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Napa County Planning, Building  
& Environmental Services

**KJELDSSEN BIOLOGICAL CONSULTING**  
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February 9, 2017

**To:** Napa County Planning, Building & Environmental Services  
1195 Third Street, Suite 210  
Napa, CA 94559

**Re:** **Site Specific Biological Survey**  
Potential Impacts of Access Road Improvements  
Grading and Widening Within Creek Setback Zone

**Project:** **Lede Driveway Improvements**  
**Conservation Regulation Exemption**  
6360, 6380, and 6390 Silverado Trail  
APN 032-070-027, 028, 029 & 030  
Napa, CA 94559

## INTRODUCTION

Napa County Planning, Building & Environmental Services, Planning Division Staff has requested a site specific analysis of potential impacts of the project on an adjacent unnamed ephemeral drainage, tributary of the Napa River.

The project proposes widening an existing paved driveway. An unnamed ephemeral drainage is present along the north side of a portion of the existing driveway that is proposed for widening.

## LOCATION

The property is located at 6390 Silverado Trail, north of the city of Napa. The property is within the Yountville USGS Quadrangle. The existing paved driveway extends upslope from the floor of the Napa Valley on the east side of Silverado Trail.

## METHODS

An introduction and overview of the project was provided by George H. Monteverdi, Ph.D., Monteverdi Consulting, LLC. The engineering design plans prepared by Summit Engineering Inc. provided schematics for the proposed road improvement and widening.

Our fieldwork and study of the project area was conducted on February 26, 2016 between the hours of 11:30 to 13:30. The project site along the section adjacent to the unnamed ephemeral drainage was walked with two personnel. Field notes were recorded noting site conditions and proposed road

alignment. All species of plants present along the road alignment were recorded in field notes and are included as an attachment to this report.

### **Plants**

Field surveys were conducted identifying and recording all species on the site and along the property lines. The open nature of the site, historic use of the area and relative small size of the proposed project footprint facilitated our field studies.

Habitat is a key characteristic for consideration of special-status species in the region. Many special-status species are rare in nature because of their specific and often very narrow habitat or environmental requirements. A site evaluation based on habitat or environmental conditions is therefore a reliable method for including or excluding the possibility of special-status species in an area.

### **Animals**

Animals were identified in the field by their sight, sign, or call. Our field techniques consisted of surveying the area with binoculars and the perimeter of the study area. Existing site conditions were used to identify habitat, which could potentially support special-status species. Aerial photos were reviewed to look at the habitat surrounding the site.

Photographs were taken to document conditions using a Nikon digital camera.

## **SCOPING**

The scoping for the project considered our fieldwork, location and type of habitat, and or vegetation types present on the property or associated with potential special-status species known for the Quadrangle, surrounding Quadrangles, the County or the region. Our scoping also considered records in the most recent version of the Department of Fish and Wildlife California Natural Diversity Data Base (DFW CNDDDB Rare Find) and the California Native Plant Society (CNPS) Electronic Inventory of Rare or Endangered Plants. “Target” special-status species are those listed by the State, the Federal Government or the California Native Plant Society or considered threatened in the region. Our scoping is also a function of our familiarity with the local flora and fauna as well as previous projects on other properties in the area.

Section 15380 of the California Environmental Quality Act [CEQA (September, 1983)] has a discussion regarding non-listed (State) taxa. This section states that a plant (or animal) must be treated as Rare or Endangered even if it is not officially listed as such. If a person (or organization) provides information showing that a taxa meets the State’s definitions and criteria, then the taxa should be treated as such.

Tables II and III present target species from CDFW CNDDDB Rare Find species and U.S. Fish and Wildlife Service listed species known for the Quadrangle and surrounding Quadrangles.

### **Special-status Species**

It is a universal term used in the scientific community for species that are considered sufficiently rare that they require special consideration and/or protection and should be, or have been, listed as rare, threatened or endangered by the Federal and/or State governments.

“Take” is defined in the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Federal regulation 50 CFR 17.3 further defines the term "harm" in the “take” definition to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. Activities otherwise prohibited under ESA Section 9 and subject to the civil and criminal enforcement provisions under ESA Section 11 may be authorized under ESA Section 7 for actions by federal agencies and under ESA Section 10 for non-federal entities.

### **Sensitive Communities**

CDFW CNDDDB identifies environmentally sensitive plant communities that are rare or threatened in nature. Sensitive habitat is defined as any area which meets one of the following criteria: (1) habitats containing or supporting “rare and endangered” species as defined by the State Fish and Wildlife Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes.

### **Critical Habitat**

Critical habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery.

## **FINDINGS**

### **Special Status-Species**

A map from the CDFW CNDDDB Rare Find shows known special-status species in the proximity of the project (Plate II). These taxa as well as the taxa listed in Appendix A were considered and reviewed as part of our scoping for the proposed project. The CDFW CNDDDB map of known special-status species for the quadrangle shows an occurrence for Sonoma beardtongue and Greene’s narrow-leaved daisy close to the property. We found no evidence for the presence or habitat for these species associated with the project site.

The taxa shown on Plate II as well as those listed in Appendix A, Special-status Species known for the Quadrangle and Surrounding Quadrangles were considered and reviewed as part of our scoping for the proposed project. Reference sites were reviewed as part of our scoping for some of the species.

Tables I and II below provides a list of species that are known to occur (CDFW CNDDDB Rare Find search and U.S Fish and Wildlife Service). The table includes an analysis of habitat on project site for presence or absence.

**Table I.** Analysis of special-status target plants for the area. The taxa included in the table are selected based on the habitat present and the CDFW CNDDDB records for the area of the project (see also Appendix B and Plate II).

Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence
<i>Agrostis hendersonii</i> Henderson's Bent Grass	Vernal Pools	No	May- July	No	Lack of mesic habitat.
<i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan Onion	Cismontane woodland, Valley & Foothill Grassland/Clay often Serpentine	No	May- June	No	Absence of requisite edaphic conditions.
<i>Astragalus claranus</i> Clara Hunt's Milk-vetch	Chaparral, Cismontane Woodland, Valley & Foothill Grassland	No	March- May	No	Absence of requisite micro- habitat and historic grazing.
<i>Astragalus tener</i> var. <i>tener</i> Alkali Milk-vetch	Valley and Foothill Grassland, Vernal Pools /Alkaline	No	March -June	No	Absence of requisite mesic habitat or substrate on project site precludes presence.
<i>Castilleja ambigua</i> var. <i>meadii</i> Mead's Owls-clover	Vernally wet meadows with volcanic substrate	No	April- June	No	Lack of habitat.
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> Big-scale Balsamroot	Chaparral, Cismontane Woodland, Valley and Foothill Grassland	No	March- June	No	Historic use of site precludes presence.
<i>Blennosperma bakeri</i> Sonoma Sunshine	Valley and Foothill Grassland, Vernal Pools	No	March- May	No	Absence of requisite mesic habitat.
<i>Brodiaea leptandra</i> Narrow-anthered California Brodiaea	Cismontane Woodland	No	May- June	No	Absence of typical habitat and historic agricultural use of project site.
<i>Ceanothus purpureus</i> Holly-leaved Ceanothus	Chaparral	No	Feb. April	No	Absence of typical habitat and vegetation associates.
<i>Downingia pusilla</i> Dwarf Downingia	Wetlands	No	March May	No	Requisite aquatic habitat absent on the site or in the immediate vicinity.

Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence
<i>Erigeron greenii</i> Green's Narrow-leaved Daisy	Chaparral, (Serpentine)	No	May- Sept.	No	Absence of edaphic conditions required for presence.
<i>Eryngium jepsonii</i> Jepson's Coyote Thistle	Moist Clay Soils	No	April- Aug.	No	Absence of mesic conditions required for presence.
<i>Extriplex joaquiniana</i> (= <i>Atriplex</i> ) San Joaquin Sparscale	Valley and Foothill Grassland, Alkali	No	April- Oct.	No	Absence of requisite edaphic habitat on the site or in the immediate vicinity precludes presence.
<i>Hesperolinon sharsmithiae</i> Sharsmith's Western Flax	Serpentine endemic	No	May- July	No	Requisite edaphic habitat absent on the site or in the immediate vicinity.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> Congested Headed Tarplant	Coastal Grassland	No	April Oct.	No	Absence of requisite habitat.
<i>Hesperolinon breweri</i> Brewer's Western Flax	Cismontane Woodland, Valley and Foothill Grassland, Serpentine	No	May- July	No	Absence of requisite edaphic habitat on the site or in the immediate vicinity precludes presence.
<i>Horkelia tenuiloba</i> Thin-lobed (=Santa Rosa) Horkelia	Broadleaved Upland Forest, Chaparral, Valley and Foothill Grassland, mesic (wet) openings, sandy soils.	No	May- July	No	Absence of typical habitat and vegetation associates. Present on adjacent parcels.
<i>Lasthenia conjugens</i> Contra Costa Goldfields	Wet Meadows, Vernal Pools	No	May- June		Lack of suitable mesic habitat.
<i>Layia septentrionalis</i> Colusa Layia	Cismontane Woodland, Valley & Foothill Grassland, Chaparral Serpentine.	No	April- May	No	Requisite edaphic habitat absent on the site or in the immediate vicinity.
<i>Leptosiphon jepsonii</i> Jepson's Leptosiphon	Open or partially shaded grassy slopes	No	April- May	No	Requisite habitat absent on the site or in the immediate vicinity.

Scientific Name Common Name	Species Habitat Association or Plant Community	Habitat present	Bloom Time	Obs. on or Near Site	Analysis of habitat on project site for presence or absence
<i>Limnanthes vinculans</i> Sebastopol Meadowfoam	Meadows & Seeps, Valley & Foothill Grassland, Vernal Pools	No	April- May	No	Requisite mesic habitat absent on the site or in the immediate vicinity.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's Navarretia	Meadows and Seeps Cismontane Woodland, Valley and Foothill Grassland, Vernal Pools	No	May- July	No	Absence of typical habitat and vegetation associates.
<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i> Few-flowered Navarretia	Vernal Pools	No	May- June	No	Absence of typical habitat and vegetation associates.
<i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma Beardtongue	Cismontane Woodland	No	April- Aug.	No	Absence of typical habitat and vegetation associates.
<i>Sidalcea keckii</i> Keck's Checkerbloom	Grassy Slopes	No	April May	No	Lack of habitat
<i>Streptanthus hesperidis</i> Green Jewel-flower Mt. Diablo Jewel- flower	Chaparral, Valley and Foothill Grassland/ Rocky	No	April- July	No	Lack of edaphic habitat.
<i>Trichostema ruygtii</i> Napa Bluecurls Vinegar Weed	Grassland	Yes	June- Aug.	No.	Historic use of the site precludes presence.
<i>Trifolium amoenum</i> Two-fork Clover	Coastal Bluff Scrub, Valley and Foothill Grassland (Sometimes Serpentine)	No	April- June	No	Historical use of the site precludes presence.
<i>Trifolium hydrophilum</i> Saline Clover	Marshes and Swamps Grassland	No	April- June	No	Absence of mesic habitat required for presence.

Napa County Environmental Sensitivity maps note that the property is located within an area listed as sensitive for the Sonoma Beardtongue (*Penstemon newberryi* var. *sonomensis*). This plant is listed by CNPS Inventory of Rare and Endangered Plants as a 1B.3 (rare, threatened, or endangered in CA and elsewhere). This species is associated with chaparral habitat which is not present on the project site.

**Table II.** Analysis of special-status target animals for the area. The taxa included in the table are selected based on the habitat present and the CDFW CNDDDB records for the area of the project (see also Appendix B and Plate II).

Scientific Name Common Name	Habitat	Potential for Project Site	Obs. on or Near Project Site	Analysis of Habitat on project site for presence or absence
<i>Antrozous pallidus</i> Pallid Bat	Roosts in buildings & overhangs	May fly over	No	Lack of suitable roosting habitat on project site.
<i>Aquila chrysaetos</i> Golden Eagle	Nests near water	No	No	Lack of nesting habitat on or adjacent to the project site.
<i>Ardea alba</i> Great Egret	Feeds in open areas. Nests in colonies.	No May fly over	No	Lack of nesting habitat on or adjacent to the project site.
<i>Ardea herodias</i> Great Blue Heron	Feeds in open areas, Nests in colonies	No	No	Lack of suitable habitat for nesting.
<i>Branchinecta conservatio</i> Conservancy Fairy Shrimp	Vernal Pools	No	No	Drainage adjacent to project site does not contain habitat.
<i>Buteo swainsoni</i> Swainson's Hawk	Open areas with riparian influence	No	No	Lack of nesting habitat on or adjacent to the project site.
<i>Corynorhinus townsendii</i> Townsend's Big-eared Bat	Caves, also in Buildings	May fly over	No	No roosting habitat on the project site.
<i>Elanus leucurus</i> White-tailed Kite	Nests in tall trees near water	No	No	Species was not observed.
<i>Emys marmorata</i> Western Pond Turtle	Perennial fresh & brackish water Adequate open water & basking sites.	No	No	Property does not contain habitat to support species.
<i>Haliaeetus leucocephalus</i> Bald Eagle	Nests near open water.	No	No	Lack of habitat.
<i>Hypomesus transpacificus</i> Delta Smelt	San Joaquine Sacramento Delta	No	No	Not known for the region Lack of habitat.
<i>Oncorhynchus mykiss irideus</i> Steelhead-central California Coast	Aquatic	No	No	Drainage adjacent to project site does not contain habitat.

Scientific Name Common Name	Habitat	Potential for Project Site	Obs. on or Near Project Site	Analysis of Habitat on project site for presence or absence
<i>Phalacrocorax auritus</i> Double-crested Cormorant	Feeds in open water	No	No	Lack of habitat.
<i>Myotis thysanodes</i> Fringed Myotis	Montane Forests or Montane Meadows.	No	No	Lack of habitat
<i>Rana boylei</i> Foothill Yellow-legged Frog	Streams with pools	No	No	Drainage adjacent to project site does not contain habitat.
<i>Rana draytonii</i> California Red-legged Frog	Creeks, Rivers, Permanent flowing water.	No	No	Drainage adjacent to project site does not contain habitat.
<i>Syncaris pacifica</i> California Freshwater Shrimp	Creeks and Estuaries below 300 ft.	No	No	Drainage adjacent to project site does not contain habitat.
<i>Strix occidentalis caurina</i> Northern Spotted Owl	Old Growth Forests	No	No	Lack of nesting and foraging habitat.

The historic agricultural use, absence of vernal pools, lack of wetlands and host plants reasonably precludes the presence of special-status species within the proposed project area. Based on existing habitat, it is unlikely that project would have a substantial impact or result in any take of special-status species listed by CDFW and USFWS.

#### **Unnamed Ephemeral Drainage**

The driveway section in question is approximately 500-ft upslope from Silverado Trail. The section extends for approximately 800-ft on the south side of an unnamed ephemeral drainage of the Napa River. The unnamed ephemeral drainage has a large bolder rocklined thalweg with riparian tree and shrub cover. The thalweg has steep “v” shape and vegetated sides. At the time of our study the unnamed ephemeral drainage had flowing water in sections. The unnamed ephemeral drainage is separated from the driveway by a deer fence. Riparian vegetation is limited to the channel.

The unnamed ephemeral drainage is not shown on the USGS Quadrangle Map as a Blue Line Creek. The unnamed ephemeral drainage is a tributary to the Napa River. The riparian tree cover consisted of Buckeye, Blue Oak, Live Oak and Bay trees. The unnamed ephemeral drainage is illustrated in Figures 4 and 5.





**Figure 1.** Lower section of road extending upslope from Silverado Trail. The view is toward Silverado Trail which is in view in the background.



**Figure 2.** View upslope. Widening will occur along the left side of the photograph.





**Figure 3.** Road section adjacent to the unnamed ephemeral drainage. Widening will occur along the left side and on the upslope side.



**Figure 4.** View of the vegetation and banks of the thalweg of the unnamed ephemeral drainage.





**Figure 5.** View of section that will be widened approximately two feet along the ruderal verge above the unnamed ephemeral drainage. No vegetation will be removed.



**Figure 6.** View of the curve near the top of the grade where the road alignment will extend upslope.





**Figure 7.** The unnamed ephemeral drainage vegetated corridor is on the right side of the photograph.



**Figure 8.** Section near the top of the road which will be widened along the upslope side of the present alignment.

## SUMMARY

- We find that it is unlikely, following Best Management Practices, that the project will have a substantial adverse effect, either directly or through habitat modifications, on any plant or animal species listed by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- The plans for widening of road in the section under study show approximately a 2 ft extension along the unnamed ephemeral drainage side of the existing pavement;
- The verge along this section consists of ruderal vegetation (Grasses and Herbs). The project will not remove any trees or shrubs. Widening of the road will not significantly impact any natural habitat;
- Widening will generally occur within or along disturbed ground.
- There is no indication that construction and widening the road adjacent to the unnamed ephemeral drainage would result in any impacts to the unnamed ephemeral drainage provided BMPs are employed during the construction;
- The primary concern is preventing any silt or sediment from entering the unnamed ephemeral drainage. BMPs will mitigate for any movement of soil during construction. Upon completion the plans specify seeding with an erosion control mix of any bare soil;
- It is our finding based on site conditions that widening of the road with implementation of Erosion Control Measures and Best Management Practices will not impact the unnamed ephemeral drainage.
- Attached is a list of vegetation observed along or adjacent to the driveway. We found no evidence based on habitat and site conditions that would indicate any potential for presence of special-status species.

Should you have any questions, please do not hesitate to contact us at: telephone (707) 544-3091, Email [kjeldsen@sonic.net](mailto:kjeldsen@sonic.net), or by fax (707) 575-8030.

## **ATTACHMENTS**

**Plate I.** Site and Location Map

**Plate II.** CDFW CNDDDB Rare Find Map

**Plate III.** Aerial Photo of Survey Area

## **Plants and Animals Observed in the Vicinity of the Project Site**

### **APPENDIX A. CDFW CNDDDB Rare Find 5 State and Federal Listed Species for the Quadrangle and Surrounding Quadrangles**

**U.S. Fish & Wildlife Service IPaC Trust Resources Federal Endangered and Threatened Species that Occur in or may be Affected by the Project**

## **Names of and Qualifications of Field Investigators**

**Daniel T. Kjeldsen, B. S., Natural Resource Management**, California Polytechnic State University, San Luis Obispo, California. He spent 1994 to 1996 in the Peace Corps managing natural resources in Honduras, Central America. His work for the Peace Corps in Central America focused on watershed inventory, mapping and the development and implementation of a protection plan. He has over fifteen years of experience in conducting Biological Assessments, CDFW Habitat Assessments, ACOE wetland delineations, wetland rehabilitation, and development of and implementation of mitigation projects and mitigation monitoring. He has received 3.2 continuing education units MCLE 27 hours in Determining Federal Wetlands Jurisdiction from the University of California Berkeley Extension. A full resume is available upon request.

**Chris K. Kjeldsen, Ph.D., Botany**, Oregon State University, Corvallis, Oregon. He has over thirty-five years of professional experience in the study of California flora. He was a member of the Sonoma County Planning Commission and Board of Zoning (1972 to 1976). He has over thirty years of experience in managing and conducting environmental projects involving impact assessment and preparation of compliance documents, Biological Assessments, CDFW Habitat Assessments, CDFW SB 34 Mitigation projects, ACOE Mitigation projects and State Parks and Recreation Biological Resource Studies. Experience includes conducting special-status species surveys, jurisdictional wetland delineations, general biological surveys, 404 and 1600 permitting, and consulting on various projects. He taught Plant Taxonomy at Oregon State University (three years) and numerous botanical science and aquatic botany courses (thirty-five years) at Sonoma State University including sections on wetlands and wetland delineation techniques. He has supervised numerous graduate theses, NSF, DOE and local agency grants and served as a university administrator. A full resume is available upon request. He has a valid CDFW collecting permit.



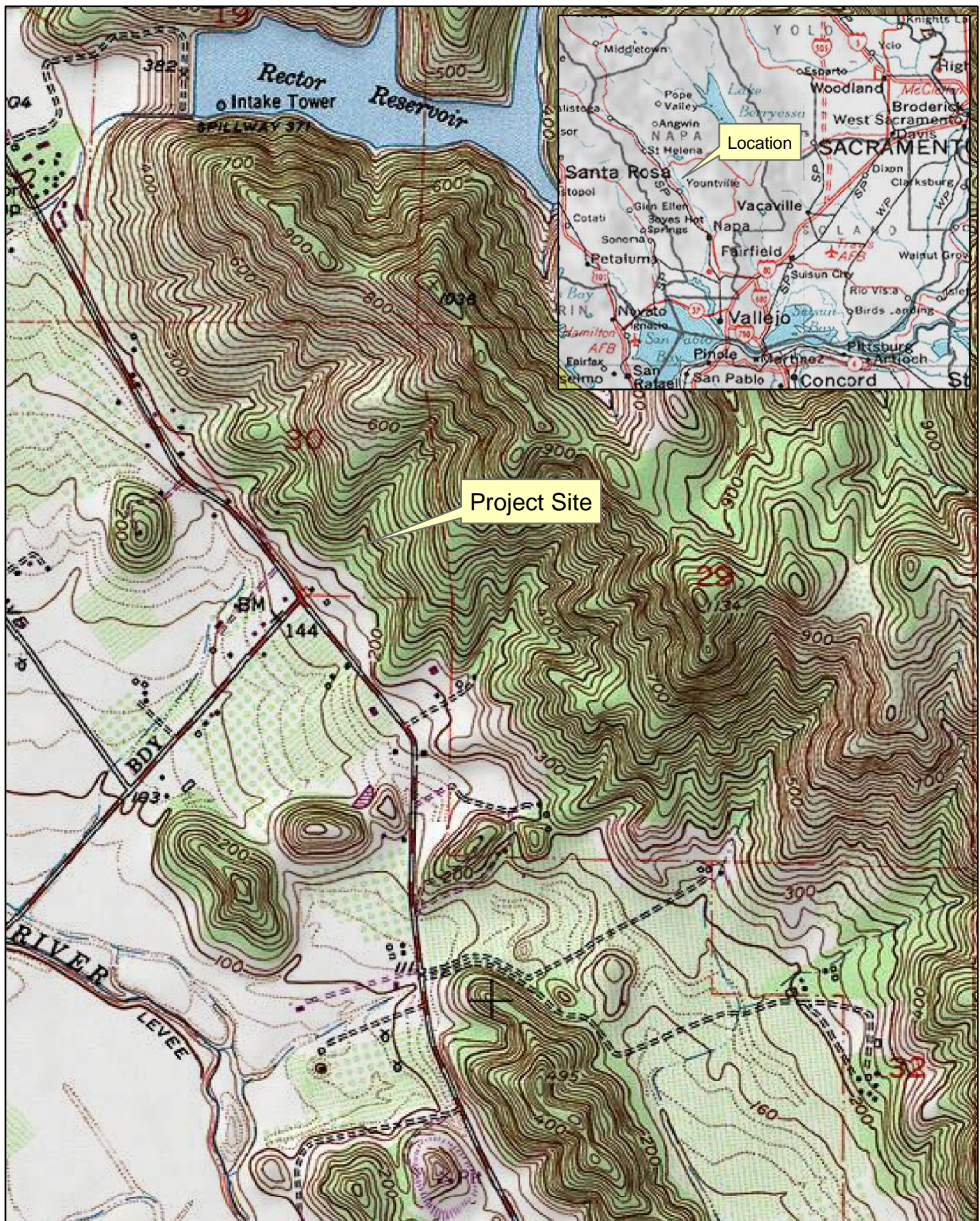


Plate I. Location and Site Map

(Yountville USGS Quadrangle)





(Data Date January 2017)





**Plate III. Aerial Photo / Survey Area**

## Plants and Animals Observed in the Vicinity of the Project Site

The nomenclature for the list of plants found on the project study areas and the immediate vicinity follows: Brodo, Irwin M., Sylvia Duran Sharnoff and Stephen Sharnoff, 2001, for the lichens; S. Norris and Shevrock, 2004, for the mosses; B.G., D.H. Goldman, D.J.Keil, R.Patterson, T.J.Rosati, and D.H.Wilkins, editors, 2012, for the vascular plants.

**Habitat type** indicates the general occurrence of the taxon on the project site or in nature.

**Abundance** refers to the relative number of individuals on the project site or in the region.

### MAJOR PLANT GROUP

#### FAMILY

<u>Genus</u>	<u>Habitat Type</u>	<u>Abundance</u>
<u>Common Name</u>		

NCN = No Common Name, \* = Non-native, @= Voucher Specimen

### MOSSES

#### MINACEAE

<i>Grimmia</i> Ssp. NCN	On exposed Rocks	Common
<i>Homalothecium nuttallii</i> (Wilson) Jaeger NCN	Epiphytic on Trees Near Coast-Inland	Common
<i>Orthotrichum lyellii</i> Hook & Tayl. NCN	Woodlands, Upper Canopy	Common
<i>Pseudobraunia californica</i> (Lesq.) Broth. NCN	On Exposed Rocks	Common
<i>Scleropodium touretii</i> (Brid.) L Koch. NCN	Woodlands	Common

### LICHENS

#### FOLIOSE

<i>Flavoparmelia caperata</i> (L.) Hale Common Green Shield	On Oaks	Common
<i>Flavopunctilia flaventor</i> (Stirt.) Hale Speckled Green Shield	On Oaks, Occasional on Rocks	Common
<i>Parmelia sulcata</i> Taylor Hamered Shield Lichen	On Bark	Common
<i>Xanthoparmelia mexicana</i> (Gyeln.) Hale NCN	On Rocks	Common
<i>Xanthoria polycarpa</i> (Hoffm.) Rieber Pin-cushion Sunburst Lichen	On Oaks Young Twigs	Common

#### FRUTICOSE

<i>Evernia prunastri</i> (L.) Ach. NCN	On Oaks	Common
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<b><u>MAJOR PLANT GROUP</u></b>		
<b><u>FAMILY</u></b>		
<b><u>Genus</u></b>	<b><u>Habitat Type</u></b>	<b><u>Abundance</u></b>
<b><u>Common Name</u></b>		

NCN = No Common Name, \* = Non-native, @= Voucher Specimen

<i>Ramalina farinacea</i> (L.) Ach.	On Oaks	Common
NCN		
<i>Ramalina menziesii</i> Taylor non Tuck.	On Oaks	Common
Lace Lichen, Old Man's Beard		
<i>Usnea intermedia</i> = <i>U. arizonica</i>	On Oaks	Common
NCN		

### **VASCULAR PLANTS FERNS**

#### **PTERIDACEAE**

<i>Pellaea andromedifolia</i> (Kaulf.) Fee	Woodlands	Occasional
Coffee Fern		
<i>Pentagramma triangularis</i> (Kaulf.) G. Yatsk. subsp. <i>triangularis</i>	Woodlands	Common
Goldback Fern		

### **VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**

#### **CLASS--DICOTYLEDONAE- TREES**

#### **MAGNOLIIDS**

#### **LAURACEAE**

<i>Umbellularia californica</i> (Hook.&Arn.) Nutt.	Conifer&Oak Woodlands	Occasional
California Laurel, Sweet Bay, Pepperwood, California Bay		

#### **EUDICOTS**

#### **ERICACEAE Heath Family**

<i>Arbutus menziesii</i> Pursh	Woodlands	Common
Madrone		

#### **FAGACEAE Oak Family**

<i>Quercus agrifolia</i> Nee	Woodlands	Common
Live Oak		
<i>Quercus douglasii</i> Hook.&Arn.	Woodlands	Common
Blue Oak (Hybridizes with <i>Q. garryana</i> and <i>Q. lobata</i> )		
* <i>Quercus suber</i> L.	Ruderal, Cultivated	Occasional
Cork Oak		

#### **OLEACEAE Olive Family**

* <i>Olea europaea</i> L.	Planted	Occasional
Olive		

#### **SAPINDACEAE Soapberry Family**

<i>Aesculus californica</i> (Spach) Nutt.	Woodlands, Riparian	Common
California Buckeye		

<b><u>MAJOR PLANT GROUP</u></b>		
<b><u>FAMILY</u></b>		
<b><u>Genus</u></b>	<b><u>Habitat Type</u></b>	<b><u>Abundance</u></b>
<b><u>Common Name</u></b>		

NCN = No Common Name, \* = Non-native, @= Voucher Specimen

## **VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**

### **CLASS--DICOTYLEDONAE-SHRUBS AND WOODY VINES**

#### **EUDICOTS**

#### ANACARDIACEAE Sumac Family

*Toxicodendron diversilobum* (Torry&Gray) E.Green Woodlands Common  
Poison Oak

#### ASTERACEAE (Compositae) Sunflower Family

*Baccharis pilularis* deCandolle Woodlands, Grasslands Common  
Coyote Brush

#### CUCURBITACEAE Gourd Family

*Marah oregana* (S.Watson) Howell Grassland, Edge of Woodlands Occasional  
Wild Cucumber, Man-root

#### ERICACEAE Heath Family

*Arctostaphylos manzanita* Parry ssp. *glaucescens* Woodlands Common  
Common Manzanita

#### PHRYMACEAE Lopseed Family

*Mimulus aurantiacus* Curtis Woodlands Occasional  
Bush Monkey Flower

#### ROSACEAE Rose Family

*Heteromeles arbutifolia* (Lind.) M. Rome. Shrub/Scrub Common  
Christmas Berry, Toyon

## **VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**

### **CLASS--DICOTYLEDONAE-HERBS**

#### **EUDICOTS**

#### APIACEAE (Umbelliferae) Carrot Family

\**Daucus carota* L. Ruderal Grasslands Common  
Wild Carrot, Queen Anne's Lace  
*Sanicula crassicaulis* DC. Woodlands Common  
Pacific Sanicle

#### ASTERACEAE (Compositae) Sunflower Family

\**Calendula arvensis* L. Ruderal Occasional  
Field Marigold  
\**Carduus pycnocephalus* L. subsp. *pycnocephalus* Woodlands Common  
Italian Thistle  
\**Centaurea solstitialis* L. Grasslands, Ruderal Common  
Yellow Star Thistle  
\**Cirsium vulgare* (Savi) Ten. Grasslands, Ruderal Common  
Bull Thistle

<b><u>MAJOR PLANT GROUP</u></b>		
<b><u>FAMILY</u></b>		
<b><u>Genus</u></b>	<b><u>Habitat Type</u></b>	<b><u>Abundance</u></b>
<b><u>Common Name</u></b>		

NCN = No Common Name, \* = Non-native, @ = Voucher Specimen

* <i>Helminthotheca echioides</i> (L.) Holub	Ruderal	Common
Ox-tongue (= <i>Picris echioides</i> )		
* <i>Hypochaeris glabra</i> L.	Ruderal	Common
Cat's Ear		
* <i>Lactuca serriola</i> L.	Ruderal	Occasional
Prickly Lettuce		
<i>Madia elegans</i> D.Don	Ruderal, Grasslands	Common
Common Madia		
* <i>Senecio vulgaris</i> L.	Ruderal	Occasional
NCN		
* <i>Sonchus asper</i> (L.) Hill var. <i>asper</i>	Ruderal	Common
Prickly Sow Thistle		
* <i>Sonchus oleraceus</i> L.	Ruderal	Common
Common Sow Thistle		
* <i>Taraxacum officinale</i> F.H.Wigg	Ruderal	Common
Dandelion		
BORAGINACEAE Borage or Waterleaf Family		
<i>Amsinckia menziesii</i> (Lehm) Nelson&Macbr.	Grasslands	Occasional
Rancher's Fireweed		
<i>Nemophila heterophylla</i> Frisch.&Mey.	Woodlands, Shrub/Scrub	Occasional
Canyon Nemophila		
BRASSICACEAE Mustard Family		
* <i>Brassica nigra</i> (L.) Koch	Ruderal	Common
Black Mustard		
* <i>Cardamine hirsuta</i> L.	Ruderal	Common
Bitter-cress		
* <i>Raphanus sativus</i> L.	Ruderal	Common
Wild Radish		
* <i>Sisymbrium officinalis</i> L.	Ruderal, Grasslands	Common
Hedge Mustard		
CARYOPHYLLACEAE Pink Family		
* <i>Cerastium arvense</i> L. subsp. <i>strictum</i>	Ruderal	Common
Spury, Stickey Sand-Spury		
CRASSULACEAE Stoncrop Family		
<i>Crassula connata</i> (Ruiz.& Pav.) A Berg.	Grassland, Chaparral Open Areas	Common
Sand Pygmy Weed		
FABACEAE (Leguminosae) Legume Family		
<i>Lupinus bicolor</i> Lindl.	Grassland	Common
Miniature lupine		
<i>Lupinus nanus</i> Benth.	Grasslands	Common

<b><u>MAJOR PLANT GROUP</u></b>		
<b><u>FAMILY</u></b>		
<b><u>Genus</u></b>	<b><u>Habitat Type</u></b>	<b><u>Abundance</u></b>
<b><u>Common Name</u></b>		

NCN = No Common Name, \* = Non-native, @= Voucher Specimen

Sky Lupine		
* <i>Medicago arabica</i> (L.) Huds	Ruderal	Common
Spotted Bur Clover		
* <i>Medicago lupulina</i> L.	Grassland	Common
Black Medic		
* <i>Melilotus albus</i> L.	Grasslands	Common
White Sweetclover		
* <i>Trifolium hirtum</i> All.	Ruderal	Common
Rose Clover		
* <i>Vicia sativa</i> L. subsp. <i>nigra</i>	Grasslands, Ruderal	Common
Narrow Leaved-vetch		
* <i>Vicia villosa</i> Roth. subsp. <i>villosa</i>	Ruderal	Common
Hairy Vetch, Winter Vetch		
GERANIACEAE Geranium Family		
* <i>Erodium botrys</i> (Cav.) Bertol.	Grasslands	Common
Broadleaf Filaree, Long-beaked Filaree		
* <i>Geranium dissectum</i> L.	Grasslands	Common
Common Geranium		
* <i>Geranium molle</i> L.	Grasslands	Common
Dove's Foot Geranium		
LAMIACEAE (Labiatae) Mint Family		
* <i>Lamium purpureum</i> L.	Ruderal. Palustrine	Common
Red Dead Nettle		
<i>Stachys ajugoides</i> Benth.	Moist Open Places	Occasional
Hedge-nettle		
MALVACEAE Mallow Family		
* <i>Malva parviflora</i> L.	Ruderal	Common
Cheeseweed, Mallow		
PAPAVERACEAE Poppy Family		
<i>Eschscholzia californica</i> Cahm.	Grasslands	Common
California Poppy		
PLANTAGINACEAE Plantain Family		
* <i>Plantago lanceolata</i> L.	Ruderal	Common
English Plantain		
POLYGONACEAE Buckwheat Family		
* <i>Rumex acetosella</i> L.	Ruderal	Common
Sheep Sorrel		
* <i>Rumex crispus</i> L.	Ruderal	Common
Curly Dock		

<b><u>MAJOR PLANT GROUP</u></b>		
<b><u>FAMILY</u></b>		
<b><u>Genus</u></b>	<b><u>Habitat Type</u></b>	<b><u>Abundance</u></b>
<b><u>Common Name</u></b>		

NCN = No Common Name, \* = Non-native, @= Voucher Specimen

RUBIACEAE Madder Family

<i>Galium aparine</i> L.	Woodlands, Riparian, Ruderal	Common
Goose Grass		

**VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**

**CLASS--MONOCOTYLEDONAE-GRASSES**

POACEAE Grass Family

* <i>Avena barbata</i> Link.	Grasslands	Common
Slender Wild Oat		
* <i>Bromus diandrus</i> Roth	Ruderal, Grasslands	Common
Ripgut Grass		
* <i>Bromus hordeaceus</i> L.	Grasslands	Common
Soft Chess, Blando Brome ( <i>B.mollis</i> )		
* <i>Cynodon dactylon</i> (L.) Pers.	Ruderal	Common
Bermuda Grass		
* <i>Cynosurus echinatus</i> L.	Ruderal	Common
Hedgehog, Dogtail		
* <i>Festuca bromoides</i> L.	Ruderal, Moist Flats become Dry	Common
Six-weeks Fescue (= <i>Vulpia bromoides</i> )		
<i>Festuca microstachys</i> Nutt.	Grasslands, Ruderal	Common
NCN (= <i>Vulpia microstachys</i> )		
<i>Festuca occidentalis</i> Hook.	Open Forests, Woodlands	Occasional
Western Fescue		
* <i>Festuca perennis</i> (L.) Columbus & Sm.	Grasslands	Common
Perennial Rye Grass (= <i>Lolium multiflorum</i> , <i>L. perenne</i> )		
<i>Stipa pulchra</i> Hitchc.	Oak Woodland, Grasslands, Chaparral	Common
Purple Needle Grass (= <i>Nassella pulchra</i> )		

**VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**

**CLASS--MONOCOTYLEDONAE-HERBS**

AGAVACEAE Century Plant Family

<i>Chlorogalum pomeridianum</i> (DC.) Kunth var. <i>pomeridianum</i>	Woodlands, Grasslands
Soap Plant	Common

## Fauna Observed in the Vicinity of the Project Site

The nomenclature for the animals found on the project site and in the immediate vicinity follows: Mc Ginnis–1984, for the fresh water fishes; Stebbins-1985, for the reptiles and amphibians; Udvardy and Farrand–1998, for the birds; and Jameson and Peeters -1988 for the mammals.

### AVES ORDER

Common Name	Genus	Observed
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#### AVES

House Finch	<i>Carpodactus mexicanus</i>	X
Oregon Junco	<i>Junco oreganus</i>	X
Turkey Vulture	<i>Cathartes aura</i>	X
Wilson's Warbler	<i>Wilsonia pusill</i>	X

### MAMMALS ORDER

Common Name	Genus	Observed
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#### RODENTIA

Pocket Gopher	<i>Thomomys bottae</i>	Sight
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# **APPENDIX A.**

**CDFW CNDDDB Rare Find 5 State and Federal Listed Species for the  
Quadrangle and Surrounding Quadrangles**

**U.S. Fish & Wildlife Service IPaC Trust Resources  
Federal Endangered and Threatened Species that Occur in or may be  
Affected by the Project**

**Query Summary:**

Quad **IS** (Capell Valley (3812242) **OR** Chiles Valley (3812253) **OR** Lake Berryessa (3812252) **OR** Mt. George (3812232) **OR** Napa (3812233) **OR** Rutherford (3812244) **OR** Sonoma (3812234) **OR** St. Helena (3812254) **OR** Yountville (3812243))  
**AND** Habitat **IS** (Valley & foothill grassland)

**CNDDDB Element Query Results**

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Habitats
<i>Agrostis hendersonii</i>	Henderson's bent grass	None	None	G2Q	S2	3.2	Valley & foothill grassland, Vernal pool, Wetland
<i>Allium peninsulare</i> var. <i>franciscanum</i>	Franciscan onion	None	None	G5T1	S1	1B.2	Cismontane woodland, Ultramafic, Valley & foothill grassland
<i>Antrozous pallidus</i>	pallid bat	None	None	G5	S3	null	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
<i>Aquila chrysaetos</i>	golden eagle	None	None	G5	S3	null	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland
<i>Astragalus claranus</i>	Clara Hunt's milk-vetch	Endangered	Threatened	G1	S1	1B.1	Chaparral, Cismontane woodland, Valley & foothill grassland
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	None	None	G2T2	S2	1B.2	Alkali playa, Valley & foothill grassland, Vernal pool, Wetland
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	None	None	G2	S2	1B.2	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland

Blennosperma bakeri	Sonoma sunshine	Endangered	Endangered	G1	S1	1B.1	Valley & foothill grassland, Vernal pool, Wetland
Brodiaea leptandra	narrow-anthered brodiaea	None	None	G3?	S3?	1B.2	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland
Buteo swainsoni	Swainson's hawk	None	Threatened	G5	S3	null	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Corynorhinus townsendii	Townsend's big-eared bat	None	None	G3G4	S2	null	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Riparian forest, Riparian woodland, Upper montane coniferous forest, Valley & foothill grassland
Downingia pusilla	dwarf downingia	None	None	GU	S2	2B.2	Valley & foothill grassland, Vernal pool, Wetland
Elanus leucurus	white-tailed kite	None	None	G5	S3S4	null	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Eryngium jepsonii	Jepson's coyote-thistle	None	None	G2	S2	1B.2	Valley & foothill grassland, Vernal pool
Extriplex joaquinana	San Joaquin spearscale	None	None	G2	S2	1B.2	Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	None	None	G5T1T2	S1S2	1B.2	Valley & foothill grassland
Hesperolinon breweri	Brewer's western flax	None	None	G2?	S2?	1B.2	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Horkelia tenuiloba	thin-lobed horkelia	None	None	G2	S2	1B.2	Broadleaved upland forest, Chaparral, Valley & foothill grassland
Lasthenia conjugens	Contra Costa goldfields	Endangered	None	G1	S1	1B.1	Alkali playa, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
Layia septentrionalis	Colusa layia	None	None	G2	S2	1B.2	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland

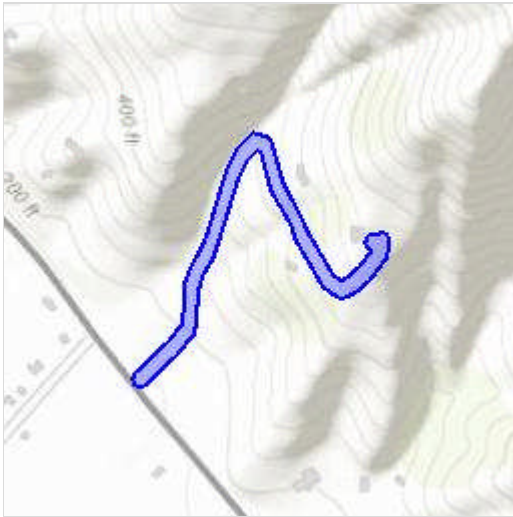
Limnanthes vinculans	Sebastopol meadowfoam	Endang ered	Endang ered	G1	S1	1B.1	Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Navarretia leucocephala ssp. bakeri	Baker's navarretia	None	None	G4T2	S2	1B.1	Cismontane woodland, Lower montane coniferous forest, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Sidalcea keckii	Keck's checkerbloom	Endang ered	None	G2	S2	1B.1	Cismontane woodland, Ultramafic, Valley & foothill grassland
Taxidea taxus	American badger	None	None	G5	S3	null	Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Trichostema rueggii	Napa bluecurls	None	None	G1G2	S1S2	1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley & foothill grassland, Vernal pool, Wetland
Trifolium amoenum	two-fork clover	Endang ered	None	G1	S1	1B.1	Coastal bluff scrub, Ultramafic, Valley & foothill grassland
Trifolium hydrophilum	saline clover	None	None	G2	S2	1B.2	Marsh & swamp, Valley & foothill grassland, Vernal pool, Wetland

**IPaC****U.S. Fish & Wildlife Service**

# IPaC resource list

## Location

Napa County, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

## Endangered species

**This resource list is for informational purposes only and should not be used for planning or analyzing project level impacts.**

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to “request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action” for any project that is conducted, permitted, funded, or licensed by any Federal agency.

**A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Review section in IPaC or from the local field office directly.**

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by creating a project and making a request from the Regulatory Review section.

### Listed species

<sup>1</sup> are managed by the [Endangered Species Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. <a href="http://ecos.fws.gov/ecp/species/2891">http://ecos.fws.gov/ecp/species/2891</a>	Threatened

## Birds

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. <a href="http://ecos.fws.gov/ecp/species/1123">http://ecos.fws.gov/ecp/species/1123</a>	Threatened

## Crustaceans

NAME	STATUS
California Freshwater Shrimp <i>Syncaris pacifica</i> <b>No critical habitat</b> has been designated for this species. <a href="http://ecos.fws.gov/ecp/species/7903">http://ecos.fws.gov/ecp/species/7903</a>	Endangered
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. <a href="http://ecos.fws.gov/ecp/species/8246">http://ecos.fws.gov/ecp/species/8246</a>	Endangered

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. <a href="http://ecos.fws.gov/ecp/species/321">http://ecos.fws.gov/ecp/species/321</a>	Threatened
Steelhead <i>Oncorhynchus (=Salmo) mykiss</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. <a href="http://ecos.fws.gov/ecp/species/1007">http://ecos.fws.gov/ecp/species/1007</a>	Threatened

## Flowering Plants

NAME	STATUS
Contra Costa Goldfields <i>Lasthenia conjugens</i> There is a <b>final critical habitat</b> designated for this species. Your location is outside the designated critical habitat. <a href="http://ecos.fws.gov/ecp/species/7058">http://ecos.fws.gov/ecp/species/7058</a>	Endangered
Few-flowered Navarretia <i>Navarretia leucocephala</i> ssp. <i>pauciflora</i> (=N. <i>pauciflora</i> ) <b>No critical habitat</b> has been designated for this species. <a href="http://ecos.fws.gov/ecp/species/8242">http://ecos.fws.gov/ecp/species/8242</a>	Endangered
Sebastopol Meadowfoam <i>Limnanthes vinculans</i> <b>No critical habitat</b> has been designated for this species. <a href="http://ecos.fws.gov/ecp/species/404">http://ecos.fws.gov/ecp/species/404</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Birds are protected under the Migratory Bird Treaty Act

<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service

<sup>3</sup>. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data <http://www.birdscanada.org/birdmon/default/datasummaries.jsp>



The migratory birds species listed below are species of particular conservation concern (e.g. [Birds of Conservation Concern](#)) that may be potentially affected by activities in this location, not a list of every bird species you may find in this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the [AKN Histogram Tools](#) and [Other Bird Data Resources](#).

NAME	SEASON(S)
Bald Eagle <i>Haliaeetus leucocephalus</i> <a href="http://ecos.fws.gov/ecp/species/1626">http://ecos.fws.gov/ecp/species/1626</a>	Year-round
Bell's Sparrow <i>Amphispiza belli</i> <a href="http://ecos.fws.gov/ecp/species/9303">http://ecos.fws.gov/ecp/species/9303</a>	Year-round
Black Rail <i>Laterallus jamaicensis</i> <a href="http://ecos.fws.gov/ecp/species/7717">http://ecos.fws.gov/ecp/species/7717</a>	Breeding
Burrowing Owl <i>Athene cunicularia</i> <a href="http://ecos.fws.gov/ecp/species/9737">http://ecos.fws.gov/ecp/species/9737</a>	Year-round
Fox Sparrow <i>Passerella iliaca</i>	Wintering
Least Bittern <i>Ixobrychus exilis</i> <a href="http://ecos.fws.gov/ecp/species/6175">http://ecos.fws.gov/ecp/species/6175</a>	Breeding
Lesser Yellowlegs <i>Tringa flavipes</i> <a href="http://ecos.fws.gov/ecp/species/9679">http://ecos.fws.gov/ecp/species/9679</a>	Wintering
Lewis's Woodpecker <i>Melanerpes lewis</i> <a href="http://ecos.fws.gov/ecp/species/9408">http://ecos.fws.gov/ecp/species/9408</a>	Wintering
Long-billed Curlew <i>Numenius americanus</i> <a href="http://ecos.fws.gov/ecp/species/5511">http://ecos.fws.gov/ecp/species/5511</a>	Wintering
Nuttall's Woodpecker <i>Picoides nuttallii</i> <a href="http://ecos.fws.gov/ecp/species/9410">http://ecos.fws.gov/ecp/species/9410</a>	Year-round

Oak Titmouse	<i>Baeolophus inornatus</i> <a href="http://ecos.fws.gov/ecp/species/9656">http://ecos.fws.gov/ecp/species/9656</a>	Year-round
Olive-sided Flycatcher	<i>Contopus cooperi</i> <a href="http://ecos.fws.gov/ecp/species/3914">http://ecos.fws.gov/ecp/species/3914</a>	Breeding
Peregrine Falcon	<i>Falco peregrinus</i> <a href="http://ecos.fws.gov/ecp/species/8831">http://ecos.fws.gov/ecp/species/8831</a>	Year-round
Short-billed Dowitcher	<i>Limnodromus griseus</i> <a href="http://ecos.fws.gov/ecp/species/9480">http://ecos.fws.gov/ecp/species/9480</a>	Wintering
Short-eared Owl	<i>Asio flammeus</i> <a href="http://ecos.fws.gov/ecp/species/9295">http://ecos.fws.gov/ecp/species/9295</a>	Wintering
Swainson's Hawk	<i>Buteo swainsoni</i> <a href="http://ecos.fws.gov/ecp/species/1098">http://ecos.fws.gov/ecp/species/1098</a>	Breeding
Tricolored Blackbird	<i>Agelaius tricolor</i> <a href="http://ecos.fws.gov/ecp/species/3910">http://ecos.fws.gov/ecp/species/3910</a>	Year-round
Western Grebe	<i>Aechmophorus occidentalis</i> <a href="http://ecos.fws.gov/ecp/species/6743">http://ecos.fws.gov/ecp/species/6743</a>	Year-round

**What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?**

#### **Landbirds:**

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

#### **Atlantic Seabirds:**

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAA/NCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAA/NCCOS models: the models were developed as part of the NOAA/NCCOS project: [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#). The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the [Northeast Ocean Data Portal](#), which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

### **Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?**

#### **Landbirds:**

The [Avian Knowledge Network \(AKN\)](#) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest, survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the [Migratory Bird Programs AKN Histogram Tools](#) webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

#### **Atlantic Seabirds:**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project](#) webpage.

## Facilities

### Wildlife refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.