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November 20, 2024

Ms. Heidi Jamra
Managing Partner
Global Interactive Solutions LLC
8587 Topanga Canyon Blvd.
West Hills, CA 91304
heidimjamra@gmail.com

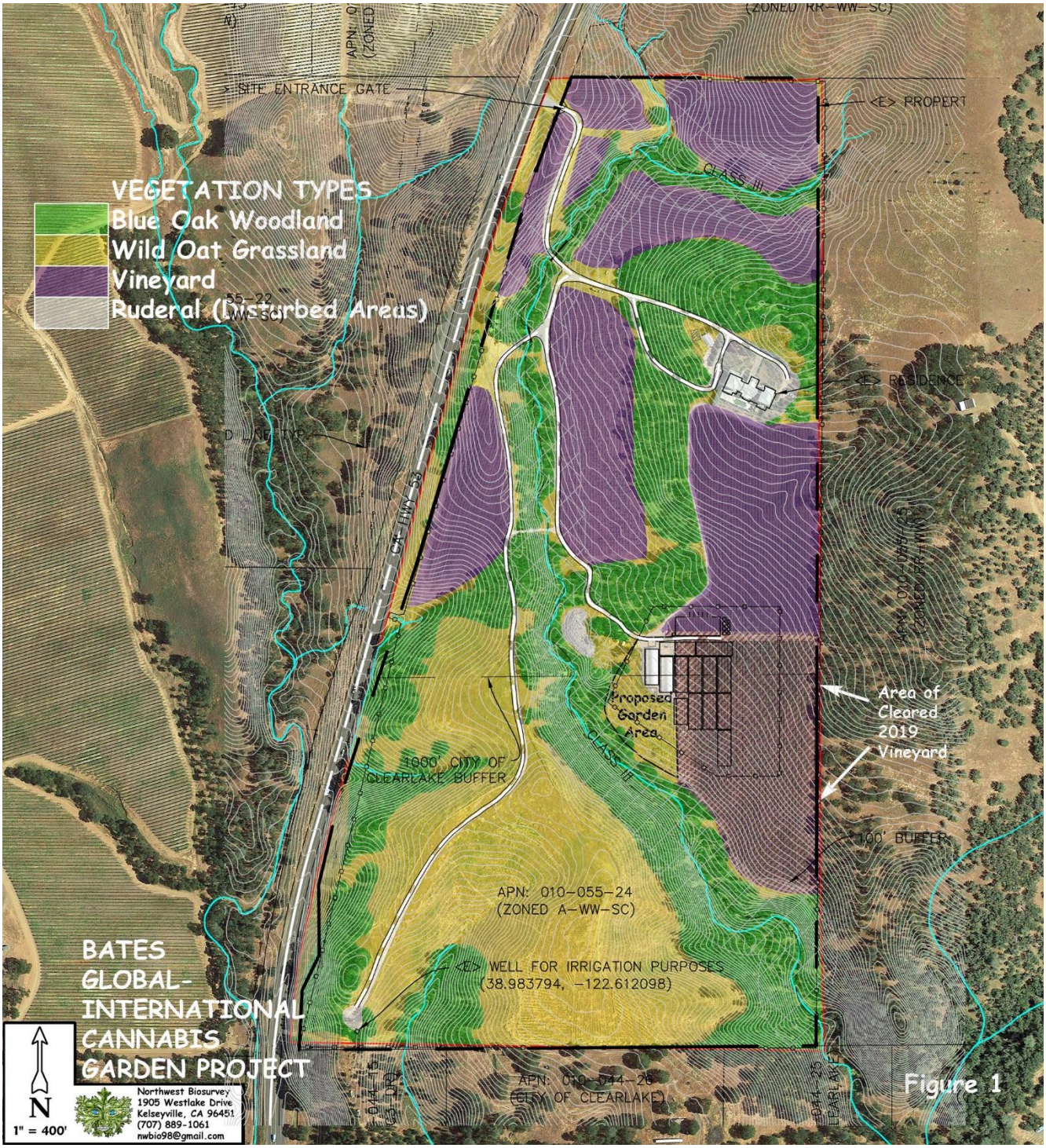
RE: Review and Update of the 2019 Bates (now Global International) Biological Resource Assessment, 1780 Hwy 53, Clearlake (Assessor Parcel Number 010-055-24)

Dear Ms. Jamra:

We have completed our review of the property referenced above as requested by the Lake County Community Development Department. The current owner has proposed a modification to the project that was analyzed in the 2019 biological resource assessment report. The purpose of this review is to determine whether conditions on the property have changed since the time of the 2019 biological resource assessment. Additionally, new pre-survey research has been conducted in order to determine whether any of the biological resources identified in 2019 have subsequently been reclassified to have sensitive regulatory status.

Survey Results: A visit to the site was made on November 19, 2024. During the site visit, current conditions were compared to vegetation and other biological resources mapped and identified in 2019.

All native vegetation mapped in the 2019 report remains intact; no changes to this vegetation (consisting of blue oak woodland and wild oat grassland) have been made. A portion of a vineyard that was present in 2019 has been cleared as shown in **Figure 1**, which also shows the proposed new project area within the former vineyard. Neither the clearing of this vineyard nor the expansion of the cannabis project into it will adversely impact biological resources on the property.


VEGETATION TYPES
Blue Oak Woodland
Wild Oat Grassland
Vineyard
Ruderal (Disturbed Areas)
SITE ENTRANCE GATE
<E> PROPERT
CLASS III
<E> RESIDENCE
Proposed Garden Area
Area of Cleared 2019 Vineyard
1000' CITY OF CLEARLAKE BUFFER
100' BUFFER
APN: 010-055-24
(ZONED A-WW-SC)
<E> WELL FOR IRRIGATION PURPOSES
(38.983794, -122.612098)
APN: 010-044-26
(CITY OF CLEARLAKE)
BATES GLOBAL-INTERNATIONAL CANNABIS GARDEN PROJECT
N
1" = 400'
Northwest Biosurvey
1905 Westlake Drive
Kelseyville, CA 96451
(707) 889-1061
nwbio98@gmail.com
Figure 1

Recommendations: No further biological studies are recommended. It is our opinion that the 2019 Biological Resource Report remains valid. If future development impacts the native vegetation, the mitigation measures proposed in the 2019 assessment report should be implemented.

Please contact us if you have any questions. We would be happy to discuss this review with you or with county staff is necessary.

Sincerely,



Steve Zalusky
Principal Biologist

cc: Mr. Richard Knoll, Richard Knoll Consulting, richardk2255@hotmail.com

BIOLOGICAL RESOURCE ASSESSMENT WITH BOTANICAL SURVEY and DELINEATION OF WATERS OF THE U.S.

for the

BATES PROPERTY
APN 010-055-24
LAKE COUNTY, CALIFORNIA

August 14, 2019

Prepared by
Northwest Biosurvey



BIOLOGICAL RESOURCE ASSESSMENT
WITH BOTANICAL SURVEY
and DELINEATION OF WATERS OF THE U.S.
for the
BATES PROPERTY
APN 010-055-24
LAKE COUNTY, CALIFORNIA

August 14, 2019

Prepared for: Damon and Dottie Bates
mrsdottiebates@gmail.com

Prepared by: Northwest Biosurvey
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Kelseyville, CA 95451
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CONTENTS

Section		Page
1.0	**PROJECT DESCRIPTION**	**1**
	1.1 Proposed Project	1
	1.2 Location	1
2.0	**ASSESSMENT METHODOLOGY**	**3**
	2.1 Botanical Survey Methods	4
	2.2 Delineation Methods	4
	2.3 Survey Dates	4
	2.4 Biological Resource Assessment Staff	4
3.0	**SITE CHARACTERISTICS**	**6**
	3.1 Topography and Drainage	6
	3.2 Soils	6
	3.3 Vegetation Types	6
4.0	**PRE-SURVEY RESEARCH RESULTS**	**9**
	4.1 CNPS Electronic Inventory Analysis	9
	4.2 California Natural Diversity Database	9
	4.3 Wildlife Habitat Analysis Results	15
	4.4 Wildlife Assessment	15
5.0	**FIELD SURVEY RESULTS**	**17**
	5.1 Botanical Field Survey Results	17
6.0	**DELINEATION OF WATERS OF THE U.S.**	**17**
7.0	**SUMMARY AND RECOMMENDATIONS**	**20**
	6.1 Summary	20
	6.2 Recommendations	21
8.0	**BIBLIOGRAPHY**	**23**

FIGURES AND TABLES

Section		Page
Figure 1	Location Map	2
Figure 2	Plant Communities Map	8
Figure 3	Possible Aquatic Resources Map	Appendix C

Table 1	Areas of Vegetation Types	6
Table 2	Selected CNPS Plants	10
Table 3	CNDDB Sensitive Plant Species	12
Table 4	Flora of APN 010-055-24	18

APPENDIX A CNDDB 9-Quad Species List

APPENDIX B Regional CWHR Species List

APPENDIX C Aquatic Resources Report

1.0 PROJECT DESCRIPTION

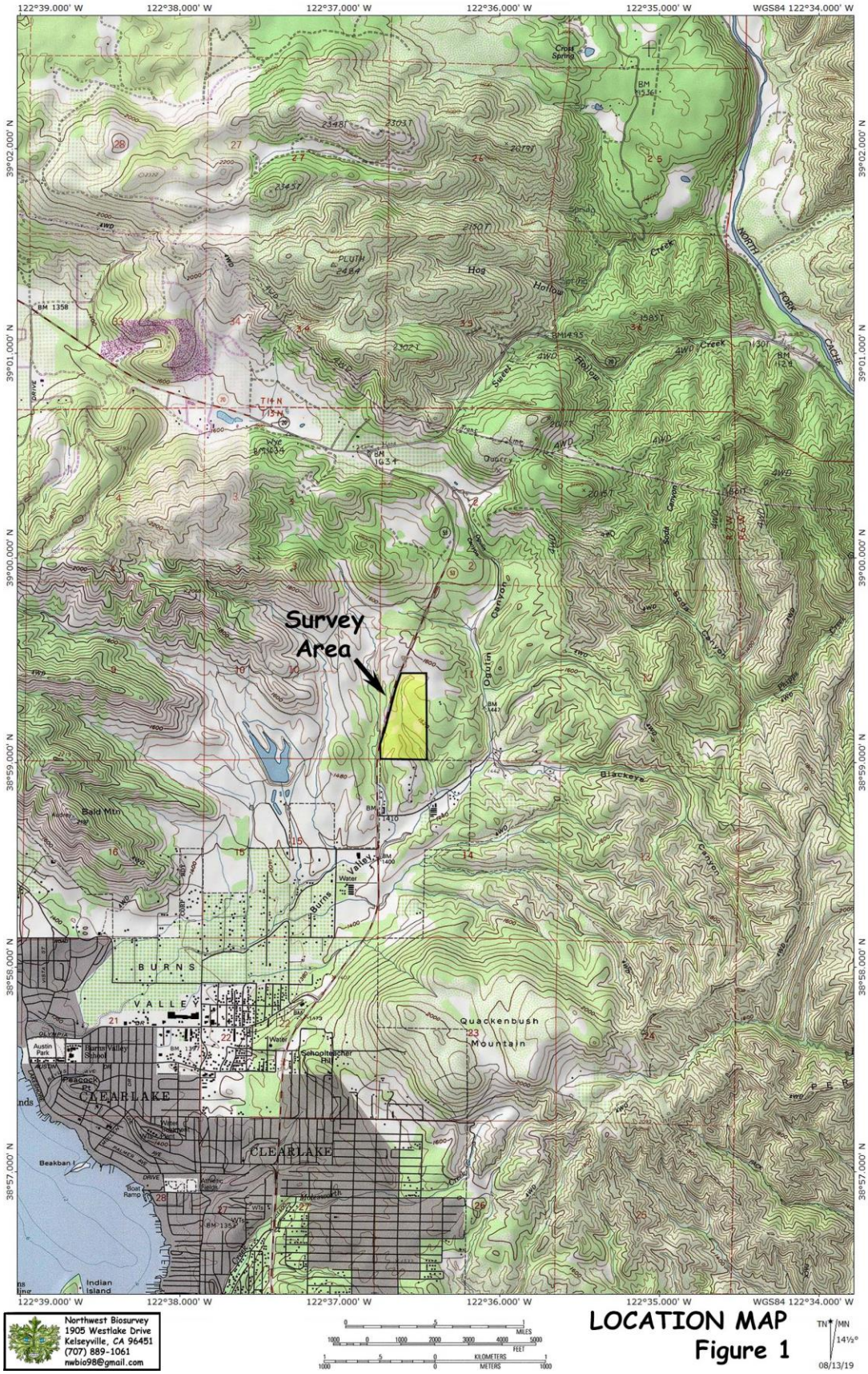
1.1 Proposed Project: This biological resource assessment and survey covers a parcel of approximately 64 acres which is proposed for outdoor cannabis cultivation and other agricultural uses. Vegetation types are mapped for the entire parcel. Much of the property is currently developed with residential and agricultural uses.

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 taxa[1]. 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 (CNDDB) 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 at 1780 State Hwy. 53, Clearlake, California (APN 010-055-24; Sec. 11 T13N R7W, Lower Lake, 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°39.000' W
122°38.000' W
122°37.000' W
122°36.000' W
122°35.000' W
WGS84 122°34.000' W
39°02.000' N
39°01.000' N
39°00.000' N
38°59.000' N
38°58.000' N
38°57.000' N
Survey Area
Hog Hollow
North Fork Cache Creek
Dry Ditch Canyon
Blackeye Canyon
Bald Mtn
Burns Valley
BURNS VALLEY
CLEARLAKE
CLEARLAKE
Quackenbush Mountain
Austin Park
Burns Valley School
Peacock Pl
Schoolteacher Rd
Beakbane
Boat Ramp
Indian Island
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MILES
FEET
KILOMETERS
METERS
LOCATION MAP
Figure 1
TN
MN
14½°
08/13/19

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 (CNDDB)
- 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 (CNDDB)*; RareFind 5, 2019
- California Native Plant Society's (CNPS) *Electronic Inventory of Rare and Endangered Vascular Plants of California* (2019 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 Lower Lake 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"=200' 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 May 30 and August 12, 2019.

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 Computer 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 Bates property occupies an area of low foothills northeast of Burns Valley. It is cut from north to south by an ephemeral tributary to Burns Valley Creek which also has north to south tributaries to the east and west of the property. Burns Valley Creek runs southeast for approximately two miles through the level terrain of Burns Valley to Clear Lake. Elevations of the property range from 1,560 feet msl (mean sea level) in the north to 1,440 feet msl in the southeast corner where the Burns Valley Creek tributary leaves the property.

3.2 Soils: The survey area contains the following soil units, which formed in alluvium:

- **Phipps complex, 5-15% slopes (soil unit 195):**
- **Phipps complex, 15-30% slopes (soil unit 196):**

These map units are on uplifted, dissected hills. These soils formed in alluvium derived from mixed rock sources. The soils are susceptible to slumping and gullying. The Phipps loam is very deep and well-drained. Permeability is slow. Surface runoff is medium to rapid and the hazard of erosion is moderate to severe, depending on slope. The shrink-swell potential is high. Vegetation on this complex is mainly oaks, annual grasses, and brush.

3.3 Vegetation Types: This site 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 below in **Table 1**. They are described below the table and shown in the vegetation map provided in **Figure 2**.

TABLE 1. AREAS OF VEGETATION TYPES

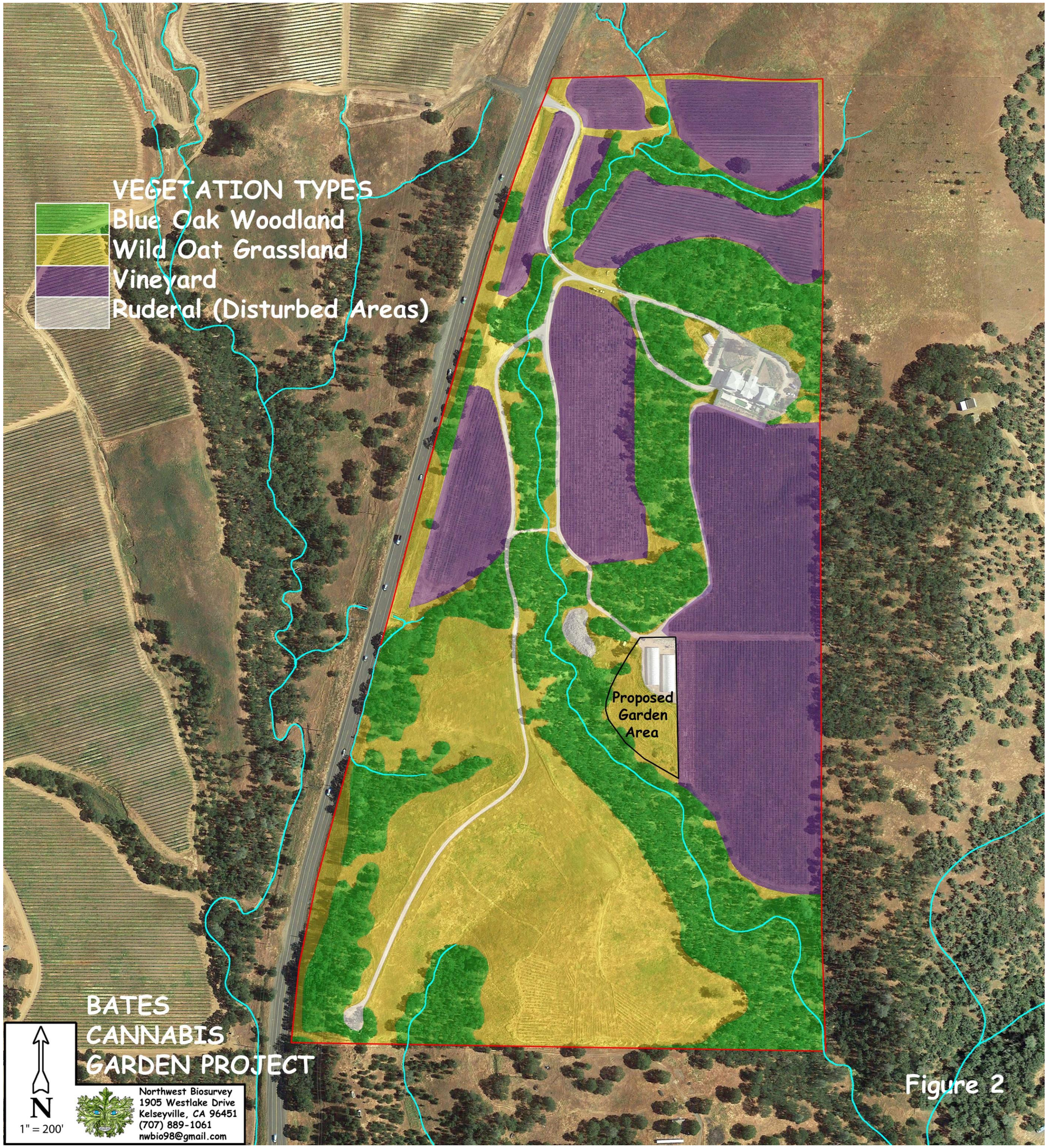
VEGETATION TYPE	ACRES	PERCENT OF TOTAL
Blue oak woodland	20.95	32.73
Wild oat grassland	19.23	30.05
Vineyard	20.78	32.47
Ruderal (roads, structures, etc.)	3.04	4.75
Total	**64.00**	**100.0%**

- **Blue Oak Woodland:** This mature, open woodland covers slopes throughout the property. Blue oak (*Quercus douglasii*) provides a nearly homogenous tree canopy with widely scattered ghost pine (*Pinus sabiniana*). The shrub layer is sparse but includes widely scattered common manzanita (*Arctostaphylos manzanita ssp. manzanita*) and birch-leaf mountain mahogany (*Cercocarpus betuloides var. betuloides*). The ground cover is a continuation of the surrounding wild oat grassland.

- **Wild Oat Grassland:** The grassland contains a heterogeneous mix of mostly introduced grasses and forbs. Slender wild oat (*Avena barbata*) tends to be dominant; however, depending on lateness of the season, medusahead (*Elymus caput-medusae*) and yellow star thistle (*Centaurea solstitialis*) become at least sub-dominant. Other grasses and forbs include Mediterranean barley (*Hordeum marinum ssp. gussoneanum*), nitgrass (*Gastridium phleoides*), soft chess (*Bromus hordeaceus*), red brome (*Bromus madritensis ssp. rubens*), yellowflower tarweed (*Holocarpha virgata ssp. virgata*), black mustard (*Brassica nigra*), and yellow Mariposa lily (*Centaurea solstitialis*).

- **Vineyard:** Existing vineyard occupies approximately one-third of the property.

- **Ruderal:** This term refers to areas disturbed by human activity including roads and structures. The property is occupied by three residences, a parking lot, and roadways.


VEGETATION TYPES
Blue Oak Woodland
Wild Oat Grassland
Vineyard
Ruderal (Disturbed Areas)
Proposed Garden Area
BATES CANNABIS GARDEN PROJECT
N
1" = 200'
Northwest Biosurvey
1905 Westlake Drive
Kelseyville, CA 96451
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nwbio98@gmail.com
Figure 2

4.0 PRE-SURVEY RESEARCH RESULTS

4.1 <u>CNPS Electronic Inventory Analysis</u>: 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.

<u>Note</u>: *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 <u>California Natural Diversity Database</u>: The California Natural Diversity Database (CNDDB) and CDFW RareFind 5 data and maps for the Lower Lake 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:

Bates Project APN 010-055-24

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat/Micro-Habitat
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	1B.2	None	None	Mar-Jun	Coastal bluff scrub, Cismontane woodland, Valley and foothill grassland
Astragalus rattanii var. jepsonianus	Jepson's milk-vetch	Fabaceae	annual herb	1B.2	None	None	Mar-Jun	Chaparral, Cismontane woodland, Valley and foothill grassland; often serpentinite
Delphinium uliginosum	swamp larkspur	Ranunculaceae	perennial herb	4.2	None	None	May-Jun	Chaparral, Valley and foothill grassland; serpentine seeps
Fritillaria pluriflora	adobe-lily	Liliaceae	perennial bulbiferous herb	1B.2	None	None	Feb-Apr	Chaparral, Cismontane woodland, Valley and foothill grassland; often adobe
Harmonia hallii	Hall's harmonia	Asteraceae	annual herb	1B.2	None	None	Apr-Jun	Chaparral; serpentinite
Hesperolinon sharsmithiae	Sharsmith's western flax	Linaceae	annual herb	1B.2	None	None	May-Jul	Chaparral; serpentinite
Lasthenia burkei	Burke's goldfields	Asteraceae	annual herb	1B.1	**CE**	**FE**	Apr-Jun	Meadows and seeps (mesic), Vernal pools
Layia septentrionalis	Colusa layia	Asteraceae	annual herb	1B.2	None	None	Apr-May	Chaparral, Cismontane woodland, Valley and foothill grassland; sandy, serpentinite
Lupinus sericatus	Cobb Mountain lupine	Fabaceae	perennial herb	1B.2	None	None	Mar-Jun	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest
Malacothamnus helleri	Heller's bush-mallow	Malvaceae	perennial deciduous shrub	3.3	None	None	May-Jul	Chaparral (sandstone), Riparian woodland (gravel)

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat/Micro-Habitat
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
Navarretia leucocephala ssp. pauciflora	few-flowered navarretia	Polemoniaceae	annual herb	1B.1	CT	FE	May-Jun	Vernal pools (volcanic ash flow)
Streptanthus hesperidis	green jewelflower	Brassicaceae	annual herb	1B.2	None	None	May-Jul	Chaparral (openings), Cismontane woodland; serpentinite, rocky

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*	*SE*	*= State Endangered.*
ST	*= State. Threatened*	*SD*	*= State Delisted*
SSC	*= CDFW Species of Special Concern*	*FP*	*= CDFW Fully Protected*
WL	*= CDFW Watch List*	*FE*	*= Federal Endangered*
FT	*= Federal Threatened*	*FD*	*= Federal Delisted*

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

Plant Species	Common Name	Habitat Requirements, Fed/State/CNPS* Status	Blooming Season	Habitat Present
Amsinckia lunaris	bent-flowered fiddleneck	Coastal bluff scrub, cismontane woodland, valley & foothill grassland; --/--/1B.2	March-June ann. herb	Habitat not present
Astragalus rattanii var. jepsonianus	Jepson's milk-vetch	Chaparral, cismontane woodland, valley & foothill grassland; often serpentinite; --/--/1B.2	April-June ann. herb	Habitat not present
Delphinium uliginosum	swamp larkspur	Chaparral, valley and foothill grassland /serpentinite seeps; --/--/4.2	May-June per. herb	Habitat not present
Fritillaria pluriflora	adobe-lily	Chaparral, cismontane woodland, valley & foothill grassland; often adobe; --/--/1B.2	Feb.-April per. herb	Habitat not present
Harmonia hallii	Hall's harmonia	Open rocky areas in chaparral/serpentine barrens, hills & ridges; --/--/1B.2	April-June ann. herb	Habitat not present
Hesperolinon sharsmithiae	Sharsmith's western flax	Chaparral, serpentinite; --/--/1B.2	May-July ann. herb	Habitat not present
Lasthenia burkei	Burke's goldfields	Meadows and seeps (mesic), vernal pools; FE/SE/1B.1	April-June ann. herb	Habitat not present
Layia septentrionalis	Colusa layia	Chaparral, cismontane woodland, valley & foothill grassland/sandy, serpent.; --/--/1B.2/G2/S2	April-May, ann. herb	Habitat not present
Leptosiphon acicularis	bristly leptosiphon	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland; --/--/4.2	April-July ann. herb	Habitat present
Lomatium hooveri	Hoover's lomatium	Chaparral, cismontane woodland/serpentinite, occasionally volcanic; --/--/4.3	April-July per. herb	Habitat not present
Malacothamnus helleri	Heller's bush-mallow	Chaparral (sandstone), riparian woodland (gravel); --/--/3.3	May-July decid. shrub	Habitat not present
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Cismontane woodland, lower montane conif. forest, meadows & seeps, valley & foothill grassland, vernal pools/mesic --/--/1B.1	May-July ann. herb	Habitat not present
Navarretia leucocephala ssp. pauciflora	few-flowered navarretia	Volcanic ash flow vernal pools; FE/ST/1B.1	May-June ann. herb	Habitat not present

Plant Species	Common Name	Habitat Requirements, Fed/State/CNPS* Status	Blooming Season	Habitat Present
Potamogeton zosteriformis	eel-grass pondweed	Rooted submerged plant with long, thin leaves, may be 3-4 feet long; occurs in marshes & swamps (freshwater), flowing water; --/--/2B.2	June-July ann. herb (aquatic)	Habitat not present

*See CNPS list for key

Wildlife Species	Common Name	Habitat Requirements, Status	Season Present	Habitat Present
Saldula usingeri	Wilbur Springs shorebug	Springs & creeks, wet substrate of spring outflows (soda springs); G1/S1	year-round	Habitat not 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 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/S2S3	year-round	Habitat not present
Taricha rivularis	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	Habitat 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	June-August	Habitat 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 not present
Aquila chrysaetos	golden eagle	Secluded cliffs with overhanging ledges and large trees near open terrain; CFP/WL/G5/S3	year-round	Habitat not present
Haliaeetus leucocephalus	bald eagle	Large bodies of water with adjacent snags; FD/SE/SFP/G5/S2 (wintering & nesting)		Habitat not present
Ardea herodias	great blue heron	Shallow ponds and estuaries, & salt and fresh emergent wetlands; G5/S4	sometimes migratory	Habitat not present

Wildlife Species	Common Name	Habitat Requirements, Status	Season Present	Habitat 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 not 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; G3/S2S3	migratory; usually hibernate during winter	Possible habitat present
Corynorhinus townsendii	Townsend's big-eared bat	Roosts in open near relatively mesic sites, mainly montane forest habitats; SSC/G3/S2	local migrant	Habitat not present
Antrozous pallidus	pallid bat	Open, dry habitats, forest habitats, in caves, tunnels, buildings, bridges; sensitive to human disturbance; SSC/G5/S3	year-round. local migrant	Possible habitat present

Key:

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, a total of fourteen sensitive wildlife species need to be accounted for within the project area. These consist of the species identified as present within the Lower Lake quadrangle by the CNDDB; white-tailed kite is added based on presence of potential suitable habitat. 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.

- Habitat for the following species is not found on the property. These species include:

  - **Wilbur Springs shorebug** – restricted habitat requirements: springs
  - **Clear Lake hitch** – Clear Lake and its tributaries
  - **Clear Lake-Russian River roach** – Clear Lake and its tributaries
  - **Red-bellied newt** – long-term high-gradient streams
  - **Foothill yellow-legged frog** – long-term streams
  - **Western pond turtle** – ponds
  - **Golden eagle** – require large nesting structures near water
  - **Bald eagle** – require large nesting structures near water
  - **Great blue heron –** require large nesting structures near water
  - **Yuma myotis** – conifer or riparian woodlands or forests
  - **Townsend's big-eared bat** – conifer or riparian woodlands or forests

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.

- The following bat species may occur in within the oak woodlands and travel to off-site water bodies:

  - **Little Brown Bat (Myotis lucifugus):**

  Myotis lucifugus is a relatively small bat, weighing in at less than ½ ounce. Habitats are widely varied and include bogs, forested or herbaceous wetlands, riparian habitats, woodlands, chaparral, grasslands, orchards, and fields in more urban areas. During the

winter, this bat hibernates in caves and manmade structures. Females give birth to one litter of one bat in late spring to early summer. This bat does not have sensitive status but is included in the CNDDB.

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

Optimal habitat for these bats consists of open forest and woodlands with sources of water over which to feed. 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, but they will also roost in buildings, bridges, and hollow trees. Foraging occurs over open country. 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. These bats have a home range of 1 to 3 miles and are known to roost with other bat species. This species is extremely sensitive to human disturbance of roosting sites. Pallid bat is a California Species of Special Concern.

- The following bird species may occur in within the oak woodlands and adjacent grasslands:

  - **White-tailed kite (Elanus leucurus):**

This bird is usually found near agricultural areas and prefers open terrain near woodlands and water. These raptors hunt over open country and prefer large, deciduous trees surrounded by expanses of grassland, meadows, farmland, and/or wetlands for nesting and roosting sites. They feed mostly on small diurnal mammals, but will sometimes eat birds, insects, amphibians, and reptiles. The species was not observed during site visits but has the potential to be present in future years. The California Fully Protected status of these raptors pertains to nesting pairs with an emphasis on protecting nesting habitat. This species is also protected under the Migratory Bird Treaty Act.

5.0 FIELD SURVEY RESULTS

5.1 <u>Botanical Field Survey Results</u>: 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 42 plant taxa on the property, including native and introduced plants.

The relatively small number of species identified is a result of the lack of diversity within the ruderal and agricultural areas, and the limited number of natural plant communities.

No plants with sensitive status were discovered during the in-season floristic-level botanical surveys.

6.0 DELINEATION OF WATERS OF THE U.S.

The discussion of waters of the U.S. and Aquatic Resources in discussed in **Appendix C**, along with a map of possible aquatic resources.

TABLE 4. FLORA FOR APN 010-055-24

Habit	Species	Common Name	Family	Origin
forb	*Allium amplectens*	narrowleaf onion	Alliaceae	N
forb	*Anthriscus caucalis*	bur chervil	Apiaceae	A
forb	*Torilis arvensis*	field hedge parsley	Apiaceae	A
forb	*Centaurea solstitialis*	yellow star thistle	Asteraceae	A
forb	*Cirsium brevistylum*	clustered thistle, Indian thistle	Asteraceae	N
forb	*Holocarpha virgata ssp. virgata*	yellowflower tarweed, sticky tarweed	Asteraceae	N
forb	*Madia sativa*	coast tarweed	Asteraceae	N
forb	*Micropus californicus*	cottontop	Asteraceae	N
forb	*Brassica nigra*	black mustard	Brassicaceae	A
forb	*Petrorhagia dubia*	pink grass, wilding pink	Caryophyllaceae	A
forb	*Trifolium hirtum*	rose clover	Fabaceae	A
forb	*Vicia villosa ssp. villosa*	winter vetch, hairy vetch	Fabaceae	A
forb	*Geranium dissectum*	cut-leaved geranium	Geraniaceae	A
forb	*Geranium molle*	dovefoot geranium	Geraniaceae	A
forb	*Calochortus luteus*	yellow Mariposa lily	Liliaceae	N
forb	*Chlorogalum pomeridianum*	wavyleaf soap plant	Liliaceae	N
forb	*Sidalcea diplosypha*	fringed sidalcea	Malvaceae	N
forb	*Toxicoscordion micranthum*	small flowered star lily	Melanthiaceae	N
forb	*Clarkia purpurea ssp. quadrivulnera*	purple clarkia, winecup clarkia, four-spot	Onagraceae	N
forb	*Plantago erecta*	California plantain	Plantaginaceae	N
forb	*Plantago lanceolata*	English plantain	Plantaginaceae	A

Habit	Species	Common Name	Family	Origin
forb	*Navarretia pubescens*	purple navarretia, downy pincushion plant	Polemoniaceae	N
forb	*Rumex crispus*	curly dock	Polygonaceae	A
forb	*Ranunculus occidentalis*	western buttercup	Ranunculaceae	N
forb	*Brodiaea elegans ssp. elegans*	harvest brodiaea	Themidaceae	N
grass	*Avena barbata*	slender wild oat	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 caput-medusae*	medusahead	Poaceae	A
grass	*Festuca microstachys*	desert fescue, small fescue	Poaceae	N
grass	*Festuca perennis*	perennial ryegrass, Italian rye grass	Poaceae	A
grass	*Gastridium phleoides*	nitgrass	Poaceae	A
grass	*Hordeum marinum ssp. gussoneanum*	Mediterranean barley	Poaceae	A
grass	*Poa bulbosa*	bulbous bluegrass	Poaceae	A
shrub	*Arctostaphylos manzanita ssp. manzanita*	common manzanita	Ericaceae	N
shrub	*Cytisus scoparius*	Scotch broom	Fabaceae	A
shrub	*Cercocarpus betuloides var. betuloides*	birch-leaf mountain mahogany	Rosaceae	N
tree	*Quercus douglasii*	blue oak	Fagaceae	N
tree	*Pinus sabiniana*	ghost pine	Pinaceae	N
vine	*Symphoricarpos mollis*	tripvine, creeping snowberry	Caprifoliaceae	N
vine	*Clematis lasiantha*	chaparral clematis, pipestem	Ranunculaceae	N

A=Alien, N=Native

7.0 SUMMARY AND RECOMMENDATIONS

7.1 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 *On-line Inventory of Rare and Endangered Vascular Plants of California,* and the California Department of Fish and Wildlife's *Wildlife Habitat Relationships System*
- Vegetation mapping
- Delineation of waters of the U.S.

Sensitive Plants: A total of 42 native and introduced plant taxa were identified on the property during the in-season, floristic-level botanical surveys. No sensitive taxa were identified. 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.

The relatively small number of species identified is a result of the lack of diversity within the ruderal and agricultural areas, and the limited number of natural plant communities.

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

- Birds: White-tailed kite
- Mammals: Pallid bat

Possible Waters of the U.S.: Several short-term ephemeral drainages were mapped on the parcel. This is discussed in **Appendix C, Aquatic Resources Report**.

7.2 Recommendations:

A. Habitat Fragmentation

Potential Impacts:

The proposed cannabis garden is limited to a one-acre site adjacent to existing vineyard and containing a greenhouse complex. The existing cover type is wild oat grassland and ruderal (structures). The garden has been designed to avoid the blue oak woodland to the west. The potential for this project to result in additional habitat fragmentation is minimal.

B. Sensitive Plants and Wildlife

Potential Impacts:

Plants: No plants with sensitive regulatory status were found on this parcel during the in-season, floristic-level botanical survey conducted for this project. Due to the current agricultural and ruderal (developed) nature of this property, the potential for wildlife with sensitive regulatory status to occur there is very low. Consequently, the proposed project does not have a significant potential to adversely impact plants or wildlife with sensitive regulatory status.

Wildlife: Impacts to woodlands have a potential to result in an incidental take of the following wildlife species with sensitive regulatory status:

Pallid bat

- White-tailed kite

Proposed Mitigation:

Measure 1: In order to avoid impacts passerines and raptors protected under the Migratory Bird Treaty Act and California Fish and Wildlife 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.

***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.

C. Waters of the U.S.

Potential Impact:

The survey area contains approximately 0.086-acre of ephemeral stream channels. Placement of fill within any possible waters of the U.S. mapped in Appendix C, Figure W-2 would be regulated under the Clean Water Act.

Proposed Mitigation for Impacts to Waters of the U.S:

Placement of fill within Waters of the U.S. may require a Nationwide Permit by the Corps of Engineers (possibly a non-reporting permit under the Nationwide Permit Program), along with a 401 Water Quality Certification from the Regional Water Quality Control Board, and 1604 Stream Alteration Agreement from the California Department of Fish and Wildlife. The County of Lake may require stream setbacks.

D. Erosion Control

Potential Impacts:

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

Proposed Mitigation:

All work should incorporate extensive erosion control measures consistent with Lake 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

CNDDB SENSITIVE PLANT AND WILDLIFE SPECIES

WITHIN THE

SURROUNDING CALIF. 7½' QUADS.

Surrounding 9-Quad List: Lower Lake Quadrangle

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	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	*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	-
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

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	CNPS
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
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	*Archoplites interruptus*	Sacramento 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
Jericho Valley	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
Jericho Valley	*Aquila chrysaetos*	golden eagle	None	None	FP ; WL	-
Jericho Valley	*Falco mexicanus*	prairie falcon	None	None	WL	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	CNPS
Jericho Valley	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
Jericho Valley	*Antrozous pallidus*	pallid bat	None	None	SSC	-
Jericho Valley	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
Jericho Valley	*Myotis yumanensis*	Yuma myotis	None	None	-	-
Jericho Valley	*Emys marmorata*	western pond turtle	None	None	SSC	-
Jericho Valley	*Northern Interior Cypress Forest*	Northern Interior Cypress Forest	None	None	-	-
Jericho Valley	*Serpentine Bunchgrass*	Serpentine Bunchgrass	None	None	-	-
Jericho Valley	*Grimmia torenii*	Toren's grimmia	None	None	-	1B.3
Jericho Valley	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
Jericho Valley	*Antirrhinum virga*	twig-like snapdragon	None	None	-	4.3
Jericho Valley	*Arabis modesta*	modest rockcress	None	None	-	4.3
Jericho Valley	*Arabis oregana*	Oregon rockcress	None	None	-	4.3
Jericho Valley	*Asclepias solanoana*	serpentine milkweed	None	None	-	4.2
Jericho Valley	*Astragalus breweri*	Brewer's milk-vetch	None	None	-	4.2
Jericho Valley	*Astragalus clevelandii*	Cleveland's milk-vetch	None	None	-	4.3
Jericho Valley	*Astragalus rattanii var. jepsonianus*	Jepson's milk-vetch	None	None	-	1B.2
Jericho Valley	*Balsamorhiza macrolepis*	big-scale balsamroot	None	None	-	1B.2
Jericho Valley	*Calyptridium quadripetalum*	four-petaled pussypaws	None	None	-	4.3
Jericho Valley	*Castilleja rubicundula var. rubicundula*	pink creamsacs	None	None	-	1B.2
Jericho Valley	*Clarkia gracilis ssp. tracyi*	Tracy's clarkia	None	None	-	4.2
Jericho Valley	*Collomia diversifolia*	serpentine collomia	None	None	-	4.3
Jericho Valley	*Cordylanthus tenuis ssp. brunneus*	serpentine bird's-beak	None	None	-	4.3
Jericho Valley	*Delphinium uliginosum*	swamp larkspur	None	None	-	4.2
Jericho Valley	*Equisetum palustre*	marsh horsetail	None	None	-	3
Jericho Valley	*Eriogonum nervulosum*	Snow Mountain buckwheat	None	None	-	1B.2
Jericho Valley	*Eriogonum tripodum*	tripod buckwheat	None	None	-	4.2
Jericho Valley	*Erythranthe nudata*	bare monkeyflower	None	None	-	4.3
Jericho Valley	*Erythronium helenae*	St. Helena fawn lily	None	None	-	4.2
Jericho Valley	*Fritillaria pluriflora*	adobe-lily	None	None	-	1B.2
Jericho Valley	*Fritillaria purdyi*	Purdy's fritillary	None	None	-	4.3
Jericho Valley	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
Jericho Valley	*Helianthus exilis*	serpentine sunflower	None	None	-	4.2
Jericho Valley	*Hesperolinon bicarpellatum*	two-carpellate western flax	None	None	-	1B.2
Jericho Valley	*Hesperolinon drymarioides*	drymaria-like western flax	None	None	-	1B.2
Jericho Valley	*Hesperolinon sharsmithiae*	Sharsmith's western flax	None	None	-	1B.2
Jericho Valley	*Juglans hindsii*	Northern California black walnut	None	None	-	1B.1
Jericho Valley	*Leptosiphon latisectus*	broad-lobed leptosiphon	None	None	-	4.3
Jericho Valley	*Lomatium hooveri*	Hoover's lomatium	None	None	-	4.3
Jericho Valley	*Malacothamnus helleri*	Heller's bush-mallow	None	None	-	3.3
Jericho Valley	*Navarretia jepsonii*	Jepson's navarretia	None	None	-	4.3
Jericho Valley	*Orobanche valida ssp. howellii*	Howell's broomrape	None	None	-	4.3
Jericho Valley	*Piperia leptopetala*	narrow-petaled rein orchid	None	None	-	4.3
Jericho Valley	*Sidalcea keckii*	Keck's checkerbloom	End	None	-	1B.1
Jericho Valley	*Streptanthus brachiatus ssp. hoffmanii*	Freed's jewelflower	None	None	-	1B.2
Jericho Valley	*Streptanthus hesperidis*	green jewelflower	None	None	-	1B.2
Jericho Valley	*Streptanthus morrisonii ssp. kruckebergii*	Kruckeberg's jewelflower	None	None	-	1B.2

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	CNPS
Jericho Valley	*Toxicoscordion fontanum*	marsh zigadenus	None	None	-	4.2
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	*Ardea herodias*	great blue heron	None	None	-	-
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 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
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	*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

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	CNPS
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
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
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	*Bombus occidentalis*	western bumble bee	None	None	-	-
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	-	-
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 Strm*	Central Valley Drainage Rainbow Trout/Cyprinid Strm	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

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	CNPS
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	*Cryptantha dissita*	serpentine cryptantha	None	None	-	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
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
Wilbur Springs	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	CNPS
Wilbur Springs	*Accipiter cooperii*	Cooper's hawk	None	None	WL	-
Wilbur Springs	*Aquila chrysaetos*	golden eagle	None	None	FP ; WL	-
Wilbur Springs	*Athene cunicularia*	burrowing owl	None	None	SSC	-
Wilbur Springs	*Falco mexicanus*	prairie falcon	None	None	WL	-
Wilbur Springs	*Ochthebius recticulus*	Wilbur Springs minute moss beetle	None	None	-	-
Wilbur Springs	*Paracoenia calida*	Wilbur Springs shore fly	None	None	-	-
Wilbur Springs	*Saldula usingeri*	Wilbur Springs shorebug	None	None	-	-
Wilbur Springs	*Antrozous pallidus*	pallid bat	None	None	SSC	-
Wilbur Springs	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
Wilbur Springs	*Emys marmorata*	western pond turtle	None	None	SSC	-
Wilbur Springs	*Wildflower Field*	Wildflower Field	None	None	-	-
Wilbur Springs	*Plagiobryoides vinosula*	wine-colored tufa moss	None	None	-	4.2
Wilbur Springs	*Allium fimbriatum var. purdyi*	Purdy's onion	None	None	-	4.3
Wilbur Springs	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
Wilbur Springs	*Asclepias solanoana*	serpentine milkweed	None	None	-	4.2
Wilbur Springs	*Astragalus breweri*	Brewer's milk-vetch	None	None	-	4.2
Wilbur Springs	*Astragalus clevelandii*	Cleveland's milk-vetch	None	None	-	4.3
Wilbur Springs	*Astragalus rattanii var. jepsonianus*	Jepson's milk-vetch	None	None	-	1B.2
Wilbur Springs	*Astragalus rattanii var. rattanii*	Rattan's milk-vetch	None	None	-	4.3
Wilbur Springs	*Balsamorhiza macrolepis*	big-scale balsamroot	None	None	-	1B.2
Wilbur Springs	*Brodiaea rosea*	Indian Valley brodiaea	None	End	-	3.1
Wilbur Springs	*Calochortus uniflorus*	pink star-tulip	None	None	-	4.2
Wilbur Springs	*Calyptridium quadripetalum*	four-petaled pussypaws	None	None	-	4.3
Wilbur Springs	*Calystegia collina ssp. oxyphylla*	Mt. Saint Helena morning-glory	None	None	-	4.2
Wilbur Springs	*Calystegia collina ssp. tridactylosa*	three-fingered morning-glory	None	None	-	1B.2
Wilbur Springs	*Castilleja rubicundula var. rubicundula*	pink creamsacs	None	None	-	1B.2
Wilbur Springs	*Centromadia parryi ssp. parryi*	pappose tarplant	None	None	-	1B.2
Wilbur Springs	*Centromadia parryi ssp. rudis*	Parry's rough tarplant	None	None	-	4.2
Wilbur Springs	*Clarkia gracilis ssp. tracyi*	Tracy's clarkia	None	None	-	4.2
Wilbur Springs	*Collomia diversifolia*	serpentine collomia	None	None	-	4.3
Wilbur Springs	*Cryptantha excavata*	deep-scarred cryptantha	None	None	-	1B.1
Wilbur Springs	*Delphinium uliginosum*	swamp larkspur	None	None	-	4.2
Wilbur Springs	*Eriastrum tracyi*	Tracy's eriastrum	None	Rare	-	3.2
Wilbur Springs	*Erigeron greenei*	Greene's narrow-leaved daisy	None	None	-	1B.2
Wilbur Springs	*Erythranthe nudata*	bare monkeyflower	None	None	-	4.3
Wilbur Springs	*Extriplex joaquinana*	San Joaquin spearscale	None	None	-	1B.2
Wilbur Springs	*Fritillaria pluriflora*	adobe-lily	None	None	-	1B.2
Wilbur Springs	*Fritillaria purdyi*	Purdy's fritillary	None	None	-	4.3
Wilbur Springs	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
Wilbur Springs	*Helianthus exilis*	serpentine sunflower	None	None	-	4.2
Wilbur Springs	*Hesperolinon bicarpellatum*	two-carpellate western flax	None	None	-	1B.2
Wilbur Springs	*Hesperolinon drymarioides*	drymaria-like western flax	None	None	-	1B.2
Wilbur Springs	*Horkelia bolanderi*	Bolander's horkelia	None	None	-	1B.2
Wilbur Springs	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
Wilbur Springs	*Leptosiphon latisectus*	broad-lobed leptosiphon	None	None	-	4.3
Wilbur Springs	*Lomatium hooveri*	Hoover's lomatium	None	None	-	4.3

QUAD NAME	SCIENTIFIC NAME	COMMON NAME	FED.	CAL.	CDFG	CNPS
Wilbur Springs	*Lomatium repostum*	Napa lomatium	None	None	-	4.3
Wilbur Springs	*Lupinus milo-bakeri*	Milo Baker's lupine	None	Threat	-	1B.1
Wilbur Springs	*Lupinus sericatus*	Cobb Mountain lupine	None	None	-	1B.2
Wilbur Springs	*Malacothamnus helleri*	Heller's bush-mallow	None	None	-	3.3
Wilbur Springs	*Navarretia jepsonii*	Jepson's navarretia	None	None	-	4.3
Wilbur Springs	*Navarretia linearifolia ssp. pinnatisecta*	pinnate-leaved navarretia	None	None	-	4.3
Wilbur Springs	*Navarretia nigelliformis ssp. radians*	shining navarretia	None	None	-	1B.2
Wilbur Springs	*Orobanche valida ssp. howellii*	Howell's broomrape	None	None	-	4.3
Wilbur Springs	*Puccinellia simplex*	California alkali grass	None	None	-	1B.2
Wilbur Springs	*Senecio clevelandii var. clevelandii*	Cleveland's ragwort	None	None	-	4.3
Wilbur Springs	*Thelypodium brachycarpum*	short-podded thelypodium	None	None	-	4.2
Wilson Valley	*Rana boylii*	foothill yellow-legged frog	None	Cand Threat	SSC	-
Wilson Valley	*Aquila chrysaetos*	golden eagle	None	None	FP ; WL	-
Wilson Valley	*Haliaeetus leucocephalus*	bald eagle	Delisted	End	FP	-
Wilson Valley	*Antrozous pallidus*	pallid bat	None	None	SSC	-
Wilson Valley	*Corynorhinus townsendii*	Townsend's big-eared bat	None	None	SSC	-
Wilson Valley	*Margaritifera falcata*	western pearlshell	None	None	-	-
Wilson Valley	*Emys marmorata*	western pond turtle	None	None	SSC	-
Wilson Valley	*Amsinckia lunaris*	bent-flowered fiddleneck	None	None	-	1B.2
Wilson Valley	*Antirrhinum virga*	twig-like snapdragon	None	None	-	4.3
Wilson Valley	*Astragalus clevelandii*	Cleveland's milk-vetch	None	None	-	4.3
Wilson Valley	*Astragalus rattanii var. jepsonianus*	Jepson's milk-vetch	None	None	-	1B.2
Wilson Valley	*Castilleja rubicundula var. rubicundula*	pink creamsacs	None	None	-	1B.2
Wilson Valley	*Centromadia parryi ssp. parryi*	pappose tarplant	None	None	-	1B.2
Wilson Valley	*Collomia diversifolia*	serpentine collomia	None	None	-	4.3
Wilson Valley	*Delphinium uliginosum*	swamp larkspur	None	None	-	4.2
Wilson Valley	*Eriogonum nervulosum*	Snow Mountain buckwheat	None	None	-	1B.2
Wilson Valley	*Erythranthe nudata*	bare monkeyflower	None	None	-	4.3
Wilson Valley	*Fritillaria pluriflora*	adobe-lily	None	None	-	1B.2
Wilson Valley	*Harmonia hallii*	Hall's harmonia	None	None	-	1B.2
Wilson Valley	*Hesperolinon drymarioides*	drymaria-like western flax	None	None	-	1B.2
Wilson Valley	*Layia septentrionalis*	Colusa layia	None	None	-	1B.2
Wilson Valley	*Lomatium hooveri*	Hoover's lomatium	None	None	-	4.3
Wilson Valley	*Navarretia jepsonii*	Jepson's navarretia	None	None	-	4.3
Wilson Valley	*Navarretia nigelliformis ssp. nigelliformis*	adobe navarretia	None	None	-	4.2
Wilson Valley	*Senecio clevelandii var. clevelandii*	Cleveland's ragwort	None	None	-	4.3
Wilson Valley	*Streptanthus brachiatus ssp. hoffmanii*	Freed's jewelflower	None	None	-	1B.2

Key for 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
B110	OSPREY	CD	NATIVE
M059	SONOMA CHIPMUNK		NATIVE
M075	GOLDEN-MANTLED GROUND SQUIRREL		NATIVE
M080	NORTHERN FLYING SQUIRREL	SC FS	NATIVE
M120	PINYON MOUSE		NATIVE
M151	BLACK BEAR	HA	NATIVE
R078	AQUATIC GARTERSNAKE		NATIVE

Total Number of Species: 7

Query Parameters

Included Locations Lake Co

Included Location Seasons Migrant, Summer, Winter, Yearlong

Included Habitats & (Stages) Annual Grassland, Blue Oak Woodland, Vineyard

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

Included Habitat Seasons Migrant, Summer, Winter, Yearlong

Excluded Elements
Acorns, Aquatics - Emergent, Aquatics - Submerged, Bank, Barren, Berries, Birds - Large, Birds - Medium, Birds - Small, Brush Pile, Campground, Cave, Cliff, Cones, Dump, Eggs, Flowers, Forbs, Fruits, Fungi, Graminoids, Insects - Flying, Insects - Terrestrial, Invertebrates, Jetty, Kelp, Lithic, Log - Large (hollow), Log - Large (rotten), Log - Large (sound), Log - Medium (hollow), Log - Medium (rotten), Log - Medium (sound), Mammals - Large, Mammals - Medium, Mammals - Small, Mine, Nectar, Nest Box, Nest Island, Nest Platform, Nuts, Pack Stations, Reptiles, Riparian Inclusion, Rock, Roots, Salt Ponds, Sand Dune, Sap, Seeds, Shrub/agriculture, Shrub/water, Shrubs, Slash - Large (hollow), Slash - Large (rotten), Slash - Large (sound), Slash - Small, Soil - Friable, Soil - Gravelly, Soil - Organic, Soil - Saline, Soil - Sandy, Steep Slope, Stump (rotten), Stump (sound), Talus, Transmission Lines, Tree Leaves, Trees - Fir, Trees - Pine, Water - Created Body, Water/agriculture, Wharf

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.

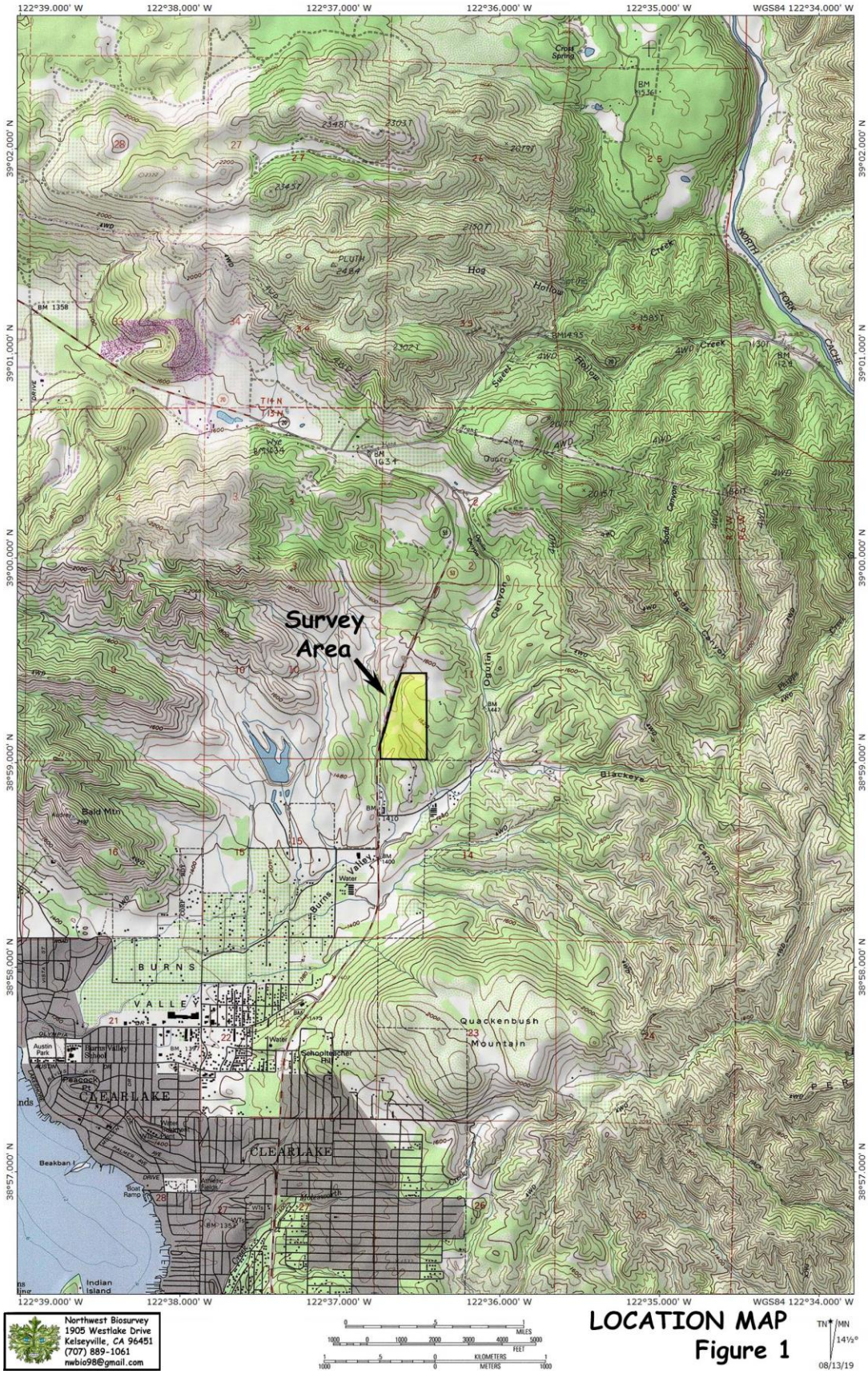
1.3 Delineation Date: Delineation fieldwork was completed on May 30, 2019.

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

2.0 Existing Conditions

2.1 Location: The project site is located at 1780 State Hwy. 53, Clearlake, California (APN 010-055-24; Sec. 11 T13N R7W, Lower Lake, Calif. 7½' Topographic Map). A location map is provided in **Figure 1**.


122°39.000' W
122°38.000' W
122°37.000' W
122°36.000' W
122°35.000' W
WGS84 122°34.000' W
39°02.000' N
39°01.000' N
39°00.000' N
38°59.000' N
38°58.000' N
38°57.000' N
Survey Area
Hog Hollow
North Fork Cache Creek
Dry Creek
Blackeye
Bald Mtn
BURNS VALLEY
CLEARLAKE
Quackenbush Mountain
Indian Island
Northwest Biosurvey
1905 Westlake Drive
Kelseyville, CA 96451
(707) 889-1061
nwbio98@gmail.com
LOCATION MAP
Figure 1
08/13/19

2.1 Site Topography and Drainage: The Bates property occupies an area of low foothills northeast of Burns Valley. It is cut from north to south by an ephemeral tributary to Burns Valley Creek which also has north to south tributaries to the east and west of the property. Burns Valley Creek runs southeast for approximately two miles through the level terrain of Burns Valley to Clear Lake. Elevations of the property range from 1,560 feet msl (mean sea level) in the north to 1,440 feet msl in the southeast corner where the Burns Valley Creek tributary leaves the property.

2.2 Soils: The survey area contains the following soil units, which formed in alluvium:

- **Phipps complex, 5-15% slopes (soil unit 195):**
- **Phipps complex, 15-30% slopes (soil unit 196):**

These map units are on uplifted, dissected hills. These soils formed in alluvium derived from mixed rock sources. The soils are susceptible to slumping and gullying. The Phipps loam is very deep and well-drained. Permeability is slow. Surface runoff is medium to rapid and the hazard of erosion is moderate to severe, depending on slope. The shrink-swell potential is high. Vegetation on this complex is mainly oaks, annual grasses, and brush.

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 ephemeral drainages. No potential wetland resources were found.

The total area of all delineated aquatic resources is **0.086 acre**. 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)
ED1	R6	NA	NRPW	38.987622°	-122.610279°	3360	4.0	0.0193
ED2	R6	NA	NRPW	38.990018°	-122.608595°	545	2.7	0.0338
ED3	R6	NA	NRPW	38.986642°	-122.611624°	113	4.5	0.0117
ED4	R6	NA	NRPW	38.986721°	-122.611460°	46	6.3	0.0067
ED5	R6	NA	NRPW	38.985603°	-122.611778°	206	1.5	0.0071
ED6	R6	NA	NRPW	38.983933°	-122.611346°	310	1.0	0.0071
Total Stream Segments								**0.0857**
Total Possible Waters of U.S. Within Survey Area								**0.0857**

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)

BATES CANNABIS GARDEN PROJECT POSSIBLE WATERS OF THE U.S.

Project Name: Bates Garden Project

Contact: Damon and Dottie Bates
mrsdottiebates@gmail.com
damonbates1427@gmail.com

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

Date of Map: August 13, 2019

POSSIBLE AQUATIC RESOURCES WITHIN THE SURVEY AREA

Name	Cowardin Code	HGM Code	Waters Type	Latitude	Longitude	Length (ft)	Width (ft)	Area (acres)
ED1	R6	NA	NRPW	38.987622°	-122.610279°	3360	4.0	0.0193
ED2	R6	NA	NRPW	38.990018°	-122.608595°	545	2.7	0.0338
ED3	R6	NA	NRPW	38.986642°	-122.611624°	113	4.5	0.0117
ED4	R6	NA	NRPW	38.986721°	-122.611460°	46	6.3	0.0067
ED5	R6	NA	NRPW	38.985603°	-122.611778°	206	1.5	0.0071
ED6	R6	NA	NRPW	38.983933°	-122.611346°	310	1.0	0.0071
							Total Stream Segments	0.0857
Total Possible Waters of U.S. Within Survey Area								0.0857

Legend

- Map Reference Point
- Proposed Project Blocks
- Survey Boundary
- Upland Sample Point
- Wetland Sample Point
- Culvert

Wetlands (0.0000 Acres)

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

Other Waters (0.0857 Acres)

- Ephemeral Drainages (0.0857Acres)
- Intermittent Streams (0.0000 Acres)
- Perennial Streams (0.0000 Acres)
- Ponds (0.0000 Acres)
- Non -Indicative Aerial Signatures

Map Source: Google Earth
Date: 8/15/2018

200'

ED1
ED2
ED3
ED4
ED5
ED6

Proposed Garden Area

N
1" = 200'

Northwest Biosurvey
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Kelseyville, CA 96451
(707) 889-1061
nwbio98@gmail.com

Figure W-2