoseris retrosa</i>	spear-leaved agoseris	Asteraceae	N
forb	<i>Artemisia douglasiana</i>	mugwort	Asteraceae	N
forb	<i>Centaurea solstitialis</i>	yellow star thistle	Asteraceae	A
forb	<i>Hypochaeris radicata</i>	rough cat's-ear	Asteraceae	A
forb	<i>Micropus californicus</i>	cottontop	Asteraceae	N
forb	<i>Micropus californicus var. californicus</i>	slender cottonweed	Asteraceae	N
forb	<i>Senecio vulgaris</i>	common butterweed, common groundsel	Asteraceae	A
forb	<i>Wyethia angustifolia</i>	narrow-leaved mule ears	Asteraceae	N
forb	<i>Wyethia glabra</i>	green mule ears, shining mule ears	Asteraceae	N
forb	<i>Cynoglossum grande</i>	grand hound's tongue	Boraginaceae	N
forb	<i>Plagiobothrys nothofulvus</i>	rusty-haired popcornflower	Boraginaceae	N
forb	<i>Thysanocarpus curvipes</i>	fringe pod	Brassicaceae	N
forb	<i>Carex multicaulis</i>	forest sedge, many-stem sedge	Cyperaceae	N
forb	<i>Lupinus affinis</i>	fleshy lupine	Fabaceae	N
forb	<i>Lupinus bicolor</i>	miniature lupine	Fabaceae	N
forb	<i>Trifolium hirtum</i>	rose clover	Fabaceae	A
forb	<i>Vicia sativa ssp. nigra</i>	narrow-leaved vetch	Fabaceae	A

Habit	Species	Common Name	Family	Origin
forb	<i>Vicia villosa ssp. villosa</i>	winter vetch, hairy vetch	Fabaceae	A
forb	<i>Erodium botrys</i>	long-beaked storksbill, broadleaf filaree	Geraniaceae	A
forb	<i>Erodium cicutarium</i>	red-stem storksbill	Geraniaceae	A
forb	<i>Geranium dissectum</i>	cut-leaved geranium	Geraniaceae	A
forb	<i>Nemophila menziesii var. atomaria</i>	baby blue eyes	Hydrophyllaceae	N
forb	<i>Iris macrosiphon</i>	bowl-tubed iris	Iridaceae	N
forb	<i>Sisyrinchium bellum</i>	blue-eyed grass, western blue-eyed grass	Iridaceae	N
forb	<i>Juncus confusus</i>	Colorado rush	Juncaceae	N
forb	<i>Luzula comosa</i>	Pacific woodrush	Juncaceae	N
forb	<i>Mentha pulegium</i>	pennyroyal	Lamiaceae	A
forb	<i>Stachys albens</i>	cobwebby hedge nettle, white-stem hedge nettle	Lamiaceae	N
forb	<i>Chlorogalum pomeridianum</i>	wavyleaf soap plant	Liliaceae	N
forb	<i>Dichelostemma capitatum ssp. capitatum</i>	blue dicks	Liliaceae	N
forb	<i>Claytonia perfoliata ssp. perfoliata</i>	miner's lettuce	Montiaceae	N
forb	<i>Clarkia purpurea ssp. quadrivulnera</i>	purple clarkia, winecup clarkia, four-spot	Onagraceae	N
forb	<i>Taraxia (Camissonia) ovata</i>	sun cup	Onagraceae	N
forb	<i>Plantago lanceolata</i>	English plantain	Plantaginaceae	A
forb	<i>Navarretia mellita</i>	skunk navarretia	Polemoniaceae	N
forb	<i>Dodecatheon hendersonii</i>	Henderson's shooting stars	Primulaceae	N
forb	<i>Delphinium nudicaule</i>	red larkspur	Ranunculaceae	N
forb	<i>Ranunculus occidentalis</i>	western buttercup	Ranunculaceae	N
forb	<i>Galium aparine</i>	goose grass, common bedstraw	Rubiaceae	N
forb	<i>Galium porrigens var. porrigens</i>	climbing bedstraw, graceful bedstraw	Rubiaceae	N
forb	<i>Pedicularis densiflora</i>	warrior's plume, Indian warrior	Scrophulariaceae	N
forb	<i>Brodiaea elegans ssp. elegans</i>	harvest brodiaea	Themidaceae	N
grass	<i>Avena barbata</i>	slender wild oat	Poaceae	A
grass	<i>Briza maxima</i>	big quaking grass	Poaceae	A
grass	<i>Bromus carinatus var. carinatus</i>	California brome	Poaceae	N

Habit	Species	Common Name	Family	Origin
grass	<i>Bromus sterilis</i>	poverty brome	Poaceae	A
grass	<i>Cynosurus echinatus</i>	hedgehog dogtail, annual dogtail	Poaceae	A
grass	<i>Elymus glaucus ssp. glaucus</i>	blue wildrye	Poaceae	N
grass	<i>Festuca californica</i>	California fescue	Poaceae	N
grass	<i>Hordeum brachyantherum ssp. brachyantherum</i>	meadow barley, northern barley	Poaceae	N
grass	<i>Phalaris aquatica</i>	Harding grass	Poaceae	A
shrub	<i>Toxicodendron diversilobum</i>	poison oak	Anacardiaceae	N
shrub	<i>Baccharis pilularis</i>	coyote brush, chaparral broom	Asteraceae	N
shrub	<i>Symphoricarpos albus var. laevigatus</i>	common snowberry	Caryophyllaceae	N
shrub	<i>Arctostaphylos manzanita ssp. manzanita</i>	common manzanita	Ericaceae	N
shrub	<i>Adenostoma fasciculatum</i>	chamise	Rosaceae	N
shrub	<i>Cercocarpus betuloides var. betuloides</i>	birch-leaf mountain mahogany	Rosaceae	N
shrub	<i>Heteromeles arbutifolia</i>	toyon	Rosaceae	N
shrub	<i>Rosa californica</i>	California wild rose	Rosaceae	N
shrub	<i>Rubus armeniacus</i>	Himalayan blackberry	Rosaceae	A
shrub	<i>Salix lasiolepis</i>	arroyo willow	Salicaceae	N
tree	<i>Alnus rhombifolia</i>	white alder	Betulaceae	N
tree	<i>Arbutus menziesii</i>	Pacific madrone	Ericaceae	N
tree	<i>Quercus douglasii</i>	blue oak	Fagaceae	N
tree	<i>Quercus garryanna var. garryanna</i>	Oregon white oak	Fagaceae	N
tree	<i>Quercus kelloggii</i>	California black oak	Fagaceae	N
tree	<i>Quercus wislizeni var. wislizeni</i>	interior live oak	Fagaceae	N
tree	<i>Aesculus californica</i>	California buckeye	Hippocastanaceae	N
tree	<i>Umbellularia californica</i>	California bay	Lauraceae	N
tree	<i>Populus fremontii var. fremontii</i>	Fremont cottonwood	Salicaceae	N
tree	<i>Salix laevigata</i>	red willow	Salicaceae	N
vine	<i>Symphoricarpos mollis</i>	tripvine, creeping snowberry	Caprifoliaceae	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 (CNDDDB) 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.
- A delineation of waters of the U.S. conducted according to the *Corps of Engineers Wetlands Delineation Manual, January 1987* as updated by the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, 2008*.

Sensitive Plants: A total of 82 native and introduced plant taxa were identified on the property during the in-season, floristic-level botanical surveys. No sensitive plant taxa were identified. 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. 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.

Sensitive Wildlife: A total of sixteen sensitive wildlife species were assessed for potential occurrence at the site because of inclusion in the CNDDDB database for the Clearlake Oaks quadrangle. Two wildlife species with sensitive regulatory status have a potential to occur on within the oak woodlands on the property. These are:

- Birds: Grasshopper sparrow, raptors
- Mammals: Pallid bat

Possible Waters of the U.S.: Waters of the U.S. within the property consist of intermittent and ephemeral streams. The total area of all delineated aquatic resources is **3.277**

acres. No wetlands were delineated. This is discussed in **Appendix C, Aquatic Resources Report.**

6.2 Potential Impacts and Proposed Mitigation for Biological Resources:

A. Sensitive Wildlife

Potential Impacts: Removal of trees for development has the potential to result in an incidental take of pallid bats and grasshopper sparrows - both of which are California Species of Special Concern - and passerines and raptors protected under the Migratory Bird Treaty Act and California Fish and Wildlife Code.

Proposed Mitigation:

Measure 1: To the extent feasible, construction, including vegetation removal, shall occur outside of the nesting season for grasshopper sparrows and for raptors and passerines (February 15 through August 31). In the event that vegetation removal is necessary during the nesting season, the work shall be preceded by a pre-construction nest survey conducted by a qualified biologist within two weeks of disturbance. If an active nest of a sensitive bird species is found, a construction buffer shall be established around it in consultation with CDFW staff and shall remain in place until fledging is completed or until it is determined that the nesting effort has failed as determined by the qualified biologist.

Measure 2: In order to avoid incidental take of bats, the following recommendation is made: If work is proposed within woodland habitat during the maternity roosting season for bats (April 1 through September 15), trees with features capable of supporting roosting bats shall be surveyed for bat roosts or evidence of bat roosting (guano, urine staining and scent, dead bats) within 14 days of the start of project activities or removal of vegetation. If active roosts are discovered, a buffer of 50 feet around the active roost should be established by a qualified biologist. Removal may occur once active roosting ceases as determined by the biologist.

B. Woodlands and Forest

Potential Impacts: As shown in **Table 1** and **Figure 2**, the 97-acre property contains a mix of woodland habitat. Based on an overlay of the Getaway House development plan on the vegetation map (see **Figure 2**), the

placement of cabins appears to focus on openings in the woodland canopy, clearings, and open grasslands, and therefore reduces potential tree loss. Infrastructure such as proposed access roads and paths, etc., also emphasize use of grassland clearings and avoids trees.

Tree loss: As a consequence of this project design focusing on reduced impacts to trees and emphasis on use of the open habitat, actual tree loss should be minimized. However, this loss should be quantified during the permit process and an agency determination made regarding its significance within the context of the CEQA Guidelines. Excavation of cabin foundations, roadways, and trails beneath the driplines of oaks has a potential to result in additional tree loss beyond the incidental removal of trees within proposed construction sites.

Habitat Fragmentation: The Getaway House property sits astride a ridge extending between the Sanel and McDowell Valleys, both of which are heavily developed in fenced vineyard. As a consequence, this intervening ridge serves as a primary wildlife corridor between extensive open habitats to the north and south. Construction and use of this project will result in significant seasonal intrusion of people and potentially pets into this habitat. Night-time noise, lighting, and pets have a potential to adversely impact wildlife movement through this corridor.

Proposed Mitigation:

Measure 3: Use of woodland openings and grassland habitat should be emphasized as demonstrated in the proposed project design. Project engineers and/or surveyors should map any trees within the oak woodlands that will be removed during construction. This map and tree count should be used by permitting staff to determine whether potential impacts to oak woodlands have a potential to be significant within the context of the CEQA Guidelines and California's Oak Woodlands Protection Act. In the event that impacts are determined to be significant, standard mitigation consists of establishing a preservation ratio on an acreage basis and preserving on-site oak woodlands in a manner consistent with local planning policies. Project design and permitting should emphasize design which minimizes tree loss to the extent practical.

Measure 4: Construction of trails, foundations, roadways, etc., should avoid excavation beneath the driplines of trees for all trees that have not been approved for removal. In particular, trails and roadways should

minimize actual excavation and implement state of the art erosion control (e.g. rolling dips vs. water bars, etc.) where excavation is necessary.

Measure 5: To minimize disturbance of native wildlife using the property as a movement corridor, the following measures should be implemented:

- Pets, if allowed, should be kept indoors at night and dogs should be on a leash or under direct supervision.
- Use of overhead lighting should be avoided. Minor, on-ground, path lighting may be allowed.
- Night-time noise, particularly amplified music, should be subject to a curfew.
- Restrooms should be readily available throughout the resort and their use encouraged to avoid inadvertent human scent marking.

C. Waterways

Potential Impacts: Waterways on the property are mapped in **Figure W-2**. Roadways and trails crossing these waterways have a potential to result in erosion and sedimentation.

Proposed Mitigation:

Measure 6: Project design should minimize waterway crossings. Where these are necessary, it is recommended that they emphasize use of open bank areas lacking dense vegetation. Crossings of small waterways should consist of small bank-to-bank bridges not requiring excavation or footings. These may be removed during winter months. Use of in-channel crossings should be avoided. Use of mountain bikes on saturated earth trails during the winter and spring months should be avoided. Minor saturated areas may be planked. Intrusion into the McDowell Creek riparian zone (~ within 50 feet of the channel), should be minimized. This waterway is shown in dark blue in **Figure 2**. Use of trails parallel to this channel within the riparian zone should be avoided.

Any work involving the placement of fill or structures within waterways may require permits from the following agencies:

- U.S. Army Corps of Engineers
- Regional Water Quality Control Board
- California Department of Fish and Wildlife

D. Erosion Control

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

Proposed Mitigation:

Measure 7: All work should incorporate extensive erosion control measures consistent with Mendocino County Grading Regulations. 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

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

Surrounding 9-Quad List: Hopland Oaks Quadrangle

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
ASTI	<i>Dicamptodon ensatus</i>	California giant salamander	None	None	SSC	-
ASTI	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
ASTI	<i>Taricha rivularis</i>	red-bellied newt	None	None	SSC	-
ASTI	<i>Ardea herodias</i>	great blue heron	None	None	-	-
ASTI	<i>Lavinia symmetricus</i> ssp. 4	Clear Lake - Russian River roach	None	None	SSC	-
ASTI	<i>Hysterocarpus traskii</i> pomo	Russian River tule perch	None	None	SSC	-
ASTI	<i>Entosphenus tridentatus</i>	Pacific lamprey	None	None	SSC	-
ASTI	<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead - central California coast DPS	Threat	None	-	-
ASTI	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU	Threat	None	-	-
ASTI	<i>Bombus caliginosus</i>	obscure bumble bee	None	None	-	-
ASTI	<i>Erethizon dorsatum</i>	North American porcupine	None	None	-	-
ASTI	<i>Antrozous pallidus</i>	pallid bat	None	None	SSC	-
ASTI	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	SSC	-
ASTI	<i>Lasiurus blossevillii</i>	western red bat	None	None	SSC	-
ASTI	<i>Myotis yumanensis</i>	Yuma myotis	None	None	-	-
ASTI	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
ASTI	<i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	Konocti manzanita	None	None	-	1B.3
ASTI	<i>Cypripedium montanum</i>	mountain lady's-slipper	None	None	-	4.2
BIG FOOT MTN.	<i>Dicamptodon ensatus</i>	California giant salamander	None	None	SSC	-
BIG FOOT MTN.	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
BIG FOOT MTN.	<i>Taricha rivularis</i>	red-bellied newt	None	None	SSC	-
BIG FOOT MTN.	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	Threat	Threat	-	-
BIG FOOT MTN.	<i>Hysterocarpus traskii</i> pomo	Russian River tule perch	None	None	SSC	-
BIG FOOT MTN.	<i>Oncorhynchus mykiss irideus</i> pop. 16	steelhead - northern California DPS	Threat	None	-	-
BIG FOOT MTN.	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU	Threat	None	-	-
BIG FOOT MTN.	<i>Arborimus pomo</i>	Sonoma tree vole	None	None	SSC	-
BIG FOOT MTN.	<i>Lasiurus cinereus</i>	hoary bat	None	None	-	-
BIG FOOT MTN.	<i>Myotis yumanensis</i>	Yuma myotis	None	None	-	-
BIG FOOT MTN.	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
BIG FOOT MTN.	<i>Tracyina rostrata</i>	beaked tracyina	None	None	-	1B.2
BIG FOOT MTN.	<i>Arctostaphylos hispidula</i>	Howell's manzanita	None	None	-	4.2
BIG FOOT MTN.	<i>Lupinus sericatus</i>	Cobb Mountain lupine	None	None	-	1B.2
BIG FOOT MTN.	<i>Trifolium buckwestiorum</i>	Santa Cruz clover	None	None	-	1B.1
BIG FOOT MTN.	<i>Piperia candida</i>	white-flowered rein orchid	None	None	-	1B.2
CLOVERDALE	<i>Dicamptodon ensatus</i>	California giant salamander	None	None	SSC	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
CLOVERDALE	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
CLOVERDALE	<i>Taricha rivularis</i>	red-bellied newt	None	None	SSC	-
CLOVERDALE	<i>Aquila chrysaetos</i>	golden eagle	None	None	FP ; WL	-
CLOVERDALE	<i>Haliaeetus leucocephalus</i>	bald eagle	Delisted	End	FP	-
CLOVERDALE	<i>Nycticorax nycticorax</i>	black-crowned night heron	None	None	-	-
CLOVERDALE	<i>Lavinia symmetricus</i> ssp. 4	Clear Lake - Russian River roach	None	None	SSC	-
CLOVERDALE	<i>Hysterocarpus traskii</i> pomo	Russian River tule perch	None	None	SSC	-
CLOVERDALE	<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead - central California coast DPS	Threat	None	-	-
CLOVERDALE	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU	Threat	None	-	-
CLOVERDALE	<i>Bombus caliginosus</i>	obscure bumble bee	None	None	-	-
CLOVERDALE	<i>Erethizon dorsatum</i>	North American porcupine	None	None	-	-
CLOVERDALE	<i>Antrozous pallidus</i>	pallid bat	None	None	SSC	-
CLOVERDALE	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	SSC	-
CLOVERDALE	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
CLOVERDALE	<i>Allium peninsulare</i> var. franciscanum	Franciscan onion	None	None	-	1B.2
CLOVERDALE	<i>Hemizonia congesta</i> ssp. congesta	congested-headed hayfield tarplant	None	None	-	1B.2
CLOVERDALE	<i>Layia septentrionalis</i>	Colusa layia	None	None	-	1B.2
CLOVERDALE	<i>Cryptantha dissita</i>	serpentine cryptantha	None	None	-	1B.2
CLOVERDALE	<i>Streptanthus barbiger</i>	bearded jewelflower	None	None	-	4.2
CLOVERDALE	<i>Calystegia collina</i> ssp. oxyphylla	Mt. Saint Helena morning-glory	None	None	-	4.2
CLOVERDALE	<i>Arctostaphylos hispidula</i>	Howell's manzanita	None	None	-	4.2
CLOVERDALE	<i>Arctostaphylos manzanita</i> ssp. elegans	Konocti manzanita	None	None	-	1B.3
CLOVERDALE	<i>Arctostaphylos stanfordiana</i> ssp. raichei	Raiche's manzanita	None	None	-	1B.1
CLOVERDALE	<i>Iris longipetala</i>	coast iris	None	None	-	4.2
CLOVERDALE	<i>Erythronium helenae</i>	St. Helena fawn lily	None	None	-	4.2
CLOVERDALE	<i>Cypripedium montanum</i>	mountain lady's-slipper	None	None	-	4.2
CLOVERDALE	<i>Calamagrostis ophitidis</i>	serpentine reed grass	None	None	-	4.3
CLOVERDALE	<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	None	None	-	1B.1
ELLEDGE PEAK	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
ELLEDGE PEAK	<i>Taricha rivularis</i>	red-bellied newt	None	None	SSC	-
ELLEDGE PEAK	<i>Icteria virens</i>	yellow-breasted chat	None	None	SSC	-
ELLEDGE PEAK	<i>Baeolophus inornatus</i>	oak titmouse	None	None	-	-
ELLEDGE PEAK	<i>Setophaga petechia</i>	yellow warbler	None	None	SSC	-
ELLEDGE PEAK	<i>Melanerpes lewis</i>	Lewis' woodpecker	None	None	-	-
ELLEDGE PEAK	<i>Hysterocarpus traskii</i> pomo	Russian River tule perch	None	None	SSC	-
ELLEDGE PEAK	<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead - central California coast DPS	Threat	None	-	-
ELLEDGE PEAK	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU	Threat	None	-	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
ELLEDGE PEAK	<i>Erethizon dorsatum</i>	North American porcupine	None	None	-	-
ELLEDGE PEAK	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
ELLEDGE PEAK	<i>Grimmia torenii</i>	Toren's grimmia	None	None	-	1B.3
ELLEDGE PEAK	<i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	Raiche's manzanita	None	None	-	1B.1
ELLEDGE PEAK	<i>Malacothamnus mendocinensis</i>	Mendocino bush-mallow	None	None	-	1A
ELLEDGE PEAK	<i>Cypripedium californicum</i>	California lady's-slipper	None	None	-	4.2
ELLEDGE PEAK	<i>Cypripedium montanum</i>	mountain lady's-slipper	None	None	-	4.2
ELLEDGE PEAK	<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	None	Threat	-	1B.1
ELLEDGE PEAK	<i>Leptosiphon acicularis</i>	bristly leptosiphon	None	None	-	4.2
HIGHLAND SPR	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
HIGHLAND SPR	<i>Taricha rivularis</i>	red-bellied newt	None	None	SSC	-
HIGHLAND SPR	<i>Aquila chrysaetos</i>	golden eagle	None	None	FP ; WL	-
HIGHLAND SPR	<i>Agelaius tricolor</i>	tricolored blackbird	None	Threat	SSC	-
HIGHLAND SPR	<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	None	None	WL	-
HIGHLAND SPR	<i>Lavinia exilicauda</i> chi	Clear Lake hitch	None	Threat	-	-
HIGHLAND SPR	<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead - central California coast DPS	Threat	None	-	-
HIGHLAND SPR	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
HIGHLAND SPR	<i>Calycadenia micrantha</i>	small-flowered calycadenia	None	None	-	1B.2
HIGHLAND SPR	<i>Layia septentrionalis</i>	Colusa layia	None	None	-	1B.2
HIGHLAND SPR	<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	None	None	-	1B.2
HIGHLAND SPR	<i>Cryptantha dissita</i>	serpentine cryptantha	None	None	-	1B.2
HIGHLAND SPR	<i>Calystegia collina</i> ssp. <i>oxyphylla</i>	Mt. Saint Helena morning-glory	None	None	-	4.2
HIGHLAND SPR	<i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	Konocti manzanita	None	None	-	1B.3
HIGHLAND SPR	<i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	Raiche's manzanita	None	None	-	1B.1
HIGHLAND SPR	<i>Astragalus breweri</i>	Brewer's milk-vetch	None	None	-	4.2
HIGHLAND SPR	<i>Trichostema ruygtii</i>	Napa bluecurls	None	None	-	1B.2
HIGHLAND SPR	<i>Fritillaria purdyi</i>	Purdy's fritillary	None	None	-	4.3
HIGHLAND SPR	<i>Hesperolinon adenophyllum</i>	glandular western flax	None	None	-	1B.2
HIGHLAND SPR	<i>Calyptridium quadripetalum</i>	four-petaled pussypaws	None	None	-	4.3
HIGHLAND SPR	<i>Clarkia gracilis</i> ssp. <i>tracyi</i>	Tracy's clarkia	None	None	-	4.2
HIGHLAND SPR	<i>Antirrhinum subcordatum</i>	dimorphic snapdragon	None	None	-	4.3
HIGHLAND SPR	<i>Leptosiphon acicularis</i>	bristly leptosiphon	None	None	-	4.2
HIGHLAND SPR	<i>Horkelia bolanderi</i>	Bolander's horkelia	None	None	-	1B.2
HOPLAND	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
HOPLAND	<i>Taricha rivularis</i>	red-bellied newt	None	None	SSC	-
HOPLAND	<i>Aquila chrysaetos</i>	golden eagle	None	None	FP ; WL	-
HOPLAND	<i>Ardea herodias</i>	great blue heron	None	None	-	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
HOPLAND	<i>Agelaius tricolor</i>	tricolored blackbird	None	Threat	SSC	-
HOPLAND	<i>Ammodramus savannarum</i>	grasshopper sparrow	None	None	SSC	-
HOPLAND	<i>Asio otus</i>	long-eared owl	None	None	SSC	-
HOPLAND	<i>Lavinia symmetricus</i> ssp. 4	Clear Lake - Russian River roach	None	None	SSC	-
HOPLAND	<i>Hysterocarpus traskii</i> pomo	Russian River tule perch	None	None	SSC	-
HOPLAND	<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead - central California coast DPS	Threat	None	-	-
HOPLAND	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU	Threat	None	-	-
HOPLAND	<i>Bombus caliginosus</i>	obscure bumble bee	None	None	-	-
HOPLAND	<i>Erethizon dorsatum</i>	North American porcupine	None	None	-	-
HOPLAND	<i>Antrozous pallidus</i>	pallid bat	None	None	SSC	-
HOPLAND	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	SSC	-
HOPLAND	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
HOPLAND	<i>Bryum chryseum</i>	brassy bryum	None	None	-	4.3
HOPLAND	<i>Entosthodon kochii</i>	Koch's cord moss	None	None	-	1B.3
HOPLAND	<i>Layia septentrionalis</i>	Colusa layia	None	None	-	1B.2
HOPLAND	<i>Tracyina rostrata</i>	beaked tracyina	None	None	-	1B.2
HOPLAND	<i>Streptanthus glandulosus</i> ssp. hoffmanii	Hoffman's bristly jewelflower	None	None	-	1B.3
HOPLAND	<i>Viburnum ellipticum</i>	oval-leaved viburnum	None	None	-	2B.3
HOPLAND	<i>Calystegia collina</i> ssp. oxyphylla	Mt. Saint Helena morning-glory	None	None	-	4.2
HOPLAND	<i>Carex comosa</i>	bristly sedge	None	None	-	2B.1
HOPLAND	<i>Arctostaphylos stanfordiana</i> ssp. raichei	Raiche's manzanita	None	None	-	1B.1
HOPLAND	<i>Iris longipetala</i>	coast iris	None	None	-	4.2
HOPLAND	<i>Epilobium septentrionale</i>	Humboldt County fuchsia	None	None	-	4.3
HOPLAND	<i>Kopsiopsis hookeri</i>	small groundcone	None	None	-	2B.3
HOPLAND	<i>Erythranthe nudata</i>	bare monkeyflower	None	None	-	4.3
HOPLAND	<i>Collomia diversifolia</i>	serpentine collomia	None	None	-	4.3
HOPLAND	<i>Leptosiphon acicularis</i>	bristly leptosiphon	None	None	-	4.2
LAKEPORT	<i>Elanus leucurus</i>	white-tailed kite	None	None	FP	-
LAKEPORT	<i>Haliaeetus leucocephalus</i>	bald eagle	Delisted	End	FP	-
LAKEPORT	<i>Ardea alba</i>	great egret	None	None	-	-
LAKEPORT	<i>Ardea herodias</i>	great blue heron	None	None	-	-
LAKEPORT	<i>Egretta thula</i>	snowy egret	None	None	-	-
LAKEPORT	<i>Nycticorax nycticorax</i>	black-crowned night heron	None	None	-	-
LAKEPORT	<i>Agelaius tricolor</i>	tricolored blackbird	None	Threat	SSC	-
LAKEPORT	<i>Pandion haliaetus</i>	osprey	None	None	WL	-
LAKEPORT	<i>Phalacrocorax auritus</i>	double-crested cormorant	None	None	WL	-
LAKEPORT	<i>Archoplites interruptus</i>	Sacramento perch	None	None	SSC	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
LAKEPORT	<i>Lavinia exilicauda</i> chi	Clear Lake hitch	None	Threat	-	-
LAKEPORT	<i>Lavinia symmetricus</i> ssp. 4	Clear Lake - Russian River roach	None	None	SSC	-
LAKEPORT	<i>Hysterothys traskii</i> lagunae	Clear Lake tule perch	None	None	SSC	-
LAKEPORT	<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee	None	None	-	-
LAKEPORT	<i>Bombus occidentalis</i>	western bumble bee	None	Cand End	-	-
LAKEPORT	<i>Dubiraphia brunnescens</i>	brownish dubiraphian riffle beetle	None	None	-	-
LAKEPORT	<i>Pekania pennanti</i>	fisher - West Coast DPS	None	Threat	SSC	-
LAKEPORT	<i>Taxidea taxus</i>	American badger	None	None	SSC	-
LAKEPORT	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
LAKEPORT	Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	None	None	-	-
LAKEPORT	<i>Layia septentrionalis</i>	Colusa layia	None	None	-	1B.2
LAKEPORT	<i>Tracyina rostrata</i>	beaked tracyina	None	None	-	1B.2
LAKEPORT	<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	None	None	-	1B.2
LAKEPORT	<i>Cryptantha dissita</i>	serpentine cryptantha	None	None	-	1B.2
LAKEPORT	<i>Plagiobothrys lithocaryus</i>	Mayacamas popcornflower	None	None	-	1A
LAKEPORT	<i>Brasenia schreberi</i>	watershield	None	None	-	2B.3
LAKEPORT	<i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	Konocti manzanita	None	None	-	1B.3
LAKEPORT	<i>Astragalus breweri</i>	Brewer's milk-vetch	None	None	-	4.2
LAKEPORT	<i>Fritillaria purdyi</i>	Purdy's fritillary	None	None	-	4.3
LAKEPORT	<i>Hesperolinon adenophyllum</i>	glandular western flax	None	None	-	1B.2
LAKEPORT	<i>Clarkia gracilis</i> ssp. <i>tracyi</i>	Tracy's clarkia	None	None	-	4.2
LAKEPORT	<i>Erythranthe nudata</i>	bare monkeyflower	None	None	-	4.3
LAKEPORT	<i>Antirrhinum virga</i>	twig-like snapdragon	None	None	-	4.3
LAKEPORT	<i>Leptosiphon acicularis</i>	bristly leptosiphon	None	None	-	4.2
LAKEPORT	<i>Leptosiphon latisectus</i>	broad-lobed leptosiphon	None	None	-	4.3
LAKEPORT	<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	None	None	-	4.2
PURDYS GARDENS	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
PURDYS GARDENS	<i>Aquila chrysaetos</i>	golden eagle	None	None	FP ; WL	-
PURDYS GARDENS	<i>Circus hudsonius</i>	northern harrier	None	None	SSC	-
PURDYS GARDENS	<i>Pandion haliaetus</i>	osprey	None	None	WL	-
PURDYS GARDENS	<i>Baeolophus inornatus</i>	oak titmouse	None	None	-	-
PURDYS GARDENS	<i>Ammodramus savannarum</i>	grasshopper sparrow	None	None	SSC	-
PURDYS GARDENS	<i>Hysterothys traskii</i> pomo	Russian River tule perch	None	None	SSC	-
PURDYS GARDENS	<i>Oncorhynchus mykiss</i> irideus pop. 8	steelhead - central California coast DPS	Threat	None	-	-
PURDYS GARDENS	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU	Threat	None	-	-
PURDYS GARDENS	<i>Bombus caliginosus</i>	obscure bumble bee	None	None	-	-
PURDYS GARDENS	<i>Erethizon dorsatum</i>	North American porcupine	None	None	-	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FEDERAL	CALIF	CDFW	CNPS
PURDYS GARDENS	<i>Pekania pennanti</i>	fisher - West Coast DPS	None	Threat	SSC	-
PURDYS GARDENS	<i>Antrozous pallidus</i>	pallid bat	None	None	SSC	-
PURDYS GARDENS	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	SSC	-
PURDYS GARDENS	<i>Myotis lucifugus</i>	little brown bat	None	None	-	-
PURDYS GARDENS	<i>Myotis yumanensis</i>	Yuma myotis	None	None	-	-
PURDYS GARDENS	<i>Emys marmorata</i>	western pond turtle	None	None	SSC	-
PURDYS GARDENS	Northern Interior Cypress Forest	Northern Interior Cypress Forest	None	None	-	-
PURDYS GARDENS	Serpentine Bunchgrass	Serpentine Bunchgrass	None	None	-	-
PURDYS GARDENS	<i>Entosthodon kochii</i>	Koch's cord moss	None	None	-	1B.3
PURDYS GARDENS	<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	California Gairdner's yampah	None	None	-	4.2
PURDYS GARDENS	<i>Layia septentrionalis</i>	Colusa layia	None	None	-	1B.2
PURDYS GARDENS	<i>Tracyina rostrata</i>	beaked tracyina	None	None	-	1B.2
PURDYS GARDENS	<i>Viburnum ellipticum</i>	oval-leaved viburnum	None	None	-	2B.3
PURDYS GARDENS	<i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	Raiche's manzanita	None	None	-	1B.1
PURDYS GARDENS	<i>Monardella viridis</i>	green monardella	None	None	-	4.3
PURDYS GARDENS	<i>Lilium rubescens</i>	redwood lily	None	None	-	4.2
PURDYS GARDENS	<i>Kopsiopsis hookeri</i>	small groundcone	None	None	-	2B.3
PURDYS GARDENS	<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	None	End	-	1B.2
PURDYS GARDENS	<i>Leptosiphon acicularis</i>	bristly leptosiphon	None	None	-	4.2
PURDYS GARDENS	<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	None	None	-	4.2
PURDYS GARDENS	<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	None	None	-	1B.1
PURDYS GARDENS	<i>Horkelia bolanderi</i>	Bolander's horkelia	None	None	-	1B.2
YORKVILLE	<i>Rana boylei</i>	foothill yellow-legged frog	None	Cand Threat	SSC	-
YORKVILLE	<i>Ardea herodias</i>	great blue heron	None	None	-	-
YORKVILLE	<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead - central California coast DPS	Threat	None	-	-
YORKVILLE	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	SSC	-
YORKVILLE	<i>Lasiurus cinereus</i>	hoary bat	None	None	-	-
YORKVILLE	<i>Usnea longissima</i>	Methuselah's beard lichen	None	None	-	4.2
YORKVILLE	<i>Harmonia guggolziorum</i>	Guggolz's harmonia	None	None	-	1B.1
YORKVILLE	<i>Cryptantha dissita</i>	serpentine cryptantha	None	None	-	1B.2
YORKVILLE	<i>Streptanthus glandulosus</i> ssp. <i>hoffmanii</i>	Hoffman's bristly jewelflower	None	None	-	1B.3
YORKVILLE	<i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	Raiche's manzanita	None	None	-	1B.1
YORKVILLE	<i>Astragalus breweri</i>	Brewer's milk-vetch	None	None	-	4.2
YORKVILLE	<i>Lilium rubescens</i>	redwood lily	None	None	-	4.2
YORKVILLE	<i>Leptosiphon rattanii</i>	Rattan's leptosiphon	None	None	-	4.3
YORKVILLE	<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	None	None	-	B.1

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

State and Federal Status:

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

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

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
B052	GREAT EGRET			CD	NATIVE
B116	COOPER'S HAWK				NATIVE
B119	RED-SHOULDERED HAWK				NATIVE
B121	SWAINSON'S HAWK		CT	BL FS	NATIVE
B124	FERRUGINOUS HAWK				NATIVE
B125	ROUGH-LEGGED HAWK				NATIVE
B127	AMERICAN KESTREL				NATIVE
B128	MERLIN				NATIVE
B141	MOUNTAIN QUAIL			HA	NATIVE
B251	BAND-TAILED PIGEON			HA	NATIVE
B255	MOURNING DOVE			HA	NATIVE
B260	GREATER ROADRUNNER				NATIVE
B264	WESTERN SCREECH OWL				NATIVE
B265	GREAT HORNED OWL				NATIVE
B269	BURROWING OWL		SC	BL	NATIVE
B270	SPOTTED OWL	FT	SC	BL FS CD	NATIVE
B272	LONG-EARED OWL		SC		NATIVE
B277	COMMON POORWILL				NATIVE
B287	ANNA'S HUMMINGBIRD				NATIVE
B289	CALLIOPE HUMMINGBIRD				NATIVE
B291	RUFIOUS HUMMINGBIRD				NATIVE
B294	LEWIS' S WOODPECKER				NATIVE
B302	NUTTALL'S WOODPECKER				NATIVE
B317	HAMMOND'S FLYCATCHER				NATIVE
B318	DUSKY FLYCATCHER				NATIVE
B320	PACIFIC-SLOPE FLYCATCHER				NATIVE

ID	SPECIES NAME	STATUS	NATIVE/INTRODUCED
B321	BLACK PHOEBE		NATIVE
B326	ASH-THROATED FLYCATCHER		NATIVE
B337	HORNED LARK		NATIVE
B348	WESTERN SCRUB-JAY		NATIVE
B353	AMERICAN CROW	HA	NATIVE
B360	BUSHTIT		NATIVE
B368	BEWICK'S WREN	SC	NATIVE
B369	HOUSE WREN		NATIVE
B377	BLUE-GRAY GNATCATCHER		NATIVE
B381	MOUNTAIN BLUEBIRD		NATIVE
B386	HERMIT THRUSH		NATIVE
B391	WRENTIT		NATIVE
B393	NORTHERN MOCKINGBIRD		NATIVE
B398	CALIFORNIA THRASHER		
B407	CEDAR WAXWING		
B410	LOGGERHEAD SHRIKE	FE SC	
B417	HUTTON'S VIREO	SC	
B418	WARBLING VIREO		
B425	ORANGE-CROWNED WARBLER		
B426	NASHVILLE WARBLER		
B430	YELLOW WARBLER	SC	
B436	BLACK-THROATED GRAY WARBLER		
B437	TOWNSEND'S WARBLER		
B460	MACGILLIVRAY'S WARBLER		
B463	WILSON'S WARBLER		
B475	BLACK-HEADED GROSBEAK		
B477	LAZULI BUNTING		
B489	CHIPPING SPARROW		
B495	LARK SPARROW		
B497	BELL'S SPARROW	FT SC	
B499	SAVANNAH SPARROW	CE SC	
B501	GRASSHOPPER SPARROW	SC	
B506	LINCOLN'S SPARROW		
B509	GOLDEN-CROWNED SPARROW		

ID	SPECIES NAME	STATUS	NATIVE/INTRODUCED
B510	WHITE-CROWNED SPARROW		
B521	WESTERN MEADOWLARK		
B532	BULLOCK'S ORIOLE		
B538	HOUSE FINCH		
B543	LESSER GOLDFINCH		
B544	LAWRENCE'S GOLDFINCH		
B545	AMERICAN GOLDFINCH		
B699	BARRED OWL		
B702	CHIMNEY SWIFT		
B798	WHITE-THROATED SPARROW		
B799	HARRIS'S SPARROW		
B809	INDIGO BUNTING		
M003	VAGRANT SHREW		SC
M006	ORNATE SHREW	FE	SC
M025	LONG-EARED MYOTIS		BL
M030	SILVER-HAIRED BAT		
M032	BIG BROWN BAT		
M033	WESTERN RED BAT		SC FS
M034	HOARY BAT		
M037	TOWNSEND'S BIG-EARED BAT		SC BL FS
M045	BRUSH RABBIT	FE	CE
M055	YELLOW-PINE CHIPMUNK		
M056	REDWOOD CHIPMUNK		
M057	SHADOW CHIPMUNK		
M059	SONOMA CHIPMUNK		
M075	GOLDEN-MANTLED GROUND SQUIRREL		
M080	NORTHERN FLYING SQUIRREL		SC FS
M105	CALIFORNIA KANGAROO RAT		SC
M113	WESTERN HARVEST MOUSE		
M117	DEER MOUSE		SC
M119	BRUSH MOUSE		
M120	PINYON MOUSE		
M134	CALIFORNIA VOLE	FE	CE SC
M136	LONG-TAILED VOLE		

ID	SPECIES NAME	STATUS	NATIVE/INTRODUCED
M146	COYOTE		
M149	GRAY FOX		
M151	BLACK BEAR		
M181	MULE DEER		

Total Number of Species: 98

Query Parameters

Included Locations

Mendocino Co

Included Location Seasons

Migrant, Summer, Winter, Yearlong

Included Habitats & (Stages)

Annual Grassland, Blue Oak Woodland, Chamise-redshank Chaparral, Montane Hardwood

Habitat Suitability Threshold

Reproduction - Low, Cover - Low, Feeding - Low

Included Habitat Seasons

Migrant, Summer, Winter, Yearlong

Excluded Elements

Algae, Aquatics - Emergent, Aquatics - Submerged, Bank, Barren, Cave, Cliff, Cones, Duff, Fish, Grass/agriculture, Invertebrates - Aquatic, Kelp, Lithic, Log - Large (hollow), Log - Large (rotten), Log - Large (sound), Rock, Sand Dune, Shrub/agriculture, Slash - Large (hollow), Slash - Large (rotten), Slash - Large (sound), Snag - Large (rotten), Snag - Large (sound), Soil - Aerated, Soil - Friable, Soil - Gravelly, Soil - Organic, Soil - Saline, Soil - Sandy, Steep Slope, Talus, Tree/agriculture, Trees - Fir, Trees - Pine, Water/agriculture

Included Species All Species Included

Included Special Statuses Native

APPENDIX C

AQUATIC RESOURCES/DELINEATION REPORT

DELINEATION OF WATERS OF THE U.S.

1.0 Methodology

1.1 Purpose of Delineation: This delineation has been conducted at the request of the local permitting agency in order to determine the extent of possible waters of the U.S. on the project.

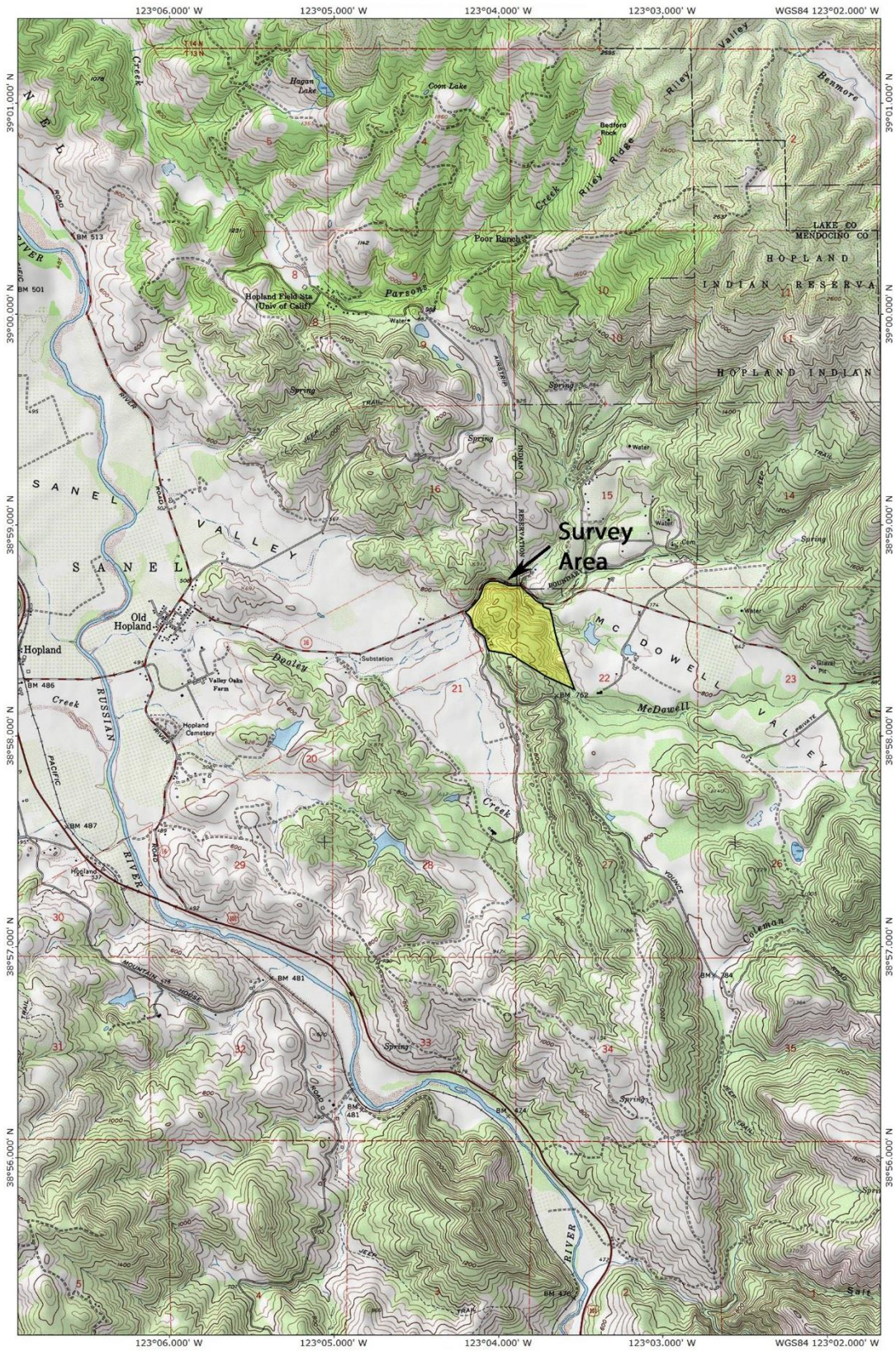
1.2 Delineation Procedure: This delineation has been conducted as prescribed in the *Corps of Engineers Wetlands Delineation Manual*, January 1987, and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, 2008. Plant taxonomy and nomenclature is from the *Jepson Manual, Higher Plants of California*, 2012. Other texts, such as Munz's *A California Flora and Supplement* 1973, and Mason's *Flora of the Marshes of California*, 1957, were used as supplemental texts; however, all nomenclature and wetland indicator status have been checked with the U.S. Army Corps of Engineers. 2016. *National Wetland Plant Lists: Arid West and California*.

The survey included use of Google satellite images, 7.5' USGS quadrangle maps, and LIDAR mapped overlays along with an extensive foot survey.

1.3 Delineation Date: Delineation fieldwork was completed on March 31, 2020.

1.4 Delineation Staff: The delineation was 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 more than 35 years of experience as a biologist in the government and private sectors. He completed his wetland delineation training under Terry Huffman of Huffman & Associates, Inc.

Fieldwork and mapping were also conducted by Leigh Zalusky. Leigh Zalusky has a Bachelor of Science Degree in Engineering from the University of California, Davis. Leigh also received formal delineation training under Terry Huffman of Huffman & Associates, Inc.




 Northwest BioSurvey
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 Kelseyville, CA 96451
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 nwbio98@gmail.com



LOCATION MAP
Figure 1

TN 14 1/2° N
 06/19/20

2.0 Existing Conditions

2.1 Location: The project site is located on Highway 175, east of Hopland in Mendocino County, California (APNs 048-270-22 (ptn.), 048-270-23 & 24; T13N R11W, Hopland, Calif. 7½' Topographic Map). A location map is provided in **Figure 1**.

2.2 Topography and Drainage: The Getaway House property straddles a narrow spur-ridge extending southward from the western base of the Mayacamas Mountains between the Sanel and McDowell Valleys. Elevations on the property range from ~840 feet msl (mean sea level) along the ridgetop to ~640 feet msl along the valley floors. The terrain is relatively steep and is cut by a number of narrow drainages.

Drainage from the eastern side of the property drains to McDowell Creek, which flows north along the eastern base of the ridge and then turns west along the northern edge of the property before entering Sanel Valley; it eventually joins Dooley Creek to continue west across the valley floor to the Russian River. Flows from the western side of the property are collected in a north-flowing channel extending along the base of the slope. This channel joins Dooley Creek at the northwestern edge of the property.

2.3 Soils: The survey area contains a single soil type:

- **Hopland-Woodin complex, 50-75% slopes:**

These well-drained soils occur on hills and mountains. This unit includes about 40% Hopland and similar soils and 30% Woodin and similar soils. Parent material is residuum from sandstone and shale. Surface runoff is high to very high.

3.0 Aquatic Resources Results

3.1 Waters of the U.S: The results of the delineation are shown on the aerial photo base map provided in **Appendix C, Figure W-2**. Waters of the U.S. within the property consist of intermittent and ephemeral streams.

The total area of all delineated aquatic resources is **3.277 acres**. The delineation results are shown in **Table 1**.

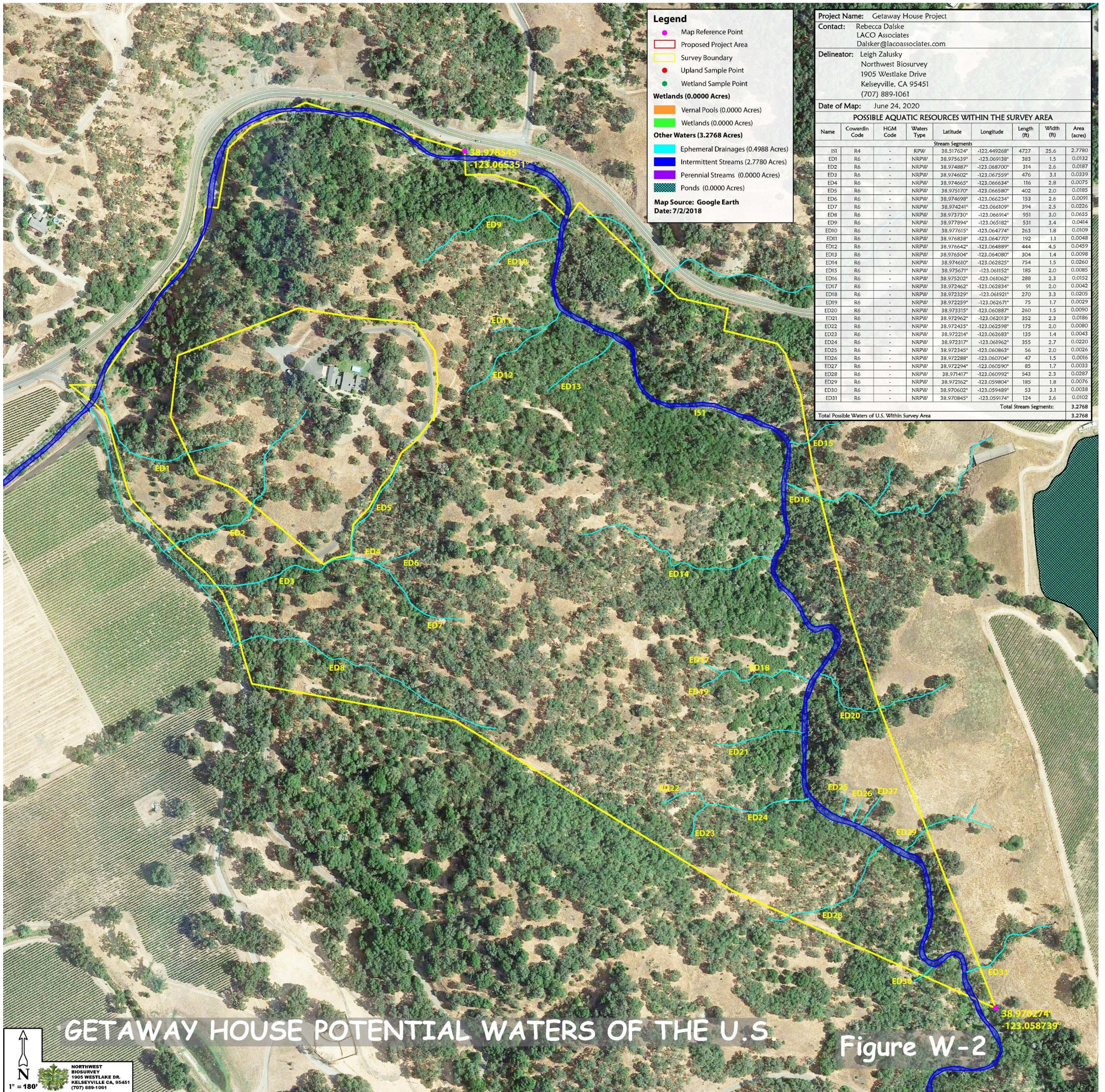
TABLE 1. POSSIBLE AQUATIC RESOURCES WITHIN THE SURVEY AREA

Name	Cowardin Code	HGM Code	Waters Type	Latitude	Longitude	Length (ft)	Width (ft)	Area (acres)
Stream Segments								
IS1	R4	-	RPW	38.517624°	-122.449268°	4727	25.6	2.7780
ED1	R6	-	NRPW	38.975639°	-123.069138°	383	1.5	0.0132
ED2	R6	-	NRPW	38.974887°	-123.068700°	314	2.6	0.0187
ED3	R6	-	NRPW	38.974602°	-123.067559°	476	3.1	0.0339
ED4	R6	-	NRPW	38.974665°	-123.066634°	116	2.8	0.0075
ED5	R6	-	NRPW	38.975170°	-123.066580°	402	2.0	0.0185
ED6	R6	-	NRPW	38.974698°	-123.066234°	153	2.6	0.0091
ED7	R6	-	NRPW	38.974241°	-123.066109°	394	2.5	0.0226
ED8	R6	-	NRPW	38.973730°	-123.066914°	951	3.0	0.0655
ED9	R6	-	NRPW	38.977894°	-123.065182°	531	3.4	0.0414
ED10	R6	-	NRPW	38.977615°	-123.064774°	263	1.8	0.0109
ED11	R6	-	NRPW	38.976838°	-123.064770°	192	1.1	0.0048
ED12	R6	-	NRPW	38.976642°	-123.064889°	444	4.5	0.0459
ED13	R6	-	NRPW	38.976504°	-123.064080°	304	1.4	0.0098
ED14	R6	-	NRPW	38.974610°	-123.062825°	754	1.5	0.0260
ED15	R6	-	NRPW	38.975671°	-123.061152°	185	2.0	0.0085
ED16	R6	-	NRPW	38.975202°	-123.061062°	288	2.3	0.0152
ED17	R6	-	NRPW	38.972462°	-123.062834°	91	2.0	0.0042
ED18	R6	-	NRPW	38.972329°	-123.061921°	270	3.3	0.0205
ED19	R6	-	NRPW	38.972259°	-123.062671°	75	1.7	0.0029
ED20	R6	-	NRPW	38.973315°	-123.060887°	260	1.5	0.0090
ED21	R6	-	NRPW	38.972962°	-123.062013°	352	2.3	0.0186
ED22	R6	-	NRPW	38.972435°	-123.062598°	175	2.0	0.0080
ED23	R6	-	NRPW	38.972214°	-123.062683°	135	1.4	0.0043
ED24	R6	-	NRPW	38.972317°	-123.061962°	355	2.7	0.0220
ED25	R6	-	NRPW	38.972345°	-123.060863°	56	2.0	0.0026
ED26	R6	-	NRPW	38.972288°	-123.060704°	47	1.5	0.0016
ED27	R6	-	NRPW	38.972294°	-123.060590°	85	1.7	0.0033
ED28	R6	-	NRPW	38.971417°	-123.060992°	543	2.3	0.0287
ED29	R6	-	NRPW	38.972162°	-123.059804°	185	1.8	0.0076
ED30	R6	-	NRPW	38.970602°	-123.059489°	53	3.1	0.0038
ED31	R6	-	NRPW	38.970845°	-123.059174°	124	3.6	0.0102
Total Stream Segments:								3.2768
Total Possible Waters of U.S. Within Survey Area								3.2768

4.0 RECOMMENDATIONS

Any work proposed within the possible waters of the U.S. will require permits from the following:

- U.S. Army Corps of Engineers (Nationwide Permit)
- Regional Water Quality Control Board (Water Quality Certification 401 permit)
- California Department of Fish and Wildlife (1602 Stream Alteration Agreement)



Legend

- Map Reference Point
- ▭ Proposed Project Area
- ▭ Survey Boundary
- Upland Sample Point
- Wetland Sample Point

Wetlands (0.0000 Acres)

- ▭ Vernal Pools (0.0000 Acres)
- ▭ Wetlands (0.0000 Acres)

Other Waters (3.2768 Acres)

- ▭ Ephemeral Drainages (0.4988 Acres)
- ▭ Intermittent Streams (2.7780 Acres)
- ▭ Perennial Streams (0.0000 Acres)
- ▭ Ponds (0.0000 Acres)

Map Source: Google Earth
Date: 7/2/2018

Project Name: Getaway House Project
 Contact: Rebecca Dalske
 LACO Associates
 Dalsker@lacoassociates.com

Delineator: Leigh Zalusky
 Northwest Biosurvey
 1905 Westlake Drive
 Kelseyville, CA 95451
 (707) 889-1061

Date of Map: June 24, 2020

POSSIBLE AQUATIC RESOURCES WITHIN THE SURVEY AREA

Name	Cowardin Code	HGM Code	Waters Type	Latitude	Longitude	Length (ft)	Width (ft)	Area (acres)
IS1	R4	-	RPW	38.517624°	-122.449268°	4727	25.6	2.7780
ED1	R6	-	NRPW	38.975639°	-123.069138°	383	1.5	0.0132
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ED9	R6	-	NRPW	38.977894°	-123.065182°	531	3.4	0.0414
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ED20	R6	-	NRPW	38.973315°	-123.060887°	260	1.5	0.0090
ED21	R6	-	NRPW	38.972962°	-123.062013°	352	2.3	0.0186
ED22	R6	-	NRPW	38.972435°	-123.062598°	175	2.0	0.0080
ED23	R6	-	NRPW	38.972214°	-123.062683°	135	1.4	0.0043
ED24	R6	-	NRPW	38.972317°	-123.061962°	355	2.7	0.0220
ED25	R6	-	NRPW	38.972345°	-123.060863°	56	2.0	0.0026
ED26	R6	-	NRPW	38.972288°	-123.060704°	47	1.5	0.0016
ED27	R6	-	NRPW	38.972294°	-123.060590°	85	1.7	0.0033
ED28	R6	-	NRPW	38.971417°	-123.060992°	943	2.3	0.0287
ED29	R6	-	NRPW	38.972162°	-123.059804°	185	1.8	0.0076
ED30	R6	-	NRPW	38.970602°	-123.059489°	53	3.1	0.0038
ED31	R6	-	NRPW	38.970845°	-123.059174°	124	3.6	0.0102
Total Stream Segments:								3.2768
Total Possible Waters of U.S. Within Survey Area								3.2768

GETAWAY HOUSE POTENTIAL WATERS OF THE U.S.

Figure W-2

North Arrow

1" = 180'

NORTHWEST BIOSURVEY
 1905 WESTLAKE DR.
 KELSEYVILLE, CA, 95451
 (707) 889-1061