

NAPA BOTANICAL SURVEY SERVICES

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NAPA CO. CONSERVATION
DEVELOPMENT & PLANNING DEPT.

Rare Plant Survey
Of
Fisher Property
2435 Partrick Road
Napa, California

Prepared For
Riechers Spence & Associates
1541 Third St.
Napa, CA 94559

By
Jake A. Ruygt

January 11, 2001

Introduction

A botanical survey was conducted on the David Fisher property located on Partrick Road on January 4, 2001. The purpose of the survey was to determine if the proposed subdivision of parcels 50-010-24, 50-010-30, 50-010-31 and the construction at six home sites including access roads could impact any special status plant species or sensitive plant communities. The alignment of the roadways and locations of proposed home sites, including two alternate sites, were identified in the field with assistance from Ryan Gregory representing Reichers Spence and Associates, Consulting Civil Engineers. A corridor about 50 ft width was searched along all proposed roadways and each home site by walking a meandering transect to thoroughly cover all areas.

There are no records of special status plant species existing on this property as determined from Napa County Planning's sensitivity maps, which are more extensive in scope than The Natural Diversity Database records managed by the Department of Fish and Game. This survey was conducted in January, which is generally adequate for the identification of woody species but inadequate for the identification of herbaceous species. For this reason, the survey could only assess the potential for the occurrence of sensitive herbaceous plant species based on prior experience of this botanist. Observations on the day of the survey and review of record identified conditions that could support four special status plant species. The first two are shrubs and the last two are herbaceous:

<i>Amorpha californica ssp. napensis</i>	false indigo	List 1B, CEQA
<i>Lupinus sericatus</i>	Cobb Mtn lupine	List 1B, CEQA
<i>Lilium rubescens</i>	chaparral lily	List 4, CEQA ?
<i>Linanthus acicularis</i>	bristly linanthus	List 4, CEQA ?

(List 1B = California Native Plant Society list of Rare and Endangered plants in California.
List 4 = CNPS list of plants of limited distribution, A Watch List.)

Existing Conditions

The property is located along a ridge near the south end of the Hood Mountain Range about 6 miles northwest of Napa. Slopes range from flat to steep while the elevation ranges from approximately 420 ft to 1590 feet. Soils include clay loams of the Fagan Series (sandstone and shale derived), which supports a woodland community, and gravelly loams of the Forward Series (rhyolite derived), which support a forest/ woodland mosaic.

Mixed Evergreen Forest

This community occurs near the ridge top on west and south facing slopes. This area is dominated by coast live oak (*Quercus agrifolia ssp. agrifolia*) and California bay (*Umbellularia californica*). The canopy is dense, permitting little penetration of sunlight. The forest floor is

generally devoid of herbaceous species and covered with a thin layer of leaf and branch litter. A few sapling trees are scattered about. Other trees associated with this community include madrone and Douglas fir. The access road to lots 1, 2 and 4a pass through this community.

Douglas Fir Forest

This community interfaces with Mixed Evergreen Forest on the north and east facing slopes of the ridge. It is dominated by a young stand of Douglas fir (*Pseudotsuga menziesii*) with a few scattered old growth individuals with a DBH of up to 6 feet. Other trees associated with the fir include coast live oak, black oak, and madrone. The understory includes a scattering of poison oak, toyon and California blackberry among the litter of needles and downed branches. Lots 1 and 2 occur in this community.

Mixed Evergreen Woodland

Fine textured soils below the ridge and on the west facing slopes support a community of scattered stands of trees and open grassland. The dominant trees include coast live oak and bay. One individual bay was observed with approximately 12 ft. diameter at breast height. The grassland supports a mix of introduced grasses and forbs with less than 20 % cover of native species. The grassy species were not sufficiently mature during the January survey to identify. Expected species here include wild oats, ripgut grass, wall barley and Italian rye. Dense stands of yellow star thistle and patches of filaree (*Erodium spp.*), sorrel (*Rumex spp.*) and Italian thistle (*Carduus pycnocephalus*) were observed in this community. Lots 3, 4a, 5, and 6 occur in this community.

Specific Findings

Lot 1 – Douglas Fir Forest with a few madrone and California hazelnut. Dense canopy with ground rose in the herb layer.

Lot 2 – Douglas Fir Forest with madrone, black oak, coast live oak and scattered shrubs including toyon, blackberry and poison oak.

Lot 3 – Mixed Evergreen Woodland with open grassland areas dominated by yellow star thistle and clover. Natives herbs including Indian soap plant, common yarrow and popcornflower cover less than 20% of the area. A large patch of coyote brush occurs at edge of site.

Lot 4A – Mixed Evergreen Woodland with Italian thistle, long-beaked filaree, yellow star thistle and a mix of annual grasses. Open grassy with few natives such as pacific snakeroot and miner's lettuce.

Lot 4B – Mixed Evergreen Woodland with open grassland areas dominated by yellow star thistle and milk thistle. Also includes vetch, clover and tower mustard and less than 5% native species.

Lot 5A – Mixed Evergreen Woodland with grassland areas dominated by yellow star thistle with scattered coyote brush, hedge parsley, and medusa grass. Natives such as common yarrow cover less than 5% of the site.

Lot 5B – Mixed Evergreen Forest dominated by yellow star thistle, filaree and annual grasses. Includes native common yarrow and Indian soap, which cover less than 10% of the site.

Lot 6 – Mixed Evergreen Forest with grassy opening dominated by yellow star thistle. A number of natives including California oatgrass, purple needlegrass, Indian soap and wild rye comprise less than 5% of the site. The tree canopy nearby includes oak, bay, maple and fir.

Results and Recommendations

No special status plant species were observed during the January 4 survey. The forest community could support false indigo and Cobb Mtn lupine. If they were present, they would be identifiable at this time. If chaparral lily is present on the property it was not found. This species may be difficult to identify at this time of year because the only indicator of its presence would be an individual withering stem. With the paucity of forest understory over much of the site it could be stated with a high degree of certainty that this species is not present at the home sites or along roadways. Any gross changes in the alignments or home site should call for additional surveys for this species, which should be conducted in June or July.

The grassland community has been greatly altered by continual grazing and weed competition, eliminating most of the native grasses and forbs. This community could support bristly linanthus although the closest record for this species is in Westwood hills park about 5 miles from the site. This tiny annual species is difficult to find even in the blooming season. This species generally shows up in ungrazed grassland where cover is sparse. This species is not considered endangered and is questionably subject to CEQA review at present. The uncertainty of the survey regarding this species should not hold up the planning process but it is recommended that prior to construction that additional surveys be conducted during April to determine if this species is present and to avoid impacts where possible.

No seasonal wetlands or unique plant communities were observed along the roadways or at the home sites.

Jake Ruygt
Owner



LIST OF VASCULAR PLANTS OBSERVED ON THE FISHER PROPERTY

<i>Acer macrophyllum</i>	big leaf maple *
<i>Achillea millefolium</i>	common yarrow *
<i>Aesculus californica</i>	buckeye *
<i>Agoseris grandiflora</i>	large-flowered mountain dandelion *
<i>Arbutus menziesii</i>	madrone *
<i>Baccharis pilularis</i>	coyote brush *
<i>Bellardia trixago</i>	bellardia
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Centaurea solstitialis</i>	yellow star thistle
<i>Centaureium spp.</i>	centaury *
<i>Chlorogalum pomeridianum</i>	Indian soap *
<i>Cirsium vulgare</i>	bull thistle
<i>Claytonia perfoliata</i>	miner's lettuce *
<i>Corylus cornuta ssp. californica</i>	California hazelnut *
<i>Cynosurus echinatus</i>	dogtail grass
<i>Danthonia californica</i>	California oatgrass *
<i>Dryopteris arguta</i>	wood fern *
<i>Elymus glaucus</i>	western wild rye *
<i>Erodium botrys</i>	long beaked filaree
<i>Erodium cicutarium</i>	red stem filaree
<i>Eschscholzia californica</i>	California poppy *
<i>Genista monspeliensis</i>	French broom
<i>Geranium dissectum</i>	cut-leaved geranium
<i>Heteromeles arbutifolia</i>	toyon *
<i>Hordeum spp.</i>	barley
<i>Juncus patens</i>	spreading rush *
<i>Marrubium vulgare</i>	horehound
<i>Mimulus aurantiacus</i>	sticky monkeyflower *
<i>Nassella pulchra</i>	purple needlegrass *
<i>Osmorhiza chilensis</i>	sweet cicely *
<i>Perideridia kelloggii</i>	Kellogg's yampah *
<i>Plagiobothrys nothofulvus</i>	rusty popcornflower *
<i>Plantago lanceolata</i>	English plantain
<i>Pseudotsuga menziesii</i>	Douglas fir
<i>Pteridium aquilinum</i>	bracken fern *
<i>Quercus agrifolia ssp. agrifolia</i>	coast live oak *
<i>Quercus kelloggi</i>	black oak *
<i>Ranunculus muricatus</i>	prickly buttercup
<i>Rhagadiolus edulis</i>	rhagadiolus
<i>Rosa spithamea</i>	ground rose *
<i>Rubus californicus</i>	California blackberry *
<i>Sanicula bipinnatifida</i>	purple sanicle *
<i>Sanicula crassicaulis</i>	pacific snakeroot *

Silybum marianum
Sisymbrium officinale
Taeniantherum caput-medusae
Trifolium subterraneum
Torilis spp.
Toxicodendron diversilobum
Umbellularia californica
Vicia spp.

milk thistle
hedge mustard
medusa grass
sub clover
hedge parsley
poison oak *
California bay *
vetch

* = native species

Special-Status Plant Survey

**FISHER PROPERTY
APN 055-010-024/30/31
Partrick Road
Napa County, CA**



**Prepared
For**
Jon M. Webb
Albion Surveys, Inc.

By
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November 5, 2007

Special-Status Plant Survey

Fisher Property

APN 055-010-024/30/31

Partrick Road

Napa County, CA

PROJECT NAME:

Fisher Proposed Lot Split

SITE DEVELOPMENT:

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PERIOD OF STUDY:

Spring-Summer 2007

Special-Status Plant Survey FISHER PROPERTY

APN 055-010-024/30/31

**Partrick Road
Napa County, CA**

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APPENDIX A Plants Observed On Or Near The Project Site

APPENDIX B California Native Plant Society Electronic Inventory & California Department of Fish and Game Rare Find Three for The Quadrangle and Surrounding Quadrangles

Special-Status Plant Survey

Fisher Property APN 055-010-024/30/31
Partrick Road Napa County, CA

EXECUTIVE SUMMARY

This study was conducted at the request of Jon M. Webb, Albion Surveys, Inc., as background information necessary for permits from Napa County Conservation, Development and Planning Department for the development of a lot split. The three existing parcels (each over 320 acres) will be split into 6 parcels total, each over 160 acres with 6 designated building envelopes. The property is located west of the city of Napa, with access from the Partrick Road. The project site is within the Sonoma Quadrangle, Napa County. The property elevation ranges from Approximately 500 feet to over 1500 feet in elevation. The purpose of the study and report is to assess if any special-status plant species may be impacted by the proposed building envelopes and access roads (see letter from County of Napa, Conservation, Development and Planning Department, October 5, 2006). This study follows the Napa County Guidelines.

Findings:

- The property is presently managed for cattle grazing;
- The property consists of agrestal pasturelands, oak woodlands and conifer woodlands;
- Spring surveys did not identify any potential habitat or presence of special-status plant species on or near the proposed building sites or access roads;
- The project site is within the DFG confidence interval for the Napa False Indigo (*Amorpha californica* var. *napensis*). We found no evidence for the presence of this species nor was there habitat for this species on the project sites;
- The site conditions, lack of any findings during our survey, soils present, site topography, lack of any historical records for the site, and the habitat and plant associates present would reasonably preclude the presence of special-status species;
- The proposed project will not have a significant negative biological impact on-site or off-site to the local flora;
- The proposed building sites will not impact any sensitive plant communities, special-status species populations or unique plant populations;
- The flora observed during our seasonal floristic study is presented in Appendix A.

Special- Status Plant Survey FISHER PROPERTY

APN 055-010-024/30/31

**Partrick Road
Napa County, CA**

1.0 INTRODUCTION

The project proposes a lot split on three existing parcels (each over 320 acres). The parcels will be split into 6 parcels, each over 160 acres with 6 designated building envelopes.

1.1 Study Area

The property is located west of the city of Napa, with access from the Partrick Road. The project site is within the Sonoma Quadrangle, Napa County. The property elevation ranges from approximately 500 feet to 1500 feet in elevation (See Plate I). Due to the large size of the property only the proposed building envelopes, access roads and surrounding environment were surveyed. Photo 1 to 6 show each of the proposed building envelopes and Plate III is an aerial photo showing the study areas.

1.2 Purpose

The purpose of the study and report is to identify potential habitat for special-status plant species and or locate any special-status plants associated with the project sites which have the potential to be impacted by the proposed project. This study follows the Napa County Guidelines (Attachment C), Department of Fish and Game (DFG) Guidelines, and the California Native Plant Society (CNPS) Guidelines.

1.3 Definitions

Special-status Species. Special-status organisms are plants or animals that have been designated by Federal or State agencies as rare, endangered, or threatened. We have also included plant species listed by the CNPS as "target organisms". The target species for the Quadrangle are discussed below. 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.

Target Organisms. were considered from the following sources:

- The California Department of Fish and Game Natural Diversity Rare Find 3 Data Base for the Quadrangle and surrounding Quadrangles of the project site;
- The California Native Plant Society Electronic Inventory for the habitat present on the project site Quadrangle and surrounding Quadrangles;
- Our experience with the local flora and fauna; and
- Five Mile radius CNDDDB Rarefind 3 search.

Habitat Types. Habitat types are used by DFG to categorize elements of nature associated with the physical and biological conditions in an area. These are of particular importance for the wildlife they support, and they are important as indicators of the potential for special-status species.

Confidence Interval. The California Department of Fish and Game (DFG) California Natural Diversity Data Base (CNDDDB) uses map polygon projections for indicating potential for occurrence of special-status plant populations around a recorded occurrence.

Critical Habitat or Sensitive Habitat. Critical habitat is by definition a biotic environment designated by U.S. Fish and Wildlife Service as essential for the existence of a particular population of species. The U.S. Fish and Wildlife Service designates critical habitat for special-status species as an area or region within which a species may be found. DFG Natural Diversity Data Base uses sensitive plant communities for plant populations that are rare or threatened in nature. Critical or Sensitive Habitat also includes wetlands and tributaries to waters of the US as defined by the Corps of Engineers (ACOE) including also creeks and seasonal streams as recognized by the DFG.

Serpentinite. Serpentinite or serpentine consists of ultramafic rock outcrops that due to the unique mineral composition support a unique flora often of endemics. Kruckeberg, 1984, indicates that the taxonomy and evolutionary responses to serpentines include "1) taxa endemic to serpentine, 2) local or regional indicator taxa, largely confined to serpentine in parts of their ranges, 3) indifferent or "bodenvag" taxa that range on and off serpentine, and 4) taxa that are excluded from serpentine." In our area serpentine outcrops or serpentinites support numerous special-status plant taxa.

Ruderal Habitat. Ruderal habitat is characterized by disturbance and the establishment and dominance of non-native introduced weed species.

Best Management Practices. Best management practices represent the construction or agricultural practices that are consistent with regulatory laws or industry standards which are prudent and consistent with site conditions.

Habitat Fragmentation. The issue of habitat fragmentation is of concern locally, nationally, and globally. The term habitat fragmentation refers to the loss of connections within the biosphere such that the movement, genetic exchange, and dispersal of native populations is restricted or prevented. Anthropogenic habitat fragmentation can be the result of a road construction, logging, agriculture, or urban growth. The practice of retaining or planning for "Corridors" is an attempt to address this issue.

Federal Endangered Species Act. Pursuant to the federal Endangered Species Act (ESA), the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service have authority over projects that may affect the continued existence of a species that is federally listed as threatened or endangered. Section 9 of ESA prohibits the take of a federally listed species; take is defined, in part, as killing, harming, or harassment and includes habitat modification or degradation where it actually results in death or injury to wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering.

California Endangered Species Act. Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the Fish and Game Code, a permit from DFG is required for projects that could result in the take of a species state listed as threatened or endangered. Under CESA, “take” is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include “harm” or “harass” as the ESA does. As a result, the threshold for a take under CESA is higher than that under the ESA.

2.0 METHODS

2.1 Scoping

Our scoping included identification of and location of habitat and or vegetation types present on the project site and their potential for support of special-status plant species that are known for the Quadrangle, surrounding Quadrangles the County or the region.

Special-status species were considered from the most recent records in the Department of Fish and Game California Natural Diversify Data Base (DFG CNDDDB Rare Find-3 and the most recent update of California Native Plant Society (CNPS) Electronic Inventory of Rare or Endangered Plants, and Napa County rare natural communities. Our scoping is also a function of our familiarity with the local flora and previous projects in the area.

2.2 Field Survey / Methodology

Our study was made by walking transects through and around the project site. In addition the surrounding environment was reviewed for evidence of special-status species. Our fieldwork focused on locating target organisms or suitable habitat for target organisms or indications that such habitat exists on the site.

Plants were identified in the field or specimens were collected, when necessary, for laboratory examination with a binocular microscope. Typically the ideal time frame for identifying plants is during their flowering cycle and our project scoping accommodated the flowering cycle for target species of the region. Flowers assist in locating populations and the blooms with fruits facilitate proper identification. Typically blooming examples are required for identification however, it is not the only method for identifying the presence of, or excluding the possibility of rare plants. Vegetative morphology and dried flower or fruit morphology which may persist long after the blooming period may also be used. Skeletal remains from previous season's growth can also be used for identification. Some species do not flower each year or only flower at maturity and therefore must be identified from vegetative characteristics. Algae, fungi, mosses, lichens, ferns, lycophyta and sphenophyta have no flowers and there are representatives from these groups that are now considered to be special-status species, which require non-blooming identification. For some plants unique features such as the aromatic oils present are key indicator. For some trees and shrubs with unique vegetative characteristics flowering is not needed for proper identification. The vegetative evaluation as a function of field experience can be used to identify species outside of the blooming period to verify or exclude the possibility of special-status plants in a study area. Habitat is also a key characteristic for consideration of special-status species in a study area. Many special-status species are rare in nature because of their specific often very narrow habitat or environmental requirements. Their presence is limited by very specific environmental conditions such as: hydrology, microclimate, soils, nutrients, interspecific and intraspecific competition, and aspect or exposure. In some situations special-status species particularly annuals may not be present each year and in this case one has to rely on skeletal material from pervious years. 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. All plants observed (living and or remains from last season's growth) were recorded in field notes and the results presented in Appendix A.

Table I. Field Dates

Date	Personnel	Person-hr.	Time	Conditions
May 7, 2007	Chris K. and Daniel T. Kjeldsen	3.0 person-hours	09:30 to 12:30	Clear, no wind, with mild temperatures.
June 14, 2007	Chris K. and Daniel T. Kjeldsen	3.0 person-hours	18:30 to 19:30	Clear with light breezes and mild temperatures.
July 19, 2007	Chris K. and Daniel T. Kjeldsen	3.0 person-hours	08:00 to 01:00	Clear with light breezes and hot.
August 24, 2007	Chris K. and Daniel T. Kjeldsen	3.0 person-hours	13:00 to 16:00	Clear with light breezes and mild temperatures

2.3 Reference Sites or Herbaria Visited

Populations of *Arctostaphylos* x *A. stanfordiana* in Annapolis, Napa False Indigo (*Amorpha californica* var. *napensis*), Cobb Mountain Lupine (*Lupinus sericatus*), Clara Hunt's Milk-vetch (*Astragalus clarianus*), Swamp Harebell (*Campanula californica*), Maple Leaf Checkerbloom (*Sidalcea malachroides*), Crystal Springs Lessingia (*Lessingia arachoniodea*), Harlequin Lotus (*Lotus formosissimus*), Pennel's Birds Beak (*Cordylanthus tenuis* ssp. *capillaries*), Tufted Hairgrass (*Deschampsia cespitosa*), Bakers Manzanita (*Arctostaphylos bakeri*), and Thin-lobed Horkelia (*Horkelia tenuiloba*) were reviewed during and prior to the fieldwork. Potential target special-status species have also been reviewed in the Herbarium of Sonoma State University.

3.0 RESULTS

3.1 Site Description

Five of the proposed building envelopes are in grassland areas. These grassland areas consist of ruderal non-native vegetation and have been heavily impacted by cattle grazing over the years. The building envelop of parcel 4 is within a stand of California Bay trees. Photos 1 to 6 illustrate each of the proposed building envelopes.



Figure 1. Proposed Building Site on Parcel 1.



Figure 2. Proposed Building Site on Parcel 2.



Figure 3. Proposed Building Site on Parcel 3.



Figure 4. Proposed Building Site on Parcel 4.



Figure 5. Proposed Building Site on Parcel 5.



Figure 6. Proposed Building Site on Parcel 6.

3.2 Flora / Habitat Types Present

The vegetation of California has been considered to be a mosaic with major changes present from one area to another often with distinct vegetation changes within short distances. The variation in vegetation is a function of topography, geology, climate and biotic factors. It is generally convenient to refer to the vegetation associates on a site as a plant community or alliance. Typically plant communities or vegetation alliances are identified or characterized by the dominant vegetation form or plant species present. There have been numerous community classification schemes proposed by different authors using different systems for the classification of vegetation. A basic premise for the designation of plant communities, associations or alliances is that in nature there are distinct plant populations occupying a site that are stable at any one time (climax community is a biotic association, that in the absence of disturbance maintains a stable assemblage over long periods of time). There is also evidence that vegetation on the site is part of a continuum without well-defined boundaries. There is no agreement as to which system of nomenclature to use for describing plant communities.

The plant communities on the property include "Valley and Foothill Oak Woodland Community" characterized by Blue Oak (*Quercus douglasii*) and Coast Live Oak (*Quercus agrifolia*), "Riparian" community associated with the seasonal drainages on the property, "Douglas fir forest" community dominated by (*Pseudotsuga menziesii*), patches of "Redwood forest" dominated by (*Sequoia sempervirens*), and "Valley and Foothill Grassland" dominated by annual grasses and forbs. The property also contains plaustrine communities associated with stock ponds.

The CNPS list of rare plants for California associates the rare and endangered species with "Habitat Types." The "Habitat Types" present include "Valley and Foothill Grassland", "Meadows and Seeps", "Riparian Forest/Woodland", and "Cismontane Woodland."

The habitat type or plant community associated with the project sites (Holland, 1986) is characterized below.

Ruderal

Ruderal supports a flora that is a result of agriculture and the introduction of non-native plants. The ruderal grasslands have been created by past land use practices. The ruderal habitat of the site consists of native and naturalized exotic species that have been introduced and selected for over time. The dominant grasses are in the following genera: *Avena*, *Bromus*, and *Taeniantherum*.

Grassland

Four of the project sites consists of grasslands. Native grasslands have been heavily impacted and lost over time due to human activities such as conversion to agriculture, fire suppression and over grazing. The project sites would be considered to be ruderal annual pastoral grasslands. Over grazing selects for introduced non-native Mediterranean annual species converting them to annual grasslands and fire suppression favors the growth overstory shrubs and trees which.

Local grasslands are classified as Valley and Foothill Grasslands. Within this classification many sources divide the grasslands into 1) Annual Grasslands that are dominated by non-native introduced annuals and 2) Native Grassland, which include areas dominated by native annual and perennial grasses. Native grasslands in California are dominated by a mixture of annual and perennial grasses such as small fescue, purple needle grass, California melcia, blue wildrye, and nodding needle grass. The present distinctive feature of native grasslands in our area is their occurrence as isolated patches of perennial bunch grasses in small refugia on steep facing slopes or isolated within larger forest or chaparral communities. Grasslands are considered to be fire tolerant and local fire suppression has favored the growth of trees and shrubs within grasslands and further impacted the distribution and occurrence.

Northern Mixed Evergreen Forest

Mixed evergreen forests are typical for the ridges and slopes of the Coast Range Mountains of Napa County. This plant community is characterized by *Pinus ponderosa*, *Arbutus menziesii*, *Quercus kelloggii*, and *Pseudotsuga menziesii*. This community is interspersed between the more mesic forests of the outer Coast Range and the more xeric grasslands, chaparral and oak woodlands. For a complete list of species observed in this plant habitat see Appendix A (it is noted that not all of the typical elements of this plant community are present on the property).

Oak Woodland Cismontane Woodland (Mixed Evergreen Hardwood)

This habitat type is found as an interface with the chaparral shrubs of study area and around the perimeter of the proposed study area. The following trees characterize this plant community: *Quercus agrifolia*, *Arbutus menziesii*, *Umbellularia californica* and *Pinus sabinana*. The shrubs of this community consist of *Arctostaphylos* ssp., *Rosa* ssp. and *Baccharis pilularis*. The under story ground cover consists of typical grasses and herbs. This

plant community is replacing the shrubs that have grown out following previous disturbance of the site.

A complete list of all plants encountered on the project site and immediate vicinity is included in Appendix A.

3.3 Surrounding Habitat Types

The aerial photograph Plate III illustrates the property and the surrounding environment. The environmental setting of the project site consists of:

- On the north side of the project – Conifer oak woodlands, vineyards;
- On the east side of the project – Oak woodlands, grassland;
- On the south side of the project – Oak woodlands, grassland, and vineyard;
- On the west side of the project – Oak woodlands, grassland.

3.4 Special-status Plant Species

Table II below provides a list of potential “target species” an analysis of our field results for potential special-status plant species and a justification for concluding absence. The taxa included in the Table are selected based on the habitat present and the California Department of Fish and Game Natural Diversity Data Base Five Mile search records for the area of the project and Appendix B.

Special-status plant species present within a five-mile radius of the study site (California Department of Fish and Game Natural Diversity Data Base, October, 2007): Napa False Indigo, Sonoma Sunshine, Narrow-anthered California Brodiaea, Pappose Tarplant, Soft Bird’s-beak, Dwarf Downingia, Delta Tule Pea, Marin Knotweed, Showy Indian Clover, Saline Clover and Oval-leaved Viburnum.

Table II. Information and analysis of potential for presence of “target species” The table is arranged alphabetically by scientific name.

Scientific Name Common Name	Species Habitat Association or Plant Community	Flower Period	Present Within Project Site	Justification for Presence/Absence on Project Site
* <i>Amorpha californica</i> var. <i>napensis</i> Napa False Indigo	Cismontane Woodland, Lower Montane Coniferous Forest	April- July	No	Absence of habitat and associated vegetation.
* <i>Blennosperma bakeri</i> Sonoma Sunshine	Vernal Pools	April- June	No	Absence of requisite mesic habitat.
* <i>Brodiaea californica</i> var. <i>leptandra</i> Narrow Anthered California Brodiaea	Cismontane Woodland	May- June	No	Absence of typical vegetation associates.

Scientific Name Common Name	Species Habitat Association or Plant Community	Flower Period	Present Within Project Site	Justification for Absence on Project Site
* <i>Ceanothus sonomensis</i> Sonoma ceanothus	Chaparral	Feb.- April	No	Absence of requisite mesic habitat.
<i>Centromadia parryi</i> ssp. <i>parryi</i> Pappose Tarplant	Grasslands	May- July	No	Requisite habitat and vegetation associates absent on the site or in the immediate vicinity.
<i>Downingia pusilla</i> Dwarf Downingia	Wetlands	March- May	No	Absence of requisite mesic habitat or substrate on project site precludes presence.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta Tule Pea	Marsh lands	May- Sep.	No	Absence of requisite mesic habitat on project site precludes presence.
* <i>Leptosiphon jepsonii</i> Jepson's Leptosiphon	Chaparral	April- May	No	Requisite habitat absent on the site or in the immediate vicinity.
* <i>Lupinus sericatus</i> Cobb Mt. Lupine	Chaparral, Cismontane Woodland	March- June	No	Absence of requisite mesic habitat on project site.
<i>Trifolium amoenum</i> Showy Indian Clover	Grassland	April- June	No	Absence of habitat and historic use of property.
<i>Trifolium depauperatus</i> var. <i>hydrophilum</i> Saline Clover	Marshes and Swamps, Grassland	April- June	No	Absence of mesic habitat required for presence.
* <i>Viburnum ellipticum</i> Oval-leaved Viburnum	Chaparral, Cismontane Woodland, Lower Coniferous Forest	May- June	No	Requisite habitat absent on the site or in the immediate vicinity.

*Taxa known to occur within five miles of the project site recorded in DFG CNDDB.

3.5 Analysis of Target Special-status Plants

Based on our fieldwork and habitat types present it is unlikely that any of the plant species shown in the table above or known for the region would occur on the site given the historical use of the study site, soil type, hydrological conditions, lack of any records, topography, and

plant associates present. It is noted that the taxa shown on Plate II which are in close proximity to the project site are primarily associated with salt marshes or wetlands.

There were no unique species observed. There is one elderberry plant on the project site, which are the host plant for the Valley Longhorn Elderberry Beetle (*Desmocerus californicus dimorphus*). This plant is the size which would potentially support the Valley Longhorn Elderberry Beetle. This plant is not part of the proposed project and there is no expected impact to this plant.

3.6 Sensitive or Critical Habitat

No sensitive plant communities are associated with the proposed building envelopes, access roads or surrounding environment. The flora present is typical for the region. There is no designated critical habitat for any plants associated with the project.

3.7 CNDDDB Field Forms

No special-status plants were identified on the proposed building envelopes, access roads or surrounding environment. No CNDDDB field forms were filed with DFG.

4.0 ASSESSMENTS OF POTENTIAL IMPACTS

4.1 On-Site Impacts

A map from the CNDDDB for the records of special-status species in the proximity of the project is shown on Plate II. No special-status plant species were found on the site as shown in the tables above.

The proposed project will not impact any special-status plant species known for the region. There is no reason to expect any significant effects from the proposed project on any of the special-status species known for the area or the region.

4.2 Off-Site Impacts

This project poses no threat to any of the special-status species of the region. The CNDDDB map Plate II illustrates the known nearby populations. A five-mile CNDDDB search shows that there are no special-status species known from the project site or the immediate vicinity.

5.0 RECOMMENDED MEASURES to AVOID IMPACTS

Standard construction practices including silt and erosion control measures must be implemented to protect off site movement of sediment and dust during and post construction.

Mitigation is required where there is a potential “take” of critical or regulated resources and in this case there will be less than significant take and therefore, there is no need for mitigation as dictated by the site conditions.

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7.0 REPORT AUTHORS

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 eight years of experience in conducting Biological Assessments, DFG Habitat Assessments, COE 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, DFG Habitat Assessments, DFG SB 34 Mitigation projects, COE 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 1601-1603 permitting, and consulting on various projects. He has 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 DFG collecting permit.

122°24'00" W

38°19'00" N, 122°23'00" W
122°23'00" W

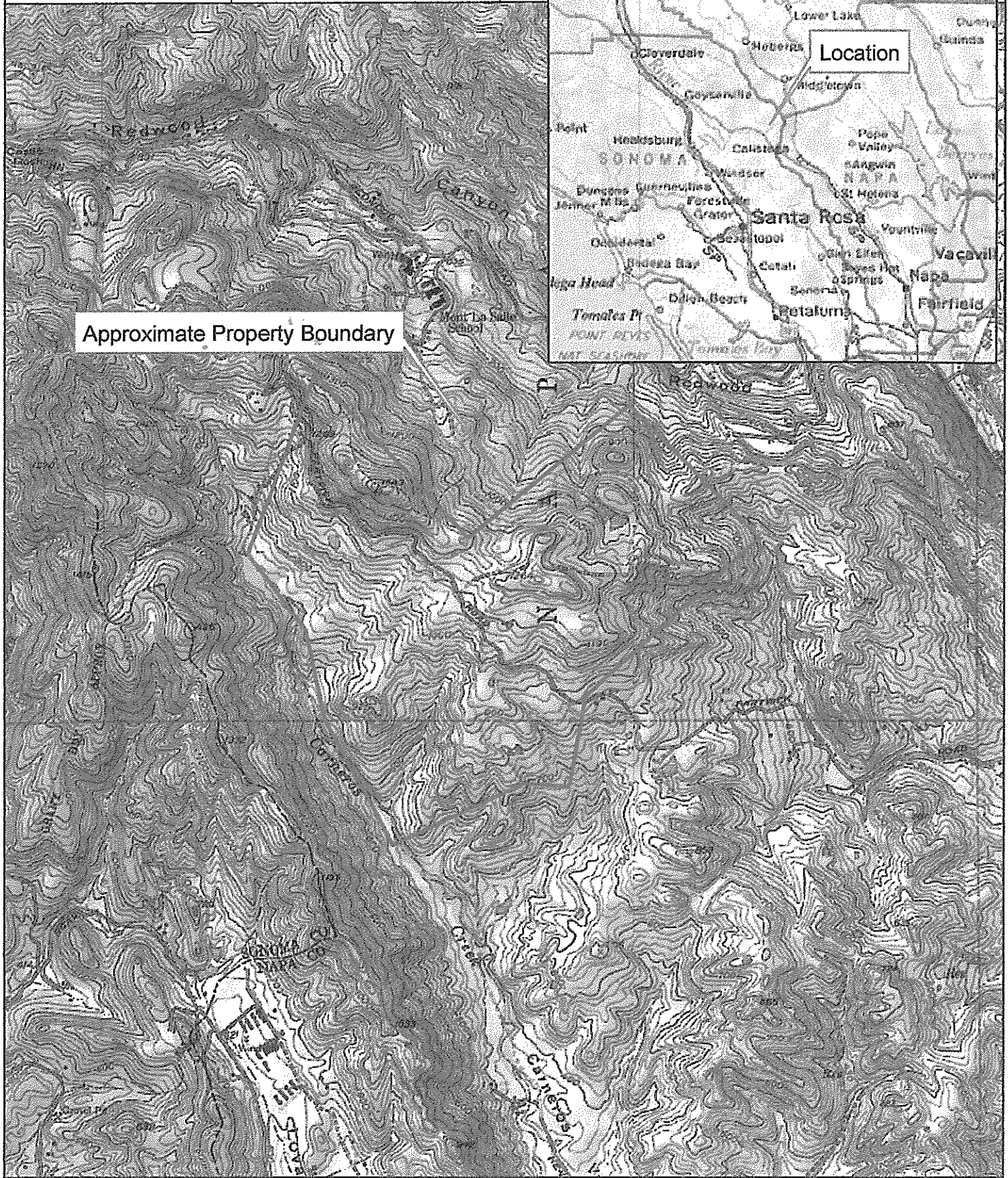
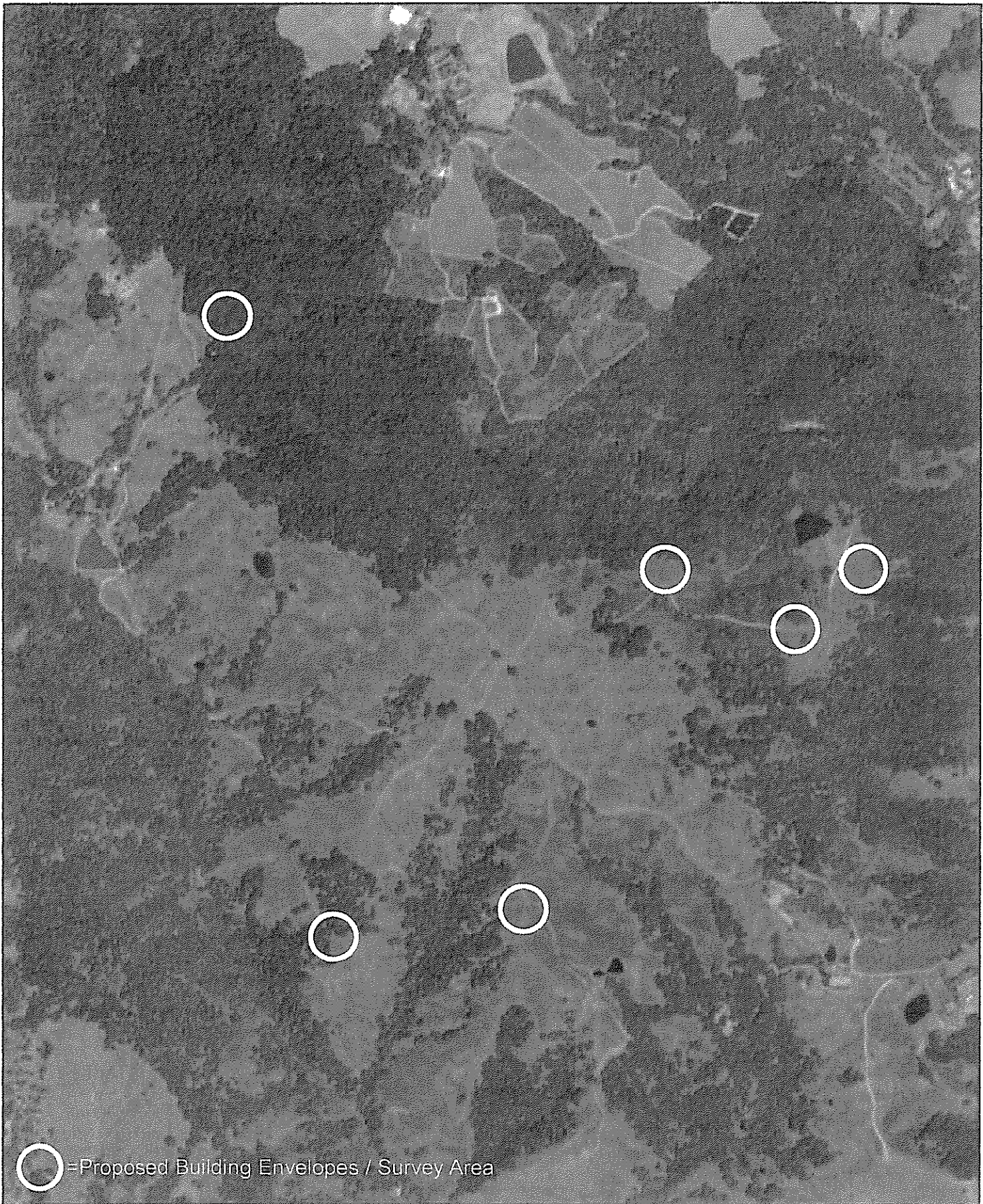


Plate I. Location / Site Map

(Sonoma Quadrangle)





○ = Proposed Building Envelopes / Survey Area

Plate III. Aerial Photo



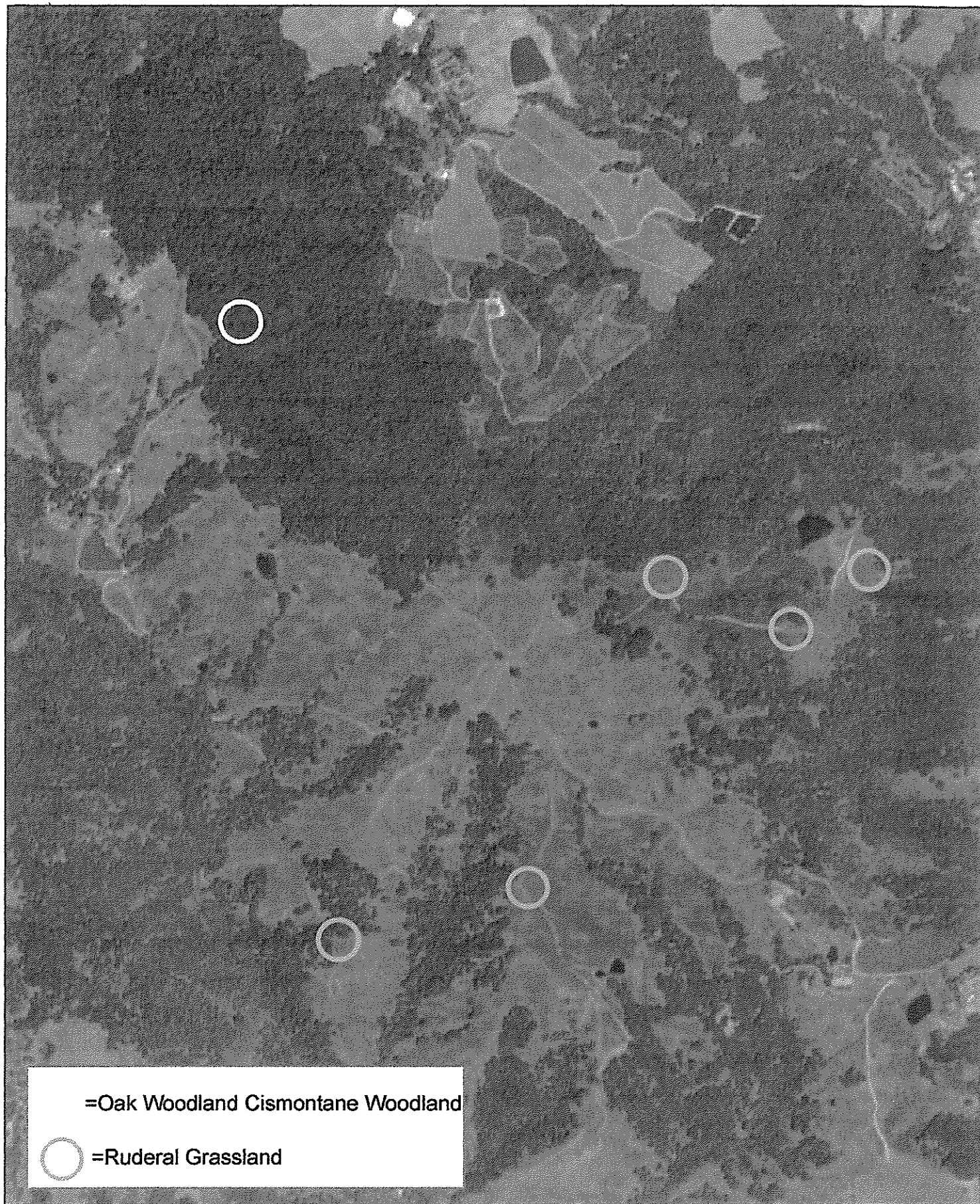


Plate IV. Vegetation Map Proposed Building Envelopes



APPENDIX A

Plants Observed Associated With The Project Sites

The nomenclature for the list of plants found on the project site and the immediate vicinity follows: Hale and Cole –1988, for the lichen; Smith -1956, for the algae; Arora -1985, for the fungi; Laughton-1967 and W.B. Schofield –1992, for the mosses; Schofield – 2002 for liverworts; and Hickman-1993, for the vascular plants.

The plant list is organized by major plant group in the following order: Cyanobacteria, Algae, Fungi - Basidiomycota, Fungi - Ascomycota, Slime Molds, Lichens, Mosses, Liverworts, Vascular Plants – Lycophyta, Vascular Plants - Sphenophyta, Vascular Plants - Pterophyta, Vascular Plants – Gymnosperms Conifers, Vascular Plants – Anthophyta Dicots Trees, Vascular Plants – Anthophyta Dicots Shrubs and Woody Vines, Vascular Plants – Anthophyta Dicots Herbs, Vascular Plants Monocots-Grasses, Vascular Plants Monocots - Sedges and Rushes, Vascular Plants Monocots – Herbs.

Habitat type indicates the general associated 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

Genus

Habitat Type

Abundance

Common Name

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

FUNGI

Basidiomycota- Club Fungi

LYCOPERDIALES

Calvatia booniana

Grasslands

Occasional

Giant Western Puffball

POLYPORACEAE

Ganoderma applanatum

On Conifers or Hardwoods

Common

Artist's Conk

Laetiporus sulphurus

On Dead Logs and Stumps

Common

Sulfur Shelf; Chicken of the Woods

Schizophyllum commune

Woodlands on Dead Wood

Common

Split-gill

Stereum hirsutum

Woodlands on Dead Wood

Common

False Turkey Tail

Trametes versicolor

Woodlands on Dead Wood

Common

Turkey Tail

Trametes hirsuta

Woodlands on Dead Wood

Common

Hairy Trukey Tail

FUNGI

Ascomycota - Sac Fungi

PYRENOMYCETES

Hypoxylon ssp.

Woodlands

Common

NCN

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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MOSSES**MINACEAE**

<i>Alsia californica</i>	On Oaks	Common
NCN		
<i>Dendroalsia abietina</i> (Hook.) Brit.	Woodlands	Common
NCN		
<i>Hedwigia stellata</i>	Grasslands on Rocks	Common
NCN		
<i>Homalothecium nuttallii</i>	Epiphytic on Trees	Common
NCN		
<i>Orthotrichum lyellii</i> Hook & Tayl.	Woodlands, Upper Canopy	Common
NCN		
<i>Scleropodium touretii</i> (Brid.) L Koch.	Woodlands	Common
NCN		

LICHENS**FOLIOSE**

<i>Flavoparmelia caperata</i>	On Oaks	Common
NCN		
<i>Flavopunctilia flaventor</i>	On Oaks	Common
NCN		
<i>Parmelia sulcata</i>	On Oaks	Common
NCN		
<i>Parmelina quercina</i>	On Oaks	Common
NCN		
<i>Parmotrema chinense</i>	On Oaks	Common
NCN		
<i>Physconia detersa</i>	On Oak Limbs	Common
NCN		
<i>Xanthoria polycarpa</i>	On Oaks	Common
NCN		
<i>Xanthoparmelia mexicana</i>	On Rocks	Common
NCN		

FRUTICOSE

<i>Evernia prunastri</i>	On Oaks	Common
NCN		
<i>Ramalina farinacea</i>	On Oaks	Common
NCN		
<i>Ramalina menziesii</i>	On Oaks	Common
NCN		

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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<i>Usnea arizonica</i>	On Oaks	Common
NCN		
CRUSTOSE		
<i>Caloplaca saxicola</i>	On Rocks	Common
NCN		
<i>Leicidia atrobrunnea</i>	On Rocks	Common
NCN		
<i>Leicidia tessellata</i>	On Rocks With Rings of Aapothecia	Common
NCN		
<i>Ochrolechia pallescens</i>	On Oaks	Common
NCN		
<i>Pertusaria armaria</i>	On Oaks	Common
NCN		

VASCULAR PLANTS DIVISION PTEROPHYTA**DENNSTAEDTIACEAE**

<i>Pteridium aquilinum</i> var. <i>pubescens</i>	Grasslands or Woodlands	Common
Bracken Fern		

DRYOPTERIDACEAE

<i>Athyrium filix-femina</i>	Conifer Woodlands-Shade	Common
Western Lady Fern		
<i>Dryopteris arguta</i>	Oak Woodlands	Common
Coastal Wood Fern		

PTERIDACEAE

<i>Pentagramma triangularis</i>	Riparian or Shady Woodlands	Common
Goldback Fern		

VASCULAR PLANTS DIVISION CONIFEROPHYTA—GYMNOSPERMS**PINACEAE**

<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	Woodlands	Common
Douglas-fir		

TAXACEAE

<i>Torreya californica</i>	Woodlands Deep Canyons	Occasional
California Nutmeg		

TAXODIACEAE

<i>Sequoia sempervirens</i>	Redwood Probably Planted	Common
Redwood		

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**CLASS--DICOTYLEDONAE- TREES****ACERACEAE***Acer macrophyllum*

Riparian

Occasional

Bigleaf Maple

ERICACEAE*Arbutus menziesii*

Woodlands

Common

Madrone

FAGACEAE*Quercus agrifolia*

Woodlands

Common

Live Oak

Quercus chrysolepis

Woodlands

Common

Canyon Live Oak, Maul

Quercus garryana

Woodlands

Common

Oregon Oak

Quercus kelloggii

Woodlands

Common

Black Oak

Quercus lobata

Valley Grasslands

Common

Valley Oak

**Quercus suber*

Ruderal, Cultivated

Occasional

Cork Oak

Quercus wislizeni

Woodlands

Occasional

Interior Live Oak

HIPPOCASTANACEAE*Aesculus californica*

Woodlands, Riparian

Common

California Buckeye

LAURACEAE*Umbellularia californica*

Woodlands

Common

California Bay

ROSACEAE**Prunus cerasifera.*

Escape, Ruderal

Occasional

Cherry Plum

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**CLASS--DICOTYLEDONAE-SHRUBS AND WOODY VINES****ANACARDIACEAE***Toxicodendron diversilobum*

Woodlands

Common

Poison Oak

ASTERACEAE*Baccharis pilularis*

Woodlands, Grasslands

Common

Coyote Brush

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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BETULACEAE

Corylus cornuta var. *californica* Riparian, Woodlands Occasional
Hazelnut

CAPRIFOLIACEAE

Lonicera hispidula var. *vacillans* Woodlands, Riparian Occasional
Honeysuckle

Sambucus mexicana = (*S. caerulea*) Shrub/Scrub Occasional
Elderberry

Symphoricarpos albus var. *laevigatus* Riparian, Shrub/Scrub Common
Snowberry Woodlands

ERICACEAE

Arctostaphylos manzanita ssp. *manzanita* Woodlands Common
Common Manzanita

FABACEAE

**Genista monspessulana* Woodlands Common
Broom, French Broom

ROSACEAE

Heteromeles arbutifolia Shrub/Scrub Common
Christmas Berry, Toyon

Rosa californica Grasslands, Edge of Woodlands Common
Rose

**Rubus armeniacus* = *R. procerus* Ruderal Common
Himalayan Blackberry

Rubus leucodermis Woodlands Common
Western Raspberry

SCROPHULARIACEAE

Mimulus aurantiacus Woodlands Occasional
Bush Monkey Flower

VITACEAE

Vitis californica Riparian Woodlands Occasional
California Wild Grape

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**CLASS--DICOTYLEDONAE-HERBS****APIACEAE**

**Conium maculatum* Riparian Common
Poison Hemlock

**Foeniculum vulgare* Ruderal Common
Fennel

Oenanthe sarmentosa Riparian Occasional
NCN

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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<i>Osmorhiza chilense</i>	Woodlands, Ruderal	Common
Sweet Cicely		
<i>Sanicula bipinnatifida</i>	Grasslands, Woodlands	Common
Purple Sanicle		
<i>Sanicula crassicaulis</i>	Woodlands	Common
Pacific Sanicle		
* <i>Torilis arvensis</i>	Grasslands Woodlands	Common
Hedge-parsley		
ASCLEPIADACEAE		
<i>Asclepias fascicularis</i>	Ruderal Along Washes	Occasional
Narrow-leaf Milkweed		
ASTERACEAE		
<i>Achillea millefolium</i>	Ruderal	Common
Yarrow		
<i>Achyrachaena mollis</i>	Grasslands	Occasional
Blow-wives		
<i>Adenocaulon bicolor</i>	Woodlands	Common
Trail Plant		
<i>Agoseris heterophylla</i>	Ruderal	Occasional
Annual Agoseris		
* <i>Anthemis cotula</i>	Ruderal	Common
Mayweed, Stinkweed, Dog-fennel		
<i>Arnica discoidea</i>	Chaparral, Foothill Woodland	Occasional
Rayless Arnica		
* <i>Carduus pycnocephalus</i>	Woodlands	Common
Italian Thistle		
* <i>Centarea calcitrapa</i>	Grasslands	Common
Purple Star Thistle		
* <i>Centaurea solstitialis</i>	Grasslands, Ruderal	Common
Yellow Star Thistle		
* <i>Cirsium vulgare</i>	Grasslands, Ruderal	Common
Bull Thistle		
* <i>Chamomilla suaveolens</i>	Ruderal	Common
Pineapple Weed		
* <i>Cichorium intybus</i>	Ruderal	Occasional
Chicory		
<i>Gnaphalium californicum</i>	Dry Open Woodlands	Occasional
Cudweed		
* <i>Filago gallica</i>	Ruderal Grasslands	Occasional
Herba Impa		

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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<i>Hemizonia pungens</i> ssp. <i>pungens</i>	Grasslands	Common
Common Spikeweed Tarweed		
<i>Hieracium albiflorum</i>	Woodlands, Grasslands	Occasional
White-flowered Hawkweed		
* <i>Hypocheris glabra</i>	Ruderal	Common
Cat's Ear		
<i>Hypochaeris radiata</i>	Ruderal	Common
Harry Cat's Ear		
<i>Madia elegans</i> ssp. <i>elegans</i>	Ruderal, Grasslands	Common
Common Madia		
<i>Madia exigua</i>	Grasslands	Common
Threadstem Madia, Tarweed		
* <i>Lactuca saligna</i>	Ruderal	Occasional
Willow Lettuce		
* <i>Lactuca serriola</i>	Ruderal	Occasional
Prickly Lettuce		
* <i>Rhagadiolus stellatus</i>	Riparian	Common
Wild Endive		
<i>Solidago canadensis</i> ssp. <i>elongata</i>	Ruderal	Common
Canadian Golden Rod		
* <i>Sonchus oleraceus</i>	Ruderal	Common
Common Sow Thistle		
* <i>Sonchus asper</i> var. <i>asper</i>	Ruderal	Common
Prickly Sow Thistle		
* <i>Senecio vulgaris</i>	Ruderal	Common
Common Groundsel		
* <i>Silybum marianum</i>	Ruderal	Common
Milk Thistle		
<i>Wyethia glabra</i>	Edge of Woodlands	Common
Coast Mules Ears		
* <i>Xanthium spinosum</i>	Ruderal	Occasional
Spiny Cocklebur		

BORAGINACEAE

<i>Amsinckia menziesii</i> var. <i>menziesii</i>	Grasslands	Occasional
Fiddleneck		
<i>Cyanoglossum grande</i>	Woodlands	Common
Hound's Tongue		
<i>Plagiobothrys nothofulvus</i>	Grasslands, Woodlands	Common
Popcorn Flower		

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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BRASSICACEAE

* <i>Brassica rapa</i>	Grasslands, Ruderal	Common
Field Mustard		
* <i>Capsella bursa-pastoris</i>	Ruderal	Common
Shepherd's Purse		
<i>Cardamine californica</i> = (<i>Dentaria</i>)	Woodlands	Common
Milk Maids, Tooth Wort		
* <i>Cardamine hirsuta</i> = <i>C. oligosperma</i>	Ruderal	Common
Bitter-cress		
* <i>Hirschfeldia incana</i> (<i>B. geniculata</i>)	Woodlands	Common
Summer Mustard		
* <i>Raphanus sativus</i>	Ruderal	Common
Wild Radish		

CARYOPHYLLACEAE

* <i>Petrohagia nanteuillii</i>	Grasslands	Common
Proliferous Pink, Grass Pink		
* <i>Silene gallica</i>	Ruderal/Grasslands/oak Woodlands	Common
Windmill Pink		
* <i>Stellaria media</i>	Ruderal	Common
Chickweed		

CHENOPODIACEAE

* <i>Chenopodium album</i>	Ruderal	Common
Lamb's Quarters, Pigweed		
* <i>Chenopodium ambrosioides</i>	Ruderal	Common
Mexican Tea		

CLUSIACEAE

* <i>Hypericum perforatum</i>	Ruderal/Grasslands	Occasional
Klamath Weed		

CONVOLVULACEAE

<i>Convolvulus arvensis</i>	Grasslands	Common
Morning-glory, Bindweed		

CUCURBITACEAE

<i>Marah oreganus</i>	Grassland	Occasional
Wild Cucumber, Man-root		

EUPHORBIACEAE

<i>Eremocarpus setigerus</i>	Ruderal	Common
Turkey Mullein, Dove Weed		
<i>Euphorbia crenulata</i>	Ruderal	Common
Chinese Caps		

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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FABACEAE

<i>Lathyrus vestitus</i> var. <i>vestitus</i>	Woodlands	Occasional
Hillside Pea		
* <i>Lotus corniculatus</i> = <i>L. tenuis</i>	Grasslands, Ruderal	Common
Birdfoot Trefoil		
<i>Lotus micranthus</i>	Grasslands, Ruderal	Common
Small Flowered Lotus		
<i>Lupinus nanus</i>	Grasslands	Common
Lupine		
<i>Lupinus pachylobus</i>	Grasslands	Common
Big Pod Lupine		
* <i>Medicago arabica</i>	Ruderal	Common
Spotted Bur Clover		
* <i>Medicago polymorpha</i>	Ruderal, Grasslands	Common
California Bur Clover		
* <i>Trifolium angustifolium</i>	Ruderal	Occasional
Narrow-leaved Clover		
* <i>Trifolium campestre</i>	Grasslands	Common
Hop-clover		
* <i>Trifolium hybridum</i>	Ruderal	Common
Alsike Clover		
* <i>Trifolium hirtum</i>	Ruderal	Common
Rose Clover		
* <i>Trifolium subterraneum</i>	Ruderal	Common
Subterranean Clover		
* <i>Vicia ludoviciana</i>	Ruderal	Common
Slender Vetch, California Vetch		
* <i>Vicia villosa</i> ssp. <i>villosa</i>	Ruderal	Common
Hairy Vetch, Winter Vetch		
* <i>Vicia sativa</i> ssp. <i>sativa</i>	Grasslands	Common
Vetch		

GERANIACEAE

* <i>Erodium botrys</i>	Grasslands	Common
Broadleaf Filaree, Long-beaked Filaree		
* <i>Geranium dissectum</i>	Grasslands	Common
Common Geranium		
* <i>Geranium molle</i>	Grasslands	Common
Dove's Foot Geranium		
* <i>Geranium potentilloides</i>	Ruderal, Shady Areas	Common
NCN		

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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

LAMIACEAE**Mentha pulegium*

Ruderal

Occasional

Pennyroyal

**Stachys arvensis*

Ruderal

Common

Stachys

MALVACEAE**Malva parviflora*

Ruderal

Common

Cheeseweed, Mallow

ONAGRACEAE*Camissonia ovata*

Grasslands

Common

Sun Cup

Epilobium brachycarpum

Ruderal Dry Areas

Common

Willow Herb

PAPAVERACEAE*Eschscholzia californica*

Grasslands

Common

California Poppy

PLANTAGINACEAE*Plantago erecta*

Grassland, Open Woodland

Common

California Plantain

**Plantago lanceolata*

Ruderal

Common

English Plantain

POLEMONIACEAE*Navarretia squarrosa*

Ruderal, Grasslands

Common

Skunkweed

POLYGONACEAE**Polygonum agrocoleon*

Ruderal Wet Ground

Occasional

Persian Wireweed

**Polygonum arenastrum*

Ruderal

Common

Common Prostrate Knotweed

**Rumex acetosella*

Ruderal

Common

Sheep Sorrel

**Rumex crispus*

Ruderal

Common

Curly Dock

PORTULACACEAE*Calandrinia ciliata*

Grasslands

Common

Red Maids

Claytonia perfoliata ssp. *perfoliata*

Woodlands, Riparian

Common

Miners Lettuce

PRIMULACEAE**Anagallis arvensis*

Ruderal

Common

Scarlet Pimpernel

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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

RANUNCULACEAE*Ranunculus californicus*

Grasslands, Woodlands

Common

Buttercup

**Ranunculus muricatus*

Grasslands, Ruderal

Occasional

Pickle-fruited Buttercup

RUBIACEAE*Galium aparine*

Woodlands, Riparian

Common

Goose Grass

Galium californicum

Woodlands

Occasional

California Bedstraw, Cleavers

SCROPHULARIACEAE**Bellardia trixago*

Grasslands

Common

NCN

**Kickxia spuria*

Ruderal

Occasional

Fluellin

**Parentucellia viscosa*

Grasslands

Common

Yellow Parentucellia

**Verbascum thapsus*

Ruderal

Occasional

Wooley Mullein

URTICACEAE*Urtica dioica* ssp. *holosericea*

Riparian

Common

Stinging Nettle

VISCACEAE*Phoradendron villosum*

Woodlands

Common

Oak Mistletoe

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**CLASS--MONOCOTYLEDONAE-GRASSES****POACEAE****Aira caryophylla*

Grassland

Common

Silver European Hairgrass

**Avena barbata*

Grasslands

Common

Slender Wild Oat

**Avena fatua*

Grasslands

Common

Wild Oat

**Avena sativa*

Grasslands

Common

Cultivated Oat

**Briza maxima*

Grasslands, Ruderal

Common

Large Quaking Grass, Rattlesnake Grass

**Briza minor*

Grasslands, Ruderal

Common

Small Quaking Grass

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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

<i>Bromus carinatus</i> var. <i>carinatus</i>	Grasslands	Common
California Brome		
* <i>Bromus diandrus</i> =(B. <i>rigidus</i>)	Grasslands	Common
Ripgut Grass		
* <i>Bromus hordeaceus</i> =(B. <i>mollis</i>)	Grasslands	Common
Soft Chess, Blando Brome		
* <i>Cynosurus echinatus</i>	Ruderal	Common
Hedgehog, Dogtail		
* <i>Dactylis glomerata</i>	Grasslands	Occasional
Orchard Grass		
* <i>Echinochloa crus-galli</i>	Ruderal	Common
Barnyard Grass		
<i>Elymus glaucus</i> ssp. <i>glaucus</i>	Woodlands	Common
Blue Wildrye		
* <i>Festuca arundinacea</i>	Grasslands	Common
Tall Fescue		
<i>Hordeum depressum</i>	Grasslands	Occasional
Low Barley		
* <i>Lolium multiflorum</i>	Grasslands	Common
Italian Rye Grass		
* <i>Lolium perenne</i>	Grasslands	Common
Perennial Rye Grass		
<i>Melica californica</i>	Oak, Conifer Woodland	Occasional
California Melic		
<i>Nassella pulchra</i> = (<i>Stipa pulchra</i>)	Oak WoodlandGrasslands	Occasional
Purple Needle Grass		
* <i>Poa annua</i>	Grasslands	Common
Annual Bluegrass		
* <i>Polypogon monspeliensis</i>	Wetlands	Common
Rabbitfoot Grass, Annual Beard Grass		
* <i>Taeniantherum caput-medusae</i>	Grasslands	Common
Medusahead		
* <i>Vulpia myuros</i> var. <i>hirsuta</i>	Grasslands	Common
Pacific Foxtail Fescue,		
* <i>Vulpia myuros</i> var. <i>myuros</i>	Grasslands	Common
Rattail Fescue, Zorro Annual Fescue		

MAJOR PLANT GROUP**Family**

Genus

Habitat Type

Abundance

Common Name

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

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**CLASS--MONOCOTYLEDONAE-SEDGES AND RUSHES****CYPERACEAE**

<i>Scirpus americanus</i>	Palustrine	Occasional
American Bullrush		

JUNCACEAE

<i>Juncus bufonius</i> var. <i>bufonius</i>	Grasslands	Common
Toad Rush		
<i>Juncus effusus</i>	Palustrine	Common
Rush		
<i>Luzula comosa</i>	Grasslands, Woodlands	Common
Wood Rush		

VASCULAR PLANTS DIVISION ANTHOPHYTA --ANGIOSPERMS**CLASS--MONOCOTYLEDONAE-HERBS****ALISMACEAE**

<i>Alisma plantago-aquatica</i>	Aquatic	Common
Water Plantain		

IRIDACEAE

<i>Iris macrosiphon</i>	Grasslands	Occasional
Long-tubed Iris		
<i>Sisyrinchium bellum</i>	Grasslands	Common
Blue-eyed Grass		

LILIACEAE

<i>Brodiaea elegans</i>	Grasslands	Common
Harvest Brodiaea		
<i>Calochortus luteus</i>	Grasslands	Occasional
Yellow Mariposa Lily		
<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	Woodlands, Grasslands	Common
Soap Plant		
<i>Dichelostemma capitatum</i>	Grasslands, Open Woodlands	Occasional
Blue Dicks		
<i>Triteleia hyacinthina</i>	Grasslands	Occasional
White Brodiaea		
<i>Triteleia laxa</i> = (<i>Brodiaea laxa</i>)	Grasslands	Occasional
Ithuriel's Spear		

TYPHACEAE

<i>Typha angustifolia</i>	Riparian	Common
Narrow-leaved Cattail		
<i>Typha latifolia</i>	Riparian	Common
Broad-leaved Cattail		

APPENDIX B

California Department of Fish and Game Rare Find Three Special-status species for the Quadrangle and Surrounding Quadrangles

California Native Plant Society Electronic Inventory for the Quadrangle and Surrounding Quadrangles

California Department of Fish and Game
Natural Diversity Database

Selected Elements by Scientific Name - Sonoma Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 <i>Actinemys marmorata</i> western pond turtle	ARAAD02030			G3G4	S3	SC
2 <i>Actinemys marmorata marmorata</i> northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC
3 <i>Adela oplerella</i> Opler's longhorn moth	IILEE0G040			G2G3	S2S3	
4 <i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020			G2G3	S2	SC
5 <i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	PMLIL021R1			G5T2	S2.2	1B.2
6 <i>Alopecurus aequalis</i> var. <i>sonomensis</i> Sonoma alopecurus	PMPOA07012	Endangered		G5T1Q	S1.1	1B.1
7 <i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	PDFAB08012			G4T2	S2.2	1B.2
8 <i>Andrena blennospermatis</i> A vernal pool andrenid bee	IIHYM35030			G2	S2	
9 <i>Antrozous pallidus</i> pallid bat	AMACC10010			G5	S3	SC
10 <i>Aquila chrysaetos</i> golden eagle	ABNKC22010			G5	S3	SC
11 <i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> Rincon manzanita	PDERI041G4			G3T1	S1.1	1B.1
12 <i>Ardea alba</i> great egret	ABNGA04040			G5	S4	
13 <i>Ardea herodias</i> great blue heron	ABNGA04010			G5	S4	
14 <i>Astragalus claranus</i> Clara Hunt's milk-vetch	PDFAB0F240	Endangered	Threatened	G1	S1.1	1B.1
15 <i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	PDFAB0F8R1			G1T1	S1.1	1B.2
16 <i>Athene cunicularia</i> burrowing owl	ABNSB10010			G4	S2	SC
17 <i>Atriplex joaquiniana</i> San Joaquin spearscale	PDCHE041F3			G2	S2.1	1B.2
18 <i>Blennosperma bakeri</i> Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1.2	1B.1
19 <i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened		G3	S2S3	
20 <i>Brodiaea californica</i> var. <i>leptandra</i> narrow-anthered California brodiaea	PMLIL0C022			G4?T2T3	S2S3.2	1B.2
21 <i>Buteo regalis</i> ferruginous hawk	ABNKC19120			G4	S3S4	SC
22 <i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070		Threatened	G5	S2	
23 <i>Caecidotea tomalensis</i> Tomales isopod	ICMAL01220			G2	S2	

California Department of Fish and Game

Natural Diversity Database

Selected Elements by Scientific Name - Sonoma Quadrangle and Surrounding Quadrangles

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
24	<i>Calasellus californicus</i> An isopod	ICMAL34010			G2G3	S2S3	
25	<i>Calicina diminua</i> Marin blind harvestman	ILARAU8040			G1	S1	
26	<i>California macrophylla</i> round-leaved filaree	PDGER01070			G3	S3.1	1B.1
27	<i>Calycadenia micrantha</i> small-flowered calycadenia	PDAST1P0C0			G2G3	S2S3.2	1B.2
28	<i>Ceanothus confusus</i> Rincon Ridge ceanothus	PDRHA04220			G2	S2.2	1B.1
29	<i>Ceanothus divergens</i> Callistoga ceanothus	PDRHA04240			G2	S2.2	1B.2
30	<i>Ceanothus purpureus</i> holly-leaved ceanothus	PDRHA04160			G2	S2.2	1B.2
31	<i>Ceanothus sonomensis</i> Sonoma ceanothus	PDRHA04420			G2	S2.2	1B.2
32	<i>Centromadia parryi</i> ssp. <i>parryi</i> pappose tarplant	PDAST4R0P2			G4?T2	S2.2	1B.2
33	<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened		G4T3	S2	SC
34	<i>Chorizanthe valida</i> Sonoma spineflower	PDPGN040V0	Endangered	Endangered	G1	S1.1	1B.1
35	<i>Circus cyaneus</i> northern harrier	ABNKC11010			G5	S3	SC
36	<i>Coastal Brackish Marsh</i>	CTT52200CA			G2	S2.1	
37	<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Candidate	Endangered	G5T3Q	S1	
38	<i>Cordylanthus maritimus</i> ssp. <i>palustris</i> Point Reyes bird's-beak	PDSCR0J0C3			G4?T2	S2.2	1B.2
39	<i>Cordylanthus mollis</i> ssp. <i>mollis</i> soft bird's-beak	PDSCR0J0D2	Endangered	Rare	G2T1	S1.1	1B.2
40	<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010			G4	S2S3	SC
41	<i>Cypseloides niger</i> black swift	ABNUA01010			G4	S2	SC
42	<i>Danaus plexippus</i> monarch butterfly	IILEPP2010			G5	S3	
43	<i>Delphinium luteum</i> yellow larkspur	PDRAN0B0Z0	Endangered	Rare	G1	S1.1	1B.1
44	<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0			G3	S3.1	2.2
45	<i>Elanus leucurus</i> white-tailed kite	ABNKC06010			G5	S3	
46	<i>Erigeron angustatus</i> narrow-leaved daisy	PDAST3M5G0			G1	S1.2?	1B.2
47	<i>Fritillaria liliacea</i> fragrant fritillary	PMLILOV0C0			G2	S2.2	1B.2

California Department of Fish and Game
Natural Diversity Database

Selected Elements by Scientific Name - Sonoma Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
48 <i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	ABPBX1201A			G5T2	S2	SC
49 <i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Delisted	Endangered	G5	S2	
50 <i>Hesperolinon bicarpellatum</i> two-carpellate western flax	PDLIN01020			G2	S2.2	1B.2
51 <i>Hesperolinon congestum</i> Marin western flax	PDLIN01060	Threatened	Threatened	G2	S2.1	1B.1
52 <i>Hesperolinon sp. nov. "serpentinum"</i> Napa western flax	PDLIN010D0			G2	S2.1	1B.1
53 <i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010			G1G2	S1S2	
54 <i>Hydroporus leechi</i> Leech's skyline diving beetle	IICOL55040			G1?	S1?	
55 <i>Hydroprogne caspia</i> Caspian tern	ABNNM08020			G5	S4	
56 <i>Hypomesus transpacificus</i> Delta smelt	AFCHB01040	Threatened	Threatened	G1	S1	
57 <i>Juglans hindsii</i> Northern California black walnut	PDJUG02040			G1	S1.1	1B.1
58 <i>Lasthenia conjugens</i> Contra Costa goldfields	PDAST5L040	Endangered		G1	S1.1	1B.1
59 <i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041		Threatened	G4T1	S1	
60 <i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta tule pea	PDFAB250D2			G5T2	S2.2	1B.2
61 <i>Layia septentrionalis</i> Colusa layia	PDAST5N0F0			G2	S2.2	1B.2
62 <i>Legenere limosa</i> legenere	PDCAM0C010			G2	S2.2	1B.1
63 <i>Leptosiphon jepsonii</i> Jepson's leptosiphon	PDPLM09140			G2	S2.2	1B.2
64 <i>Lilaeopsis masonii</i> Mason's lilaeopsis	PDAP119030		Rare	G3	S3.1	1B.1
65 <i>Limnanthes vincularis</i> Sebastopol meadowfoam	PDLIM02090	Endangered	Endangered	G2	S2.1	1B.1
66 <i>Lupinus sericatus</i> Cobb Mountain lupine	PDFAB2B3J0			G2	S2.2	1B.2
67 <i>Melospiza melodia samuelis</i> San Pablo song sparrow	ABPBXA301W			G5T2?	S2?	SC
68 <i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1			G4T2	S2.1	1B.1
69 <i>Navarretia leucocephala ssp. pauciflora</i> few-flowered navarretia	PDPLM0C0E4	Endangered	Threatened	G4T1	S1.1	1B.1
70 <i>Northern Coastal Salt Marsh</i>	CTT52110CA			G3	S3.2	
71 <i>Northern Vernal Pool</i>	CTT44100CA			G2	S2.1	

California Department of Fish and Game

Natural Diversity Database

Selected Elements by Scientific Name - Sonoma Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
72 <i>Oncorhynchus mykiss irideus</i> Steelhead - Central California Coast ESU	AFCHA0209G	Threatened		G5T2Q	S2	
73 <i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma beardtongue	PDSCR1L483			G4T1	S1.3	1B.3
74 <i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020			G5	S3	SC
75 <i>Plagiobothrys mollis</i> var. <i>vestitus</i> Petaluma popcorn-flower	PDBOR0V0Q2			G4?TX	SX	1A
76 <i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020			G2	S2	SC
77 <i>Polygonum marinense</i> Marin knotweed	PDPGN0L1C0			G1Q	S1.1	3.1
78 <i>Rallus longirostris obsoletus</i> California clapper rail	ABNME05016	Endangered	Endangered	G5T1	S1	
79 <i>Rana aurora draytonii</i> California red-legged frog	AAABH01022	Threatened		G4T2T3	S2S3	SC
80 <i>Rana boylei</i> foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
81 <i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S1S2	
82 <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> Point Reyes checkerbloom	PDMAL11012			G5T2	S2.2	1B.2
83 <i>Sidalcea oregana</i> ssp. <i>valida</i> Kenwood Marsh checkerbloom	PDMAL110K5	Endangered	Endangered	G5T1	S1.1	1B.1
84 <i>Sorex ornatus sinuosus</i> Suisun shrew	AMABA01103			G5T1	S1	SC
85 <i>Speyeria zerene myrtleae</i> Myrtle's silverspot	IILEPJ6089	Endangered		G5T1	S1	
86 <i>Streptanthus breweri</i> var. <i>hesperidis</i> green jewel-flower	PDBRA2G092			G5T2	S2.2	1B.2
87 <i>Symphyotrichum lentum</i> Suisun Marsh aster	PDASTE8470			G2	S2.2	1B.2
88 <i>Syncaris pacifica</i> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G1	S1	
89 <i>Talanites ubicki</i> Ubick's gnaphosid spider	ILARA98030			G1	S1	
90 <i>Taxidea taxus</i> American badger	AMAJF04010			G5	S4	SC
91 <i>Trifolium amoenum</i> showy indian clover	PDFAB40040	Endangered		G1	S1.1	1B.1
92 <i>Trifolium depauperatum</i> var. <i>hydrophilum</i> saline clover	PDFAB400R5			G5T2?	S2.2?	1B.2
93 <i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	IMGASJ7040			G2G3	S2S3	
94 <i>Valley Needlegrass Grassland</i>	CTT42110CA			G1	S3.1	
95 <i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080			G5	S2.3	2.3

California Department of Fish and Game












Natural Diversity Database

Selected Elements by Scientific Name - Species Known to Occur Within Five Miles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 <i>Actinemys marmorata marmorata</i> northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC
2 <i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	PDFAB08012			G4T2	S2.2	1B.2
3 <i>Antrozous pallidus</i> pallid bat	AMACC10010			G5	S3	SC
4 <i>Blennosperma bakeri</i> Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1.2	1B.1
5 <i>Brodiaea californica</i> var. <i>leptandra</i> narrow-anthered California brodiaea	PMLIL0C022			G4?T2T3	S2S3.2	1B.2
6 <i>Ceanothus sonomensis</i> Sonoma ceanothus	PDRHA04420			G2	S2.2	1B.2
7 <i>Cypseloides niger</i> black swift	ABNUA01010			G4	S2	SC
8 <i>Leptosiphon jepsonii</i> Jepson's leptosiphon	PDPLM09140			G2	S2.2	1B.2
9 <i>Lupinus sericatus</i> Cobb Mountain lupine	PDFAB2B3J0			G2	S2.2	1B.2
10 <i>Rana boylei</i> foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
11 <i>Syncaris pacifica</i> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G1	S1	
12 <i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080			G5	S2.3	2.3

Status: search results - Fri, Oct. 12, 2007 13:24 c

Your Quad Selection: Sonoma (500C) 3812234, Cuttings Wharf (483A) 3812223, Sears Point (483B) 3812224, Glen Ellen (501D) 3812235, Kenwood (501A) 3812245, Petaluma River (484A) 3812225, Napa (500D) 3812233, Yountville (500A) 3812243, Rutherford (500B) 3812244

scientific	common	family	CNPS
<u>Allium peninsulare</u> var. <u>franciscanum</u> 	Franciscan onion	Liliaceae	List 1B.2
<u>Alopecurus aequalis</u> var. <u>sonomensis</u> 	Sonoma alopecurus	Poaceae	List 1B.1
<u>Amorpha californica</u> var. <u>napensis</u> 	Napa false indigo	Fabaceae	List 1B.2
<u>Arctostaphylos bakeri</u> ssp. <u>bakeri</u> 	Baker's manzanita	Ericaceae	List 1B.1
<u>Arctostaphylos canescens</u> ssp. <u>sonomensis</u> 	Sonoma manzanita	Ericaceae	List 1B.2
<u>Arctostaphylos stanfordiana</u> ssp. <u>decumbens</u> 	Rincon manzanita	Ericaceae	List 1B.1
<u>Aster lentus</u> 	Suisun Marsh aster	Asteraceae	List 1B.2
<u>Astragalus claranus</u> 	Clara Hunt's milk-vetch	Fabaceae	List 1B.1
<u>Astragalus tener</u> var. <u>tener</u> 	alkali milk-vetch	Fabaceae	List 1B.2
<u>Atriplex joaquiniana</u> 	San Joaquin spearscale	Chenopodiaceae	List 1B.2
<u>Blennosperma bakeri</u> 	Sonoma sunshine	Asteraceae	List 1B.1

<u>Brodiaea californica</u> var. <u>leptandra</u> 🌱	narrow-anthered California brodiaea	Liliaceae	List 1B.2
<u>Calycadenia micrantha</u>	small-flowered calycadenia	Asteraceae	List 1B.2
<u>Ceanothus confusus</u> 🌱	Rincon Ridge ceanothus	Rhamnaceae	List 1B.1
<u>Ceanothus divergens</u> 🌱	Calistoga ceanothus	Rhamnaceae	List 1B.2
<u>Ceanothus purpureus</u>	holly-leaved ceanothus	Rhamnaceae	List 1B.2
<u>Ceanothus sonomensis</u> 🌱	Sonoma ceanothus	Rhamnaceae	List 1B.2
<u>Centromadia parryi</u> ssp. <u>parryi</u> 🌱	pappose tarplant	Asteraceae	List 1B.2
<u>Chorizanthe valida</u> 🌱	Sonoma spineflower	Polygonaceae	List 1B.1
<u>Cordylanthus maritimus</u> ssp. <u>palustris</u> 🌱	Point Reyes bird's-beak	Scrophulariaceae	List 1B.2
<u>Cordylanthus mollis</u> ssp. <u>mollis</u> 🌱	soft bird's-beak	Scrophulariaceae	List 1B.2
<u>Downingia pusilla</u> 🌱	dwarf downingia	Campanulaceae	List 2.2
<u>Erigeron angustatus</u>	narrow-leaved daisy	Asteraceae	List 1B.2
<u>Erigeron biolettii</u> 🌱	streamside daisy	Asteraceae	List 3
<u>Fritillaria liliacea</u> 🌱	fragrant fritillary	Liliaceae	List 1B.2
<u>Hemizonia congesta</u> ssp. <u>leucocephala</u> 🌱	Hayfield tarplant	Asteraceae	List 3

<u>Hesperolinon bicarpellatum</u>	two-carpellate western flax	Linaceae	List 1B.2
<u>Hesperolinon congestum</u> 	Marin western flax	Linaceae	List 1B.1
<u>Hesperolinon serpentinum</u> 	Napa western flax	Linaceae	List 1B.1
<u>Juglans hindsii</u> 	Northern California black walnut	Juglandaceae	List 1B.1
<u>Lasthenia conjugens</u> 	Contra Costa goldfields	Asteraceae	List 1B.1
<u>Lathyrus jepsonii</u> var. <u>jepsonii</u> 	Delta tule pea	Fabaceae	List 1B.2
<u>Layia septentrionalis</u>	Colusa layia	Asteraceae	List 1B.2
<u>Legenere limosa</u> 	legenere	Campanulaceae	List 1B.1
<u>Leptosiphon jepsonii</u>	Jepson's leptosiphon	Polemoniaceae	List 1B.2
<u>Lessingia hololeuca</u> 	woolly-headed lessingia	Asteraceae	List 3
<u>Lilaeopsis masonii</u> 	Mason's lilaeopsis	Apiaceae	List 1B.1
<u>Limnanthes vinctans</u> 	Sebastopol meadowfoam	Limnanthaceae	List 1B.1
<u>Lupinus sericatus</u> 	Cobb Mountain lupine	Fabaceae	List 1B.2
<u>Micropus amphibolus</u>	Mt. Diablo cottonweed	Asteraceae	List 3.2
<u>Navarretia leucocephala</u> ssp. <u>bakeri</u> 	Baker's navarretia	Polemoniaceae	List 1B.1
<u>Navarretia leucocephala</u> ssp.	few-flowered navarretia	Polemoniaceae	List

<u>pauciflora</u>			1B.1
<u>Navarretia leucocephala</u> ssp. <u>plieantha</u> 🌱 🌱	many-flowered navarretia	Polemoniaceae	List 1B.2
<u>Penstemon newberryi</u> var. <u>sonomensis</u> 🌱	Sonoma beardtongue	Scrophulariaceae	List 1B.3
<u>Polygonum marinense</u> 🌱	Marin knotweed	Polygonaceae	List 3.1
<u>Sidalcea oregana</u> ssp. <u>valida</u>	Kenwood Marsh checkerbloom	Malvaceae	List 1B.1
<u>Streptanthus breweri</u> var. <u>hesperidis</u> 🌱	green jewel-flower	Brassicaceae	List 1B.2
<u>Trifolium amoenum</u> 🌱	showy Indian clover	Fabaceae	List 1B.1
<u>Trifolium depauperatum</u> var. <u>hydrophilum</u> 🌱	saline clover	Fabaceae	List 1B.2
<u>Viburnum ellipticum</u> 🌱	oval-leaved viburnum	Caprifoliaceae	List 2.3

KJELDSSEN BIOLOGICAL CONSULTING
Chris K. Kjeldsen Ph.D., Botany
Daniel T. Kjeldsen B.S., Natural Resource Management
923 St. Helena Ave.
Santa Rosa, CA 95404

April 6, 2009

To: Jon M. Webb, PLS 6709
Albion Surveys, Inc
1113 Hunt Avenue
St. Helena, CA 94574

Re: Fisher Property
APN 055-010-024/30/31
Partrick Road Napa County, CA

Special-Status Plant Survey Update

Review of Theodore W. Wooster May 2003 Wildlife Report

INTRODUCTION

As requested by Jon M. Webb, Albion Surveys, and the property owner we are providing update of the 2007 Special-Status Plant Survey. The update includes an April 1, 2009 field review, analysis of the most recent California Department of Fish and Game (DFG) California Natural Diversity Data Base (CNDDB) and US Fish and Wildlife special-status species lists.

The property is located west of the city of Napa, with access from the Partrick Road. The project site is within the Sonoma Quadrangle, Napa County. The property elevation ranges from approximately 500 feet to 1500 feet in elevation (See Plate I).

The purpose of this update is to:

- Review the DFG, CNDDB, and FWS database for any new critical habitat, or new listed species which could have potential for presence on the site;
- Review special-status database's for any new species distribution that may have occurred since 2007;
- Review the project for any changes in scope and their potential impacts;
- Review Lots 1, 2, and 3 for their potential impact(s) to montane hardwood-conifer forest habitats, and habitat for existing Northern Spotted Owl (NSO) activity;
- Check project site for any changes in vegetation since the last survey; and
- Provide a field check for any habitat alteration, fluctuations in species abundance, or colonization from seed dispersal or seed bank exposure.

PROPOSED PROJECT

The project is a proposed lot split. The three existing parcels (each over 320 acres) will be split into 6 parcels total, each over 160 acres with 6 designated building envelopes.

METHODS

A field review, for this update, was conducted on April 1, 2009. The proposed building envelopes and access road to Lots 1, 2, and 3 were reviewed to determine the potential for the presence for special-status species based on direct observation or indications that habitat is present which would support special-status species, and reviewed the sites for potential impacts to surrounding montane hardwood-conifer forest habitat.

Plants were identified in the field or specimens were collected, when necessary, for laboratory examination with a binocular microscope. Typically blooming examples are required for identification however, it is not the only method for identifying the presence of, or excluding the possibility of rare plants. Vegetative morphology and dried flower or fruit morphology which may persist long after the blooming period may also be used. Skeletal remains from previous season's growth can also be used for identification. The vegetative evaluation as a function of field experience can be used to identify species outside of the blooming period to verify or exclude the possibility of special-status plants in a study area.

Habitat is also a key characteristic for consideration of special-status species in a study area. Many special-status species are rare in nature because of their specific often very narrow habitat or environmental requirements. Their presence is limited by very specific environmental conditions such as: hydrology, microclimate, soils, nutrients, interspecific and intraspecific competition, and aspect or exposure. In some situations special-status species particularly annuals may not be present each year and in this case one has to rely on skeletal material from previous years. 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.

SPECIAL-STATUS SPECIES SCOPING

Special-status species scoping for the project site considered the following resources (see attachments):

- California Native Plant Society List of Special-status Plants for the Quadrangle and Surrounding Quadrangles, and
- Department of Fish and Game (DFG) California Natural Diversity Data Base (CNDDDB) List of Special-status species for the Quadrangle.
- Federal Endangered and Threatened Species that occur in the U.S.G.S. 7 1/2 Minute Quadrangle.

FINDINGS

The tables below present the special-status species reviewed in the 2007 study (tables) and tables II provides the updated species that now are included in the DFG CNDDDB (March update 2009).

Table I. Analysis of potential for “target” special-status plant species 2007. The table includes those plants known from within five miles of the property or from the region.

Scientific Name Common Name	Species Habitat Association or Plant Community	Flower Period	Present Within Project Site	Justification for Presence/Absence on Project Site
* <i>Amorpha californica</i> var. <i>napensis</i> Napa False Indigo	Cismontane Woodland, Lower Montane Coniferous Forest	April- July	No	Absence of habitat and associated vegetation.
* <i>Blennosperma bakeri</i> Sonoma Sunshine	Vernal Pools	April- June	No	Absence of requisite mesic habitat.
* <i>Brodiaea californica</i> var. <i>leptandra</i> Narrow Anthered California Brodiaea	Cismontane Woodland	May- June	No	Absence of typical vegetation associates.
* <i>Ceanothus</i> <i>sonomensis</i> Sonoma ceanothus	Chaparral	Feb.- April	No	Absence of requisite mesic habitat.
<i>Centromadia parryi</i> ssp. <i>parryi</i> Pappose Tarplant	Grasslands	May- July	No	Requisite habitat and vegetation associates absent on the site or in the immediate vicinity.
<i>Downingia pusilla</i> Dwarf Downingia	Wetlands	March- May	No	Absence of requisite mesic habitat or substrate on project site precludes presence.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i> Delta Tule Pea	Marsh lands	May- Sep.	No	Absence of requisite mesic habitat on project site precludes presence.
* <i>Leptosiphon jepsonii</i> Jepson’s Leptosiphon	Chaparral	April- May	No	Requisite habitat absent on the site or in the immediate vicinity.
* <i>Lupinus sericatus</i> Cobb Mt. Lupine	Chaparral, Cismontane Woodland	March- June	No	Absence of requisite mesic habitat on project site.
<i>Trifolium amoenum</i> Showy Indian Clover	Grassland	April- June	No	Absence of habitat and historic use of property.
<i>Trifolium</i> <i>depauperatus</i> var. <i>hydrophilum</i> Saline Clover	Marshes and Swamps, Grassland	April- June	No	Absence of mesic habitat required for presence.
* <i>Viburnum ellipticum</i> Oval-leaved Viburnum	Chaparral, Cismontane Woodland, Lower Coniferous Forest	May- June	No	Requisite habitat absent on the site or in the immediate vicinity.

Table II. Analysis of new 2009 listed special-status plant species CNDDB March 2009 update.

Scientific Name Common Name	Species Habitat Association or Plant Community	Flower Period	Present Within Project Site	Justification for Presence/Absence on Project Site
<i>Allium peninsulare</i> <i>var. franciscanum</i> Franciscan onion	Cismontane woodland, Valley and Foothill Grassland/Clay often Serpentine	May- June	No	Absence of requisite edaphic conditions.
<i>Hemizonia congesta</i> ssp. <i>congesta</i> Seaside Tarplant	Coastal Scrub, Valley and Foothill Grassland	April Oct.	No	Absence of requisite habitat.
<i>Horkelia tenuiloba</i> Thin-lobbed Horkelia	Broadleaved upland forest, chaparral, valley and foothill grassland, mesic (wet) openings, sandy soils.	May- July	No	Absence of typical habitat and vegetation associates. Present on adjacent parcels.



Proposed building envelope Lot 1.



Proposed building envelope Lot 2.



Proposed building envelope Lot 3.



Existing Road to lot 1, 2, and 3.



Existing Road to lot 2, and 3. Note the abundance of broom that has invaded the site.



Existing Road to lot 3.

Based on our fieldwork and special-status species scoping we conclude that it is unlikely any of the new listed plant species shown in the table II above or known for Napa County would occur on the site given the soil types, historic site utilization, hydrology, lack of any records, topography, and plant associates present.

No special-status plants were observed. The property and project site does not contain habitat for special-status plants. There are no new Department of Fish and Game CNDDDB database listed species, which could have potential on the site. There has not been any new or changes in native species distribution. The project scope is the same as for the 2007 report.

There is no reason to expect any significant impacts on local or regional special-status species by the proposed project, based on the lack of habitat required for their presence on the property, the surrounding development, and the historical use of the property.

No sensitive plant communities are associated with the proposed building envelopes, access roads or surrounding environment. The flora present is typical for the region. There is no designated critical habitat for any plants associated with the project site. The review of aerial photographs reveals that there has been no change in vegetation, habitat, or use of the property.

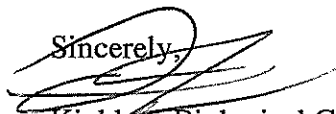
The most significant change is the increase in French Broom, a non-native invasive species.

There have not been any changes in native vegetation, significant habitat alteration, fluctuations in species abundance, or colonization from seed dispersal or seed bank exposure on the site.

Mr. Ted Wooster states that the forested area at the north end of Lots 1 and 2 are valuable foraging and roosting areas for Northern Spotted Owl (NSO). Montane hardwood-conifer forests are present on the north end of Lot 1, 2, and 3. Mr. Wooster states "that the house pads and driveway for lots 1, 2, and 3 could have a negative effect on the montane hardwood-conifer forest habitat on the east side of Partrick Road." The project as proposed will not result in any significant removal of montane hardwood-conifer forests and there is no reason to expect any negative impacts to montane hardwood-conifer forest on the property.

The proposed building envelopes are large (as shown in the photographs above) and are designed to avoid removing large native trees. There is no reason given the size of the property and the extensive woodlands present to account for any impacts to NSO. The access road for the building envelopes is present and will not significantly impact NSO habitat by tree removal. The project as proposed will not have a significant impact to montane hardwood-conifer forest and or the NSO.

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

Sincerely,

Kjeldsen Biological Consulting

Attachments

Plate I. Location and Site Map

Plate II. DFG CNDDDB Map

California Native Plant Society List of Special-status Plants for the Quadrangle and Surrounding Quadrangles.

DFG CNDDDB List of Special-status species for the Quadrangle and Surrounding Quadrangles.

Federal Endangered and Threatened Species that occur in the U.S.G.S. 7 1/2 Minute Quadrangle.

Print out of Species-status Animals known to Occur Within Five Miles DFG CNDDDB.

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 ten years of experience in conducting Biological Assessments, DFG Habitat Assessments, COE 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, DFG Habitat Assessments, DFG SB 34 Mitigation projects, COE 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 1601-1603 permitting, and consulting on various projects. He has 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 DFG collecting permit.

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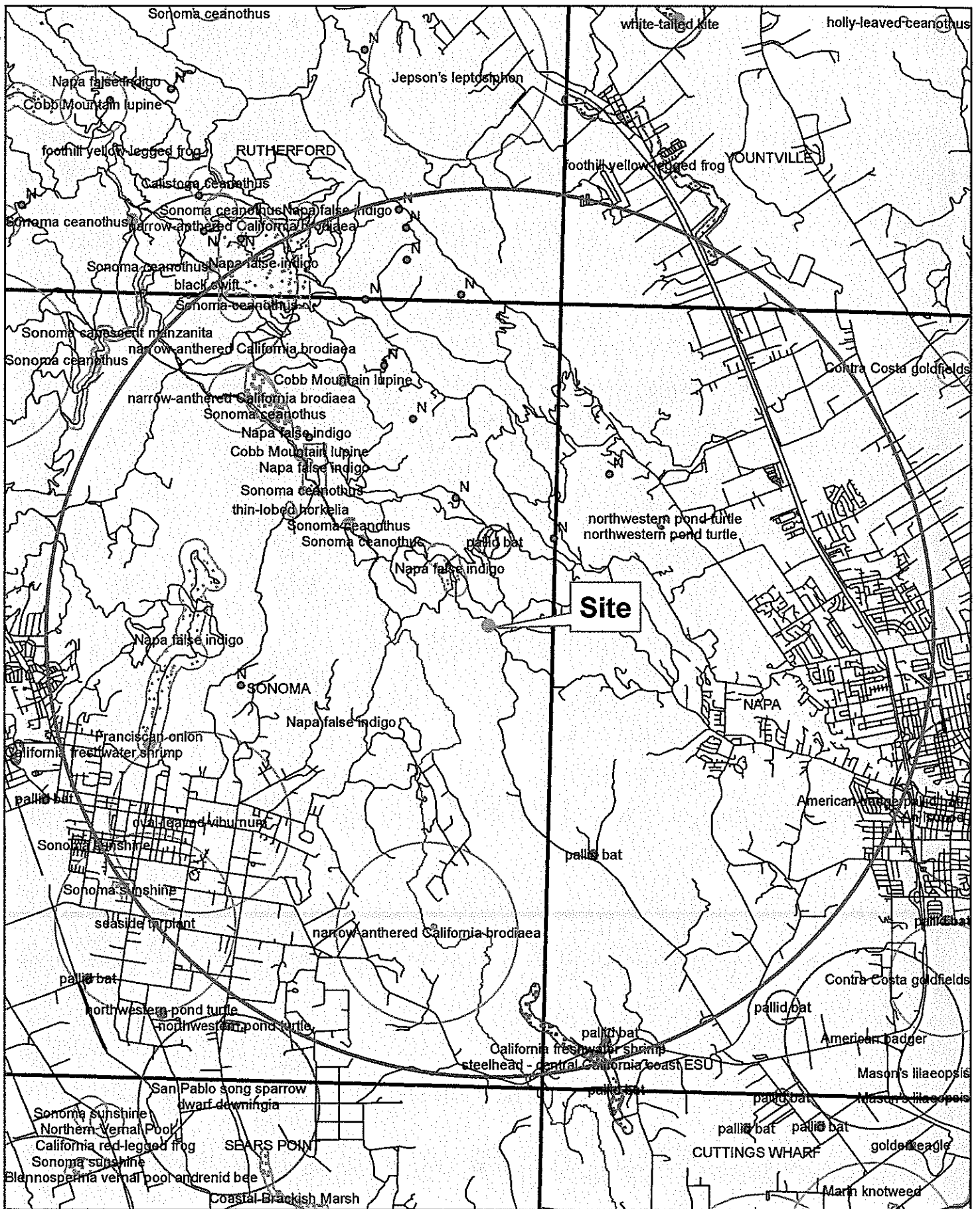
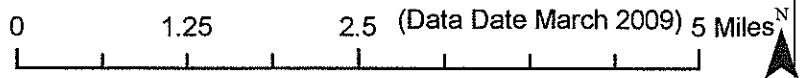


Plate II DFG CNDDDB Search



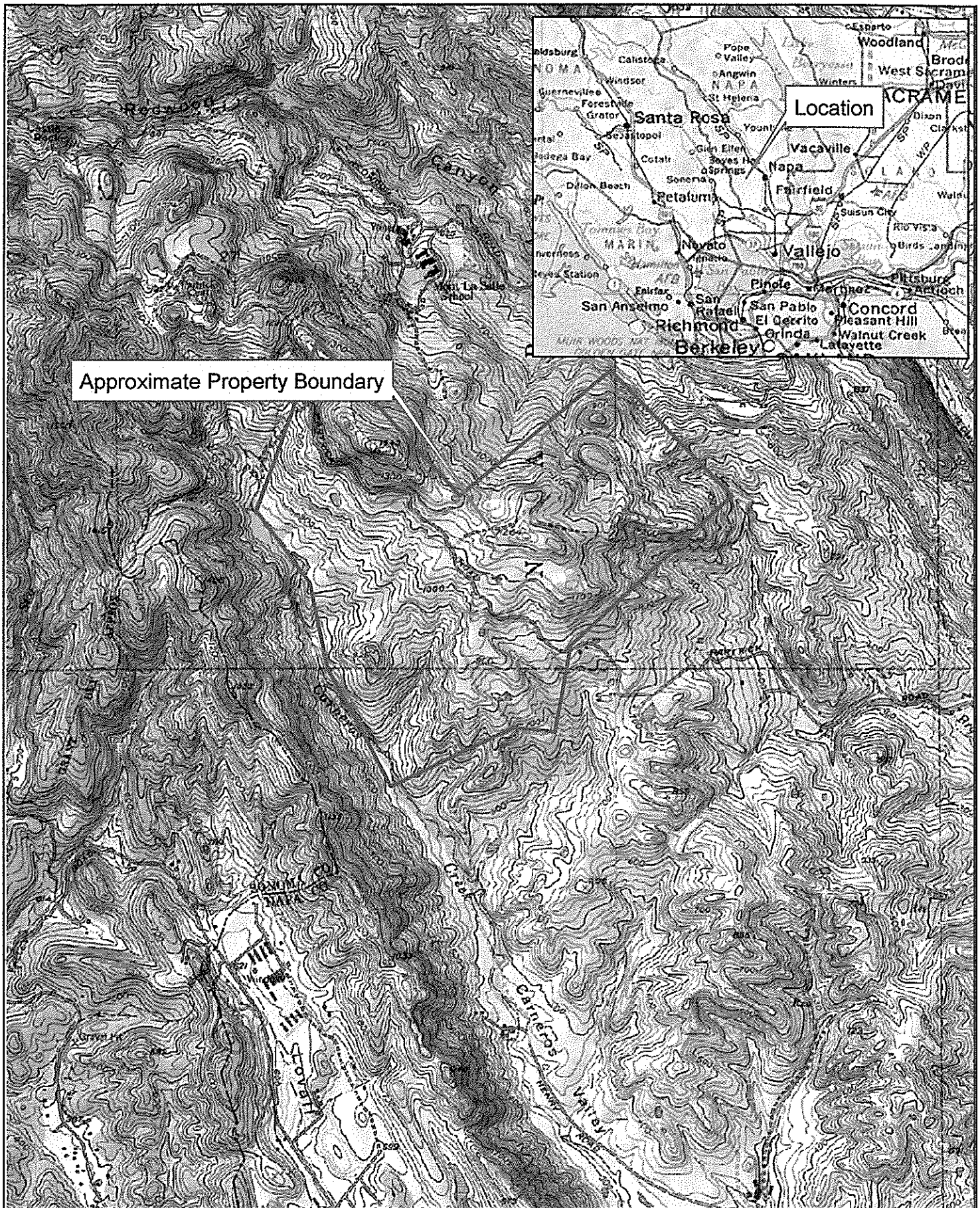


Plate I. Location / Site Map














(Sonoma Quadrangle)











Status: search results - Mon, Apr. 6, 2009, 09:20 b

Your Quad Selection: Sonoma (500C) 3812234, Cuttings Wharf (483A) 3812223, Sears Point (483B) 3812224, Glen Ellen (501D) 3812235, Kerwood (501A) 3812245, Petaluma River (484A) 3812225, Napa (500D) 3812233, Yountville (500A) 3812243, Rutherford (500B) 3812244

scientific	common	family	CNPS
<u>Allium peninsulare</u> var. <u>franciscanum</u> 📷	Franciscan onion	Liliaceae	List 1B.2
<u>Alopecurus aequalis</u> var. <u>sonomensis</u> 📷	Sonoma alopecurus	Poaceae	List 1B.1
<u>Amorpha californica</u> var. <u>napensis</u> 📷	Napa false indigo	Fabaceae	List 1B.2
<u>Arctostaphylos bakeri</u> ssp. <u>bakeri</u> 📷	Baker's manzanita	Ericaceae	List 1B.1
<u>Arctostaphylos canescens</u> ssp. <u>sonomensis</u> 📷	Sonoma canescent manzanita	Ericaceae	List 1B.2
<u>Arctostaphylos stanfordiana</u> ssp. <u>decumbens</u> 📷	Rincon Ridge manzanita	Ericaceae	List 1B.1
<u>Astragalus claranus</u> 📷	Clara Hunt's milk-vetch	Fabaceae	List 1B.1
<u>Astragalus tener</u> var. <u>tener</u> 📷	alkali milk-vetch	Fabaceae	List 1B.2
<u>Atriplex joaquiniana</u> 📷	San Joaquin spearscale	Chenopodiaceae	List 1B.2
<u>Blennosperma bakeri</u> 📷	Sonoma sunshine	Asteraceae	List 1B.1
<u>Brodiaea californica</u> var. <u>leptandra</u> 📷	narrow-anthered California brodiaea	Liliaceae	List 1B.2

<u>Calycadenia micrantha</u>	small-flowered calycadenia	Asteraceae	List 1B.2
<u>Ceanothus confusus</u> 	Rincon Ridge ceanothus	Rhamnaceae	List 1B.1
<u>Ceanothus divergens</u> 	Calistoga ceanothus	Rhamnaceae	List 1B.2
<u>Ceanothus purpureus</u> 	holly-leaved ceanothus	Rhamnaceae	List 1B.2
<u>Ceanothus sonomensis</u> 	Sonoma ceanothus	Rhamnaceae	List 1B.2
<u>Centromadia parryi</u> ssp. <u>parryi</u> 	pappose tarplant	Asteraceae	List 1B.2
<u>Chorizanthe valida</u> 	Sonoma spineflower	Polygonaceae	List 1B.1
<u>Cordylanthus maritimus</u> ssp. <u>palustris</u> 	Point Reyes bird's-beak	Scrophulariaceae	List 1B.2
<u>Cordylanthus mollis</u> ssp. <u>mollis</u> 	soft bird's-beak	Scrophulariaceae	List 1B.2
<u>Downingia pusilla</u> 	dwarf downingia	Campanulaceae	List 2.2
<u>Erigeron biolettii</u> 	streamside daisy	Asteraceae	List 3
<u>Erigeron greenei</u>	Greene's narrow-leaved daisy	Asteraceae	List 1B.2
<u>Fritillaria liliacea</u> 	fragrant fritillary	Liliaceae	List 1B.2
<u>Hemizonia congesta</u> ssp. <u>congesta</u> 	pale yellow hayfield tarplant	Asteraceae	List 1B.2
<u>Hesperolinon bicarpellatum</u>	two-carpellate western flax	Linaceae	List 1B.2
<u>Hesperolinon congestum</u> 	Marin western flax	Linaceae	List 1B.1

<u>Hesperolinon serpentinum</u> 🌸	Napa western flax	Linaceae	List 1B.1
<u>Horkelia tenuiloba</u> 🌸	thin-lobed horkelia	Rosaceae	List 1B.2
<u>Juglans hindsii</u> 🌸	Northern California black walnut	Juglandaceae	List 1B.1
<u>Lasthenia conjugens</u> 🌸	Contra Costa goldfields	Asteraceae	List 1B.1
<u>Lathyrus jepsonii</u> var. <u>jepsonii</u> 🌸	Delta tule pea	Fabaceae	List 1B.2
<u>Layia septentrionalis</u> 🌸	Colusa layia	Asteraceae	List 1B.2
<u>Legenere limosa</u> 🌸	legenere	Campanulaceae	List 1B.1
<u>Leptosiphon jepsonii</u> 🌸	Jepson's leptosiphon	Polemoniaceae	List 1B.2
<u>Lessingia hololeuca</u> 🌸	woolly-headed lessingia	Asteraceae	List 3
<u>Lilaeopsis masonii</u> 🌸	Mason's lilaeopsis	Apiaceae	List 1B.1
<u>Limnanthes vinculans</u> 🌸	Sebastopol meadowfoam	Limnanthaceae	List 1B.1
<u>Lupinus sericatus</u> 🌸	Cobb Mountain lupine	Fabaceae	List 1B.2
<u>Micropus amphibolus</u> 🌸	Mt. Diablo cottonweed	Asteraceae	List 3.2
<u>Navarretia leucocephala</u> ssp. <u>bakeri</u> 🌸	Baker's navarretia	Polemoniaceae	List 1B.1
<u>Navarretia leucocephala</u> ssp. <u>pauciflora</u> 🌸	few-flowered navarretia	Polemoniaceae	List 1B.1
<u>Navarretia leucocephala</u> ssp. <u>plieantha</u> 🌸	many-flowered navarretia	Polemoniaceae	List 1B.2

<u>Penstemon newberryi</u> var. <u>sonomensis</u> 	Sonoma beardtongue	Scrophulariaceae	List 1B.3
<u>Polygonum marinense</u> 	Marin knotweed	Polygonaceae	List 3.1
<u>Sidalcea oregana</u> ssp. <u>valida</u>	Kenwood Marsh checkerbloom	Malvaceae	List 1B.1
<u>Streptanthus breweri</u> var. <u>hesperidis</u> 	green jewel-flower	Brassicaceae	List 1B.2
<u>Symphyotrichum lentum</u>	Suisun Marsh aster	Asteraceae	List 1B.2
<u>Trifolium amoenum</u> 	two-fork clover	Fabaceae	List 1B.1
<u>Trifolium depauperatum</u> var. <u>hydrophilum</u> 	saline clover	Fabaceae	List 1B.2
  1 <u>Viburnum ellipticum</u> 	oval-leaved viburnum	Caprifoliaceae	List 2.3

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Species Known to Occur Within Five Miles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 <i>Actinemys marmorata marmorata</i> northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC
2 <i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	PMLIL021R1			G5T2	S2.2	1B.2
3 <i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	PDFAB08012			G4T2	S2.2	1B.2
4 <i>Antrozous pallidus</i> pallid bat	AMACC10010			G5	S3	SC
5 <i>Blennosperma bakeri</i> Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1.2	1B.1
6 <i>Brodiaea californica</i> var. <i>leptandra</i> narrow-anthered California brodiaea	PMLIL0C022			G4?T2T3	S2S3.2	1B.2
7 <i>Calasellus californicus</i> An isopod	ICMAL34010			G2G3	S2S3	
8 <i>Ceanothus sonomensis</i> Sonoma ceanothus	PDRHA04420			G2	S2.2	1B.2
9 <i>Cypseloides niger</i> black swift	ABNUA01010			G4	S2	SC
10 <i>Downingia pusilla</i> dwarf downingia	PDCAM060C0			G3	S3.1	2.2
11 <i>Hemizonia congesta</i> ssp. <i>congesta</i> seaside tarplant	PDAST4R065			G5T2T3	S2S3	1B.2
12 <i>Horkelia tenuiloba</i> thin-lobed horkelia	PDROS0W0E0			G2	S2.2	1B.2
13 <i>Lupinus sericatus</i> Cobb Mountain lupine	PDFAB2B3J0			G2	S2.2	1B.2
14 <i>Melospiza melodia samuelis</i> San Pablo song sparrow	ABPBXA301W			G5T2?	S2?	SC
15 <i>Oncorhynchus mykiss irideus</i> steelhead - central California coast ESU	AFCHA0209G	Threatened		G5T2Q	S2	
16 <i>Rana boylei</i> foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
17 <i>Syncaris pacifica</i> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G1	S1	
18 <i>Taxidea taxus</i> American badger	AMAJF04010			G5	S4	SC
19 <i>Trifolium amoenum</i> two-fork clover	PDFAB40040	Endangered		G1	S1.1	1B.1
20 <i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080			G5	S2.3	2.3

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 <i>Actinemys marmorata marmorata</i> northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC
2 <i>Adela oplerella</i> Opler's longhorn moth	IILEE0G040			G2G3	S2S3	
3 <i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020			G2G3	S2	SC
4 <i>Allium peninsulare var. franciscanum</i> Franciscan onion	PMLIL021R1			G5T2	S2.2	1B.2
5 <i>Alopecurus aequalis var. sonomensis</i> Sonoma alopecurus	PMPOA07012	Endangered		G5T1Q	S1.1	1B.1
6 <i>Amorpha californica var. napensis</i> Napa false indigo	PDFAB08012			G4T2	S2.2	1B.2
7 <i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	IIHYM35030			G2	S2	
8 <i>Antrozous pallidus</i> pallid bat	AMACC10010			G5	S3	SC
9 <i>Aquila chrysaetos</i> golden eagle	ABNKC22010			G5	S3	
10 <i>Arctostaphylos canescens ssp. sonomensis</i> Sonoma canescent manzanita	PDERI04066			G3G4T2	S2.1	1B.2
11 <i>Arctostaphylos stanfordiana ssp. decumbens</i> Rincon Ridge manzanita	PDERI041G4			G3T1	S1.1	1B.1
12 <i>Ardea alba</i> great egret	ABNGA04040			G5	S4	
13 <i>Ardea herodias</i> great blue heron	ABNGA04010			G5	S4	
14 <i>Astragalus claranus</i> Clara Hunt's milk-vetch	PDFAB0F240	Endangered	Threatened	G1	S1.1	1B.1
15 <i>Astragalus tener var. tener</i> alkali milk-vetch	PDFAB0F8R1			G1T1	S1.1	1B.2
16 <i>Athene cunicularia</i> burrowing owl	ABNSB10010			G4	S2	SC
17 <i>Atriplex joaquiniana</i> San Joaquin spearscale	PDCHE041F3			G2	S2.1	1B.2
18 <i>Blennosperma bakeri</i> Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1.2	1B.1
19 <i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened		G3	S2S3	
20 <i>Brodiaea californica var. leptandra</i> narrow-anthered California brodiaea	PMLIL0C022			G4?T2T3	S2S3.2	1B.2
21 <i>Buteo regalis</i> ferruginous hawk	ABNKC19120			G4	S3S4	
22 <i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070		Threatened	G5	S2	
23 <i>Caecidotea tomalensis</i> Tomaes isopod	ICMAL01220			G2	S2	

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
24 <i>Calasellus californicus</i> An isopod	ICMAL34010			G2G3	S2S3	
25 <i>Calicina diminua</i> Marin blind harvestman	ILARAU8040			G1	S1	
26 <i>California macrophylla</i> round-leaved filaree	PDGER01070			G3	S3.1	1B.1
27 <i>Calycadenia micrantha</i> small-flowered calycadenia	PDAST1P0C0			G2G3	S2S3.2	1B.2
28 <i>Ceanothus confusus</i> Rincon Ridge ceanothus	PDRHA04220			G2	S2.2	1B.1
29 <i>Ceanothus divergens</i> Calistoga ceanothus	PDRHA04240			G2	S2.2	1B.2
30 <i>Ceanothus purpureus</i> holly-leaved ceanothus	PDRHA04160			G2	S2.2	1B.2
31 <i>Ceanothus sonomensis</i> Sonoma ceanothus	PDRHA04420			G2	S2.2	1B.2
32 <i>Centromadia parryi ssp. parryi</i> pappose tarplant	PDAST4R0P2			G4T2	S2.2	1B.2
33 <i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened		G4T3	S2	SC
34 <i>Chorizanthe valida</i> Sonoma spinyflower	PDPGN040V0	Endangered	Endangered	G1	S1.1	1B.1
35 <i>Circus cyaneus</i> northern harrier	ABNKC11010			G5	S3	SC
36 <i>Coastal Brackish Marsh</i>	CTT52200CA			G2	S2.1	
37 <i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Candidate	Endangered	G5T3Q	S1	
38 <i>Cordylanthus maritimus ssp. palustris</i> Point Reyes bird's-beak	PDSCR0J0C3			G4?T2	S2.2	1B.2
39 <i>Cordylanthus mollis ssp. mollis</i> soft bird's-beak	PDSCR0J0D2	Endangered	Rare	G2T1	S1.1	1B.2
40 <i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010			G4	S2S3	SC
41 <i>Cypseloides niger</i> black swift	ABNUA01010			G4	S2	SC
42 <i>Danaus plexippus</i> monarch butterfly	IILEPP2010			G5	S3	
43 <i>Delphinium luteum</i> golden larkspur	PDRAN0B0Z0	Endangered	Rare	G1	S1.1	1B.1
44 <i>Downingia pusilla</i> dwarf downingia	PDCAM060C0			G3	S3.1	2.2
45 <i>Elanus leucurus</i> white-tailed kite	ABNKC06010			G5	S3	
46 <i>Erigeron greenei</i> Greene's narrow-leaved daisy	PDAST3M5G0			G2	S2	1B.2
47 <i>Fritillaria liliacea</i> fragrant fritillary	PMLILOV0C0			G2	S2.2	1B.2

California Department of Fish and Game
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Selected Elements by Scientific Name - Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
48 <i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	ABPBX1201A			G5T2	S2	SC
49 <i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Delisted	Endangered	G5	S2	
50 <i>Hemizonia congesta ssp. congesta</i> seaside tarplant	PDAST4R065			G5T2T3	S2S3	1B.2
51 <i>Hesperolinon bicarpellatum</i> two-carpellate western flax	PDLIN01020			G2	S2.2	1B.2
52 <i>Hesperolinon congestum</i> Marin western flax	PDLIN01060	Threatened	Threatened	G2	S2.1	1B.1
53 <i>Hesperolinon sp. nov. "serpentinum"</i> Napa western flax	PDLIN010D0			G2	S2.1	1B.1
54 <i>Horkelia tenuiloba</i> thin-lobed horkelia	PDROS0W0E0			G2	S2.2	1B.2
55 <i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010			G1G2	S1S2	
56 <i>Hydroporus leechi</i> Leech's skyline diving beetle	IICOL55040			G1?	S1?	
57 <i>Hydroprogne caspia</i> Caspian tern	ABNNM08020			G5	S4	
58 <i>Hypomesus transpacificus</i> Delta smelt	AFCHB01040	Threatened	Threatened	G1	S1	
59 <i>Juglans hindsii</i> Northern California black walnut	PDJUG02040			G1	S1.1	1B.1
60 <i>Lasthenia conjugens</i> Contra Costa goldfields	PDAST5L040	Endangered		G1	S1.1	1B.1
61 <i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041		Threatened	G4T1	S1	
62 <i>Lathyrus jepsonii var. jepsonii</i> Delta tule pea	PDFAB250D2			G5T2	S2.2	1B.2
63 <i>Layia septentrionalis</i> Colusa layia	PDAST5N0F0			G2	S2.2	1B.2
64 <i>Legenere limosa</i> legenere	PDCAM0C010			G2	S2.2	1B.1
65 <i>Leptosiphon jepsonii</i> Jepson's leptosiphon	PDPLM09140			G2	S2.2	1B.2
66 <i>Lilaeopsis masonii</i> Mason's lilaeopsis	PDAP119030		Rare	G3	S3.1	1B.1
67 <i>Limnanthes vinculans</i> Sebastopol meadowfoam	PDLIM02090	Endangered	Endangered	G2	S2.1	1B.1
68 <i>Lupinus sericatus</i> Cobb Mountain lupine	PDFAB2B3J0			G2	S2.2	1B.2
69 <i>Melospiza melodia samuelis</i> San Pablo song sparrow	ABPBXA301W			G5T2?	S2?	SC
70 <i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1			G4T2	S2.1	1B.1

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
71 <i>Navarretia leucocephala</i> ssp. <i>pauciflora</i> few-flowered navarretia	PDPLM0C0E4	Endangered	Threatened	G4T1	S1.1	1B.1
72 <i>Northern Coastal Salt Marsh</i>	CTT52110CA			G3	S3.2	
73 <i>Northern Vernal Pool</i>	CTT44100CA			G2	S2.1	
74 <i>Oncorhynchus mykiss irideus</i> steelhead - central California coast ESU	AFCHA0209G	Threatened		G5T2Q	S2	
75 <i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma beardtongue	PDSCR1L483			G4T1	S1.3	1B.3
76 <i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020			G5	S3	
77 <i>Plagiobothrys mollis</i> var. <i>vestitus</i> Petaluma popcorn-flower	PDBOR0V0Q2			G4?TX	SX	1A
78 <i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020			G2	S2	SC
79 <i>Polygonum marinense</i> Marin knotweed	PDPGN0L1C0			G1Q	S1.1	3.1
80 <i>Rallus longirostris obsoletus</i> California clapper rail	ABNME05016	Endangered	Endangered	G5T1	S1	
81 <i>Rana boylei</i> foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
82 <i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened		G4T2T3	S2S3	SC
83 <i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S1S2	
84 <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i> Point Reyes checkerbloom	PDMAL11012			G5T2	S2.2	1B.2
85 <i>Sidalcea oregana</i> ssp. <i>valida</i> Kenwood Marsh checkerbloom	PDMAL110K5	Endangered	Endangered	G5T1	S1.1	1B.1
86 <i>Sorex ornatus sinuosus</i> Suisun shrew	AMABA01103			G5T1	S1	SC
87 <i>Speyeria zerene myrtleae</i> Myrtle's silverspot	IILEPJ6089	Endangered		G5T1	S1	
88 <i>Streptanthus breweri</i> var. <i>hesperidis</i> green jewel-flower	PDBRA2G092			G5T2	S2.2	1B.2
89 <i>Symphyotrichum lentum</i> Suisun Marsh aster	PDASTE8470			G2	S2.2	1B.2
90 <i>Syncaris pacifica</i> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G1	S1	
91 <i>Talanites ubicki</i> Ubick's gnaphosid spider	ILARA98030			G1	S1	
92 <i>Taxidea taxus</i> American badger	AMAJF04010			G5	S4	SC
93 <i>Trifolium amoenum</i> two-fork clover	PDFAB40040	Endangered		G1	S1.1	1B.1
94 <i>Trifolium depauperatum</i> var. <i>hydrophilum</i> saline clover	PDFAB400R5			G5T2?	S2.2?	1B.2

California Department of Fish and Game

Natural Diversity Database

Selected Elements by Scientific Name - Quadrangle and Surrounding Quadrangles

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
95 <i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	IMGASJ7040			G2G3	S2S3	
96 <i>Valley Needlegrass Grassland</i>	CTT42110CA			G1	S3.1	
97 <i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080			G5	S2.3	2.3

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the
SONOMA (500C)
U.S.G.S. 7 1/2 Minute Quad
Database last updated: January 29, 2009
Report Date: April 6, 2009
Listed Species

Invertebrates

Syncaris pacifica-California freshwater shrimp (E)

Fish

Hypomesus transpacificus-delta smelt (T)

Oncorhynchus mykiss-Central California Coastal steelhead (T) (NMFS)

Central Valley steelhead (T) (NMFS)

Critical habitat, Central California coastal steelhead (X) (NMFS)

Oncorhynchus tshawytscha-Central Valley spring-run chinook salmon (T) (NMFS)

winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana aurora draytonii-California red-legged frog (T)

Birds

Sternula antillarum (=Sterna, =albifrons) browni-California least tern (E)

Strix occidentalis caurina-northern spotted owl (T)

Mammals

Reithrodontomys raviventris-salt marsh harvest mouse (E)

Plants

Blennosperma bakeri-Baker's stickyseed [=Sonoma Sunshine] (E)

Key:

(E) Endangered - Listed as being in danger of extinction.

(T) Threatened - Listed as likely to become endangered within the foreseeable future.

(P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.

(C) Candidate - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) Critical Habitat designated for this species

California Department of Fish and Game
 Natural Diversity Database
 Full Report for Selected Elements Species Known Within Five Miles

Allium peninsulare* var. *franciscanum

Franciscan onion

Element Code: PMLIL021R1

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G5T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.
Micro: CLAY SOILS; OFTEN ON SERPENTINE. DRY HILLSIDES. 100-300M.

Occurrence No. 15	Map Index: 70826	EO Index: 71744	— Dates Last Seen —
Occ Rank: Fair			Element: 2006-05-15
Origin: Natural/Native occurrence			Site: 2006-05-15
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2008-02-21

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.30308° / -122.45724°	Township: 05N
UTM: Zone-10 N4239583 E547455	Range: 05W
Mapping Precision: SPECIFIC	Section: 06 Qtr: SW
Symbol Type: POINT	Meridian: M
Radius: 80 meters	Elevation: 280 ft

Location: EAST SIDE OF NORRBOM ROAD, 0.3 AIR MI WSW OF SHOCKEN HILL, 0.5 MI NORTH OF SONOMA.

Location Detail: ABOUT 15 FT. FROM FENCELINE.

Ecological: MIXED HARDWOOD FOREST WITH UMBELLULARIA CALIFORNICA, AESCULUS CALIFORNICA, QUERCUS AGRIFOLIA SSP. AGRIFOLIA. VOLCANIC SUBSTRATE, GRADUAL WEST SLOPE, SHADE TO PART SUN. AMONG LARGE COBBLES.

Threat: TRAMPLING FROM PARK USERS.

General: 8 PLANTS OBSERVED IN 2006. PROPOSED TRAIL CORRIDOR NEARBY.

Owner/Manager: CITY OF SONOMA

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Amorpha californica var. napensis

Napa false indigo

Element Code: PDFAB08012

_____ Status _____	NDDDB Element Ranks _____	Other Lists _____
Federal: None	Global: G4T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, CISMONTANE WOODLAND.
Micro: OPENINGS IN FOREST OR WOODLAND OR IN CHAPARRAL. 150-2000M

Occurrence No. 5	Map Index: 45203	EO Index: 45203	_____ Dates Last Seen _____
Occ Rank: Good			Element: 1990-06-09
Origin: Natural/Native occurrence			Site: 1990-06-09
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-07-05

Quad Summary: Sonoma (3812234/500C)

County Summary: Napa

Lat/Long: 38.27515° / -122.39893°	Township: 05N
UTM: Zone-10 N4236515 E552573	Range: 05W
Mapping Precision: SPECIFIC	Section: 15 Qtr: SE
Symbol Type: POLYGON	Meridian: M
Area: 1.7 acres	Elevation: 750 ft

Location: EAST SLOPE OF ARROWHEAD MOUNTAIN, JUST NORTHEAST OF SUMMIT (PEAK 978).

Location Detail: NEAR RIDGELINE ON EAST SLOPE OF ARROWHEAD MOUNTAIN. MAPPED IN THE W 1/2 OF THE SE 1/4 OF SECTION 15.

Ecological: EAST SLOPE ON SOILS OF FORWARD-KIDD SERIES DERIVED FROM RHYOLITE. FOOTHILL WOODLAND, UNDER OAKS ON WOODED SLOPE.

Threat:

General: 15 PLANTS SEEN IN 1990.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Amorpha californica var. napensis

Napa false indigo

Element Code: PDFAB08012

Status	NDDDB Element Ranks	Other Lists
Federal: None	Global: G4T2	CNPS List: 1B.2
State: None	State: S2.2	

Habitat Associations

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, CISMONTANE WOODLAND.
Micro: OPENINGS IN FOREST OR WOODLAND OR IN CHAPARRAL. 150-2000M

Occurrence No. 6	Map Index: 45204	EO Index: 45204	Dates Last Seen
Occ Rank: Good			Element: 2000-04-09
Origin: Natural/Native occurrence			Site: 2000-04-09
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-04-26

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.30734° / -122.41862°	Township: 05N
UTM: Zone-10 N4240075 E550830	Range: 05W
Mapping Precision: SPECIFIC	Section: 04 Qtr: XX
Symbol Type: POLYGON	Meridian: M
Area: 0.5 acres	Elevation: 550 ft

Location: NE OUTSKIRTS OF SONOMA, ARROYO SECO WATERSHED, BARTHOLEMEW PARK.

Location Detail: ALONG TRAIL, NEAR CENTER SECTION 4.

Ecological: STEEP NW-FACING SLOPE, SHADED UNDERSTORY OF MIXED EVERGREEN FOREST, WITH PSEUDOTSUGA MENZIESII, QUERCUS KELLOGGII, QUERCUS GARRYANA, ARBUTUS MENZIESII, VOLCANIC SOIL.

Threat:

General: 20 PLANTS OBSERVED IN 2000. TRAIL PASSES THROUGH POPULATION BUT IS NO THREAT.

Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Amorpha californica var. napensis

Napa false indigo

Element Code: PDFAB08012

_____ Status _____	_____ NDDDB Element Ranks _____	_____ Other Lists _____
Federal: None	Global: G4T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, CISMONTANE WOODLAND.
Micro: OPENINGS IN FOREST OR WOODLAND OR IN CHAPARRAL. 150-2000M

Occurrence No. 7	Map Index: 45205	EO Index: 45205	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1985-XX-XX
Origin: Natural/Native occurrence			Site: 1985-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-04-26

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.32025° / -122.44952°	Township: 06N
UTM: Zone-10 N4241492 E548120	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 31 Qtr: XX
Symbol Type: POLYGON	Meridian: M
Area:	Elevation: 700 ft

Location: NEAR SONOMA, NORRBOM ROAD.

Location Detail: EXACT LOCATION UNKNOWN, MAPPED AS BEST GUESS TO INCLUDE NORRBOM ROAD BY CNDDDB.

Ecological:

Threat:

General: NEEDS FIELDWORK, ONLY SOURCE OF INFORMATION IS CITATION FROM 1985 BY KNIGHT AND EDWARDS.
WHERE ON NORRBOM ROAD?

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Amorpha californica var. napensis

Napa false indigo

Element Code: PDFAB08012

_____ Status _____	_____ NDDB Element Ranks _____	_____ Other Lists _____
Federal: None	Global: G4T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, CISMONTANE WOODLAND.
Micro: OPENINGS IN FOREST OR WOODLAND OR IN CHAPARRAL. 150-2000M

Occurrence No. 8	Map Index: 45206	EO Index: 45206	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-04-26

Quad Summary: Sonoma (3812234/500C)

County Summary: Napa

Lat/Long: 38.33228° / -122.39746°	Township: 06N
UTM: Zone-10 N4242855 E552661	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 27 Qtr: SE
Symbol Type: POLYGON	Meridian: M
Area:	Elevation: 1,295 ft

Location: PARTRICK ROAD.
Location Detail: SE 1/4 SEC 27.
Ecological:
Threat:
General: NEEDS FIELDWORK, ONLY SOURCE OF INFORMATION IS FIELD NOTES BY RUYGT.
Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Amorpha californica* var. *napensis

Napa false indigo

Element Code: PDFAB08012

_____ Status _____	NDDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G4T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ Habitat Associations _____

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, CISMONTANE WOODLAND.
Micro: OPENINGS IN FOREST OR WOODLAND OR IN CHAPARRAL. 150-2000M

Occurrence No. 9	Map Index: 45207	EO Index: 45207	_____ Dates Last Seen _____
Occ Rank: Good			Element: 2002-07-13
Origin: Natural/Native occurrence			Site: 2002-07-13
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2005-07-06

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma, Napa

Lat/Long: 38.35111° / -122.42720°	Township: 06N
UTM: Zone-10 N4244928 E550049	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 21 Qtr: SW
Symbol Type: POLYGON	Meridian: M
Area:	Elevation: 1,470 ft

Location: BETWEEN BISMARK KNOB AND HOGBACK MOUNTAIN, NEAR NAPA AND SONOMA COUNTY LINE.

Location Detail: MAPPED AS 3 POLYGONS: TWO NW SMALLER FROM LAT-LONG COORDINATES FROM RUY02F04 (SEC 20); ONE SE LARGER FROM RUY01U01 FROM "1400 FEET IN SW 1/4 SECTION 21" (MAPPED IN WESTERN 1/2 OF SW 1/4 TO PLACE AT PROPER ELEVATION). FROM 1400 TO 1540 FEET.

Ecological: NW POLYS IN FILTERED SUN IN DOUGLAS FIR FOREST. ASSOCIATED WITH UMBELLULARIA CALIFORNICA, ARBUTUS MENZIESII, SEQUOIA SEMPERVIRENS, AND TOXICODENDRON DIVERSILOBUM.

Threat:

General: UNKNOWN NUMBER OF PLANTS SEEN IN SE POLY (NO DATE), AND 20 PLANTS SEEN IN NW POLYS IN 2002. RUYGT 2002 (RUYO2F04) LISTS BOTH NE 1/4 SECTION 20 AND NW 1/4 SECTION 21, BUT NONE OF COORDINATES PROVIDED OCCUR IN NW1/4 SECTION 21.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Amorpha californica var. napensis

Napa false indigo

Element Code: PDFAB08012

_____ Status _____	NDDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G4T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ Habitat Associations _____

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, CISMONTANE WOODLAND.
Micro: OPENINGS IN FOREST OR WOODLAND OR IN CHAPARRAL. 150-2000M

Occurrence No. 10	Map Index: 45208	EO Index: 45208	— Dates Last Seen —
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2003-09-19

Quad Summary: Sonoma (3812234/500C), Rutherford (3812244/500B)
County Summary: Napa

Lat/Long: 38.38024° / -122.43623°	Township: 06N
UTM: Zone-10 N4248155 E549240	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 08 Qtr: XX
Symbol Type: POLYGON	Meridian: M
Area:	Elevation: 1,700 ft

Location: LOKOYA, MOUNT VEEDER. SECTION 8.
Location Detail: MAPPED AS BEST GUESS TO INCLUDE LOKOYA AND MOUNT VEEDER.
Ecological:
Threat:
General: NEEDS FIELDWORK.
Owner/Manager: UNKNOWN

California Department of Fish and Game
 Natural Diversity Database
 Full Report for Selected Elements Species Known Within Five Miles

Amorpha californica var. napensis

Napa false indigo

Element Code: PDFAB08012

_____ Status _____	NDDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G4T2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, CISMONTANE WOODLAND.

Micro: OPENINGS IN FOREST OR WOODLAND OR IN CHAPARRAL. 150-2000M

Occurrence No. 37	Map Index: 52538	EO Index: 52538	_____ Dates Last Seen _____
Occ Rank: Fair			Element: 2001-10-24
Origin: Natural/Native occurrence			Site: 2001-10-24
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2003-09-18

Quad Summary: Rutherford (3812244/500B)

County Summary: Napa

Lat/Long: 38.38882° / -122.42846°	Township: 06N
UTM: Zone-10 N4249111 E549913	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 05 Qtr: SE
Symbol Type: POINT	Meridian: M
Radius: 1/10 mile	Elevation: 1,100 ft

Location: ALONG UNNAMED ROAD NORTH OF ENCHANTED HILLS AND EAST OF MT. VEEDER ROAD, SOUTH OF RUTHERFORD.

Location Detail: ALONG ROAD CUT NEAR WELL PUMP. MAPPED WITHIN THE SE 1/4 OF THE SE 1/4 OF SECTION 5.

Ecological: GROWING ALONG A ROADCUT IN REDWOOD OAK WOODLANDS.

Threat: PROPERTY IS BEING CONVERTED TO VINEYARD. THE AREA OF OCCURRENCE IS PROPOSED FOR TIMBER CONVERSION. ALONG A ROAD CUT.

General: SEVERAL PLANTS SEEN IN 2001. PLANTS WITHIN THE TIMBER CONVERSION AREA ARE SPINDLY, LIGHT STARVED VINES. OTHER PLANTS ARE OUTSIDE OF THE CONVERSION AREA AND SECURE.

Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Blennosperma bakeri

Sonoma sunshine

Element Code: PDAST1A010

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: Endangered	Global: G1	CNPS List: 1B.1
State: Endangered	State: S1.2	

_____ **Habitat Associations** _____

General: VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.
Micro: VERNAL POOLS AND SWALES. 10-100M.

Occurrence No. 3	Map Index: 08771	EO Index: 5299	_____ Dates Last Seen _____
Occ Rank: None			Element: 1975-XX-XX
Origin: Natural/Native occurrence			Site: 1988-04-04
Presence: Extirpated			
Trend: Unknown			Record Last Updated: 1994-07-07

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.28669° / -122.46788°	Township: 05N
UTM: Zone-10 N4237758 E546536	Range: 06W
Mapping Precision: SPECIFIC	Section: 12 Qtr: XX
Symbol Type: POLYGON	Meridian: M
Area: 10.4 acres	Elevation: 65 ft

Location: WESTERN OUTSKIRTS OF SONOMA, ALONG 5TH STREET BETWEEN BETTENCOURT & MCARTHUR.

Location Detail: MAY ALSO HAVE OCCURRED ALONG HAYES STREET, WHICH IS LESS THAN 0.1 MI EAST OF 5TH STREET. THIS SITE WAS GRADED FOR HOMESITES IN 1980. SOME OLD COLLECTIONS CITE LOCATION AS 0.25 MILE SOUTH OF NAPA STREET (HIGHWAY 12).

Ecological: VERNAL POOL. IN 1947 SEEN IN 1-3 INCHES OF WATER.

Threat: MOST HABITAT DESTROYED BY GRADING FOR HOMESITES. REMAINING AREA IS VINEYARDS, TRASH & WEEDS (PATTERSON, 1988).

General: INCLUDES FORMER OCCURRENCE #4. SEARCHES SHOULD CONTINUE TO BE CONDUCTED IN SURROUNDING HABITAT, SINCE EXTENT OF ORIGINAL DISTRIBUTION IN THIS AREA IS UNKNOWN.

Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Blennosperma bakeri

Sonoma sunshine

Element Code: PDAST1A010

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: Endangered	Global: G1	CNPS List: 1B.1
State: Endangered	State: S1.2	

_____ **Habitat Associations** _____

General: VERNAL POOLS, VALLEY AND FOOTHILL GRASSLAND.
Micro: VERNAL POOLS AND SWALES. 10-100M.

Occurrence No. 22	Map Index: 08793	EO Index: 5298	_____ Dates Last Seen _____
Occ Rank: Fair			Element: 1995-03-10
Origin: Natural/Native occurrence			Site: 1995-03-10
Presence: Presumed Extant			
Trend: Decreasing			Record Last Updated: 1994-09-23

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.27945° / -122.46238°	Township: 05N
UTM: Zone-10 N4236958 E547022	Range: 05W
Mapping Precision: SPECIFIC	Section: 18 Qtr: XX
Symbol Type: POLYGON	Meridian: M
Area: 15.3 acres	Elevation: 60 ft

Location: SOUTH OF NEWCOMB STREET, NORTH OF FOUR CORNERS, SONOMA.

Location Detail: SEEN IN 1991 ON BEASLEY WAY AT COX STREET. PORTION OF SITE IS MITIGATION AREA FOR NEARBY SUBDIVISION. SEEDS FROM THIS SITE TO BE COLLECTED AND SOWN AT SONOMA VALLEY PARK (OCC #5).

Ecological: GROWING IN OLD ORCHARD WITH VERNAL SWALES, DITCHES, AND POOLS. ASSOCIATED SPECIES INCLUDE ERODIUM, RUMEX, ANNUAL AND PERENNIAL GRASSES. LASTHENIA BURKEI APPARENTLY SEEDED HERE CIRCA 1991; SOURCE OF SEEDS UNKNOWN.

Threat: DEVELOPMENT, FAILED MITIGATION POOLS, WEEDY GRASSES, PAST GRAZING & DISKING.

General: 1000-2000 PLANTS IN 1988, 5000-10,000 IN 1989, 1000 IN 1991. POOLS DESTROYED IN 1989-NEW HABITAT CREATED AND SEEDED. 44 IN REMNANT POOL IN 1994, 4 IN CREATED POOL IN 1995.

Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Brodiaea californica var. leptandra

narrow-anthered California brodiaea

Element Code: PMLIL0C022

_____ Status _____	NDDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G4?T2T3	CNPS List: 1B.2
State: None	State: S2S3.2	

_____ Habitat Associations _____

General: BROADLEAFED UPLAND FOREST, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.

Micro: 110-915M.

Occurrence No. 1	Map Index: 47346	EO Index: 47346	— Dates Last Seen —
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2002-03-05

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma, Napa

Lat/Long: 38.27420° / -122.40013°	Township: 05N
UTM: Zone-10 N4236409 E552470	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 15 Qtr: XX
Symbol Type: POINT	Meridian: M
Radius: 1 mile	Elevation:

Location: ARROWHEAD MOUNTAIN.

Location Detail:

Ecological:

Threat:

General: NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Brodiaea californica var. leptandra

narrow-anthered California brodiaea

Element Code: PMLIL0C022

Status	NDDDB Element Ranks	Other Lists
Federal: None	Global: G4?T2T3	CNPS List: 1B.2
State: None	State: S2S3.2	

Habitat Associations
General: BROADLEAFED UPLAND FOREST, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.
Micro: 110-915M.

Occurrence No. 2	Map Index: 47347	EO Index: 47347	— Dates Last Seen —
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2002-03-05

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma, Napa

Lat/Long: 38.35853° / -122.44033°	Township: 06N
UTM: Zone-10 N4245744 E548897	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 17 Qtr: XX
Symbol Type: POINT	Meridian: M
Radius: 2/5 mile	Elevation:

Location: BISMARCK KNOB.
Location Detail:
Ecological:
Threat:
General: NEEDS FIELDWORK.
Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Ceanothus sonomensis

Sonoma ceanothus

Element Code: PDRHA04420

_____ Status _____	_____ NDDB Element Ranks _____	_____ Other Lists _____
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: CHAPARRAL.

Micro: SANDY, SERPENTINE OR VOLCANIC SOILS. 210-800M.

Occurrence No. 1	Map Index: 08900	EO Index: 16340	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1980-XX-XX
Origin: Natural/Native occurrence			Site: 1980-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-10-18

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma, Napa

Lat/Long: 38.35821° / -122.43515°	Township: 06N
UTM: Zone-10 N4245711 E549350	Range: 05W
Mapping Precision: SPECIFIC	Section: 20 Qtr: NE
Symbol Type: POLYGON	Meridian: M
Area: 140.7 acres	Elevation: 1,800 ft

Location: BISMARCK KNOB, DEVILS CANYON.

Location Detail: MAPPED AS 1 LARGE AND 1 SMALL POLYGON.

Ecological:

Threat:

General: MORE INFO NEEDED ON HABITAT ASSOCIATIONS AND CONDITION OF OCCURRENCE.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Ceanothus sonomensis

Sonoma ceanothus

Element Code: PDRHA04420

_____ Status _____	_____ NDDDB Element Ranks _____	_____ Other Lists _____
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: CHAPARRAL.

Micro: SANDY, SERPENTINE OR VOLCANIC SOILS. 210-800M.

Occurrence No. 2	Map Index: 08863	EO Index: 26974	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1981-XX-XX
Origin: Natural/Native occurrence			Site: 1981-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 1993-03-24

Quad Summary: Rutherford (3812244/500B)

County Summary: Napa, Sonoma

Lat/Long: 38.37942° / -122.44746°	Township: 06N
UTM: Zone-10 N4248058 E548261	Range: 05W
Mapping Precision: SPECIFIC	Section: 07 Qtr: SE
Symbol Type: POINT	Meridian: M
Radius: 80 meters	Elevation: 2,600 ft

Location: SUMMIT OF MT. VEEDER.

Location Detail:

Ecological: PLANT SEEN IN 1981 WAS SUPPRESSED BY STANFORD MANZANITA.

Threat: DEVELOPMENT COULD THREATEN.

General: ONE PLANT SEEN IN 1981. PLANT JUST INSIDE NAPA COUNTY LINE.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Ceanothus sonomensis

Sonoma ceanothus

Element Code: PDRHA04420

Status	NDDDB Element Ranks	Other Lists
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.2	

Habitat Associations

General: CHAPARRAL.

Micro: SANDY, SERPENTINE OR VOLCANIC SOILS. 210-800M.

Occurrence No. 16	Map Index: 46110	EO Index: 46110	Dates Last Seen
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-10-11

Quad Summary: Sonoma (3812234/500C), Rutherford (3812244/500B)

County Summary: Napa

Lat/Long: 38.37342° / -122.44193°	Township: 06N
UTM: Zone-10 N4247395 E548747	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 08 Qtr: SW
Symbol Type: POINT	Meridian: M
Radius: 1/5 mile	Elevation: 2,600 ft

Location: SOUTHEAST SLOPE OF MOUNT VEEDER.

Location Detail: MAPPED WITHIN THE SW 1/4 OF THE SW 1/4 OF SECTION 8.

Ecological:

Threat:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS ARCVIEW SHAPEFILE OF RARE PLANT LOCATIONS FOR NAPA COUNTY; UNKNOWN WHEN SEEN. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Ceanothus sonomensis

Sonoma ceanothus

Element Code: PDRHA04420

Status	NDDB Element Ranks	Other Lists
Federal: None State: None	Global: G2 State: S2.2	CNPS List: 1B.2

Habitat Associations

General: CHAPARRAL.

Micro: SANDY, SERPENTINE OR VOLCANIC SOILS. 210-800M.

Occurrence No. 17	Map Index: 46112	EO Index: 46112	— Dates Last Seen —
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-10-11

Quad Summary: Sonoma (3812234/500C)

County Summary: Napa, Sonoma

Lat/Long: 38.34413° / -122.42758°	Township: 06N
UTM: Zone-10 N4244153 E550021	Range: 05W
Mapping Precision: SPECIFIC	Section: 21 Qtr: SW
Symbol Type: POLYGON	Meridian: M
Area: 11.3 acres	Elevation: 1,550 ft

Location: HOGBACK MOUNTAIN, AT SUMMIT AND ON NORTH AND EAST SLOPES.

Location Detail: 3 COLONIES: N COLONY ON NORTH SLOPE, MAPPED WITHIN NW 1/4 OF SW 1/4 OF SECTION 21; SW COLONY AT SUMMIT, MAPPED AT INTERSECTION OF SECTIONS 20, 21, 28 & 29; & SE COLONY NEAR TOP OF EAST SLOPE, MAPPED MOSTLY IN NW 1/4 NW 1/4 SECTION 28.

Ecological:

Threat:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS ARCVIEW SHAPEFILE OF RARE PLANT LOCATIONS FOR NAPA COUNTY; UNKNOWN WHEN SEEN. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

California Department of Fish and Game
 Natural Diversity Database
 Full Report for Selected Elements Species Known Within Five Miles

Ceanothus sonomensis

Sonoma ceanothus

Element Code: PDRHA04420

_____ Status _____	NDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: CHAPARRAL.

Micro: SANDY, SERPENTINE OR VOLCANIC SOILS. 210-800M.

Occurrence No. 18	Map Index: 46113	EO Index: 46113	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2006-06-22

Quad Summary: Sonoma (3812234/500C)

County Summary: Napa, Sonoma

Lat/Long: 38.33910° / -122.41774°	Township: 06N
UTM: Zone-10 N4243600 E550884	Range: 05W
Mapping Precision: SPECIFIC	Section: 28 Qtr: NE
Symbol Type: POLYGON	Meridian: M
Area: 7.1 acres	Elevation: 1,400 ft

Location: ALONG THE NAPA/SONOMA COUNTY LINE, 0.7 - 1 MILE SOUTHEAST OF HOGBACK MOUNTAIN, NORTHEAST OF SONOMA.

Location Detail: 2 COLONIES MAPPED.

Ecological:

Threat:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A GIS SHAPEFILE OF RARE PLANT LOCATIONS FOR NAPA COUNTY; UNKNOWN WHEN SEEN. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Downingia pusilla

dwarf downingia

Element Code: PDCAM060C0

_____ Status _____	NDDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G3	CNPS List: 2.2
State: None	State: S3.1	

_____ Habitat Associations _____

General: VALLEY AND FOOTHILL GRASSLAND (MESIC SITES), VERNAL POOLS.

Micro: VERNAL LAKE AND POOL MARGINS WITH A VARIETY OF ASSOCIATES. IN SEVERAL TYPES OF VERNAL POOLS.
1-485M.

Occurrence No. 27	Map Index: 43384	EO Index: 43384	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1892-05-XX
Origin: Natural/Native occurrence			Site: 1892-05-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2000-08-08

Quad Summary: Sears Point (3812224/483B), Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.24606° / -122.43930°	Township: 05N
UTM: Zone-10 N4233265 E549063	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 29 Qtr: XX
Symbol Type: POINT	Meridian: M
Radius: 1 mile	Elevation: 10 ft

Location: SCHELLVILLE.

Location Detail: EXACT LOCATION NOT KNOWN; MAPPED IN GENERAL VICINITY OF SCHELLVILLE, SOUTH OF SONOMA.

Ecological:

Threat:

General: ONLY INFORMATION FOR THIS SITE ARE 1892 COLLECTIONS BY MICHENER AND BIOLETTI.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Hemizonia congesta ssp. congesta

seaside tarplant

Element Code: PDAST4R065

_____ Status _____	_____ NDDDB Element Ranks _____	_____ Other Lists _____
Federal: None	Global: G5T2T3	CNPS List: 1B.2
State: None	State: S2S3	

_____ **Habitat Associations** _____

General: COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.
Micro: GRASSY VALLEYS AND HILLS, OFTEN IN FALLOW FIELDS. 25-200M.

Occurrence No. 11	Map Index: 72945	EO Index: 73856	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1909-08-09
Origin: Natural/Native occurrence			Site: 1909-08-09
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2008-11-20

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.27453° / -122.45714°	Township: 05N
UTM: Zone-10 N4236415 E547483	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 18 Qtr: XX
Symbol Type: POINT	Meridian: M
Radius: 1 mile	Elevation:

Location: ONE MILE SOUTH OF SONOMA.

Location Detail: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB CENTERED ONE MILE SOUTH OF THE SONOMA POST OFFICE.

Ecological: IN AN OLD STUBBLEFIELD.

Threat: THERE HAS BEEN EXTENSIVE DEVELOPMENT IN THIS AREA.

General: ONLY SOURCE OF INFORMATION IS A 1909 COLLECTION BY MCMURPHY. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Horkelia tenuiloba

thin-lobed horkelia

Element Code: PDROS0W0E0

_____ Status _____	NDDDB Element Ranks	_____ Other Lists _____
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.2	

_____ Habitat Associations _____

General: COASTAL SCRUB, CHAPARRAL.

Micro: SANDY SOILS; MESIC OPENINGS. 45-500M.

Occurrence No. 23	Map Index: 72270	EO Index: 73189	— Dates Last Seen —
Occ Rank: Unknown			Element: 1994-06-14
Origin: Natural/Native occurrence			Site: 1994-06-14
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2008-09-17

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.34093° / -122.42984°	Township: 06N
UTM: Zone-10 N4243797 E549825	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 29 Qtr: NE
Symbol Type: POLYGON	Meridian: M
Area:	Elevation: 1,230 ft

Location: POINT OF MAIN RIDGE SEPARATING HEADWATERS OF NATHANSON CREEK AND AGUA CALIENTE CREEK.

Location Detail: MAPPED ACCORDING TO MAP PROVIDED BY HRUSA. PLANTS WERE FOUND WHILE SAMPLING AZALEAS WITHIN THIS POLYGON.

Ecological: STEEP, NEARLY BARE CLIFFS. ON MIXED ASH AND HARDER ROCK VOLCANIC SUBSTRATA. GROWING AMONG RHODODENDRON OCCIDENTALE.

Threat:

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS 1994 HRUSA COLLECTION. NEEDS FIELDWORK TO DETERMINE EXACT LOCATION, BUT IT'S UNKNOWN WHETHER CURRENT LANDOWNER WOULD ALLOW ACCESS TO THE SITE.

Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Lupinus sericatus

Cobb Mountain lupine

Element Code: PDFAB2B3J0

_____ Status _____	NDDDB Element Ranks _____	Other Lists _____
Federal: None	Global: G2	CNPS List: 1B.2
State: None	State: S2.2	

_____ **Habitat Associations** _____

General: CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.

Micro: IN STANDS OF KNOBCONE PINE-OAK WOODLAND, ON OPEN WOODED SLOPES IN GRAVELLY SOILS; SOMETIMES ON SERPENTINE. 180-1500M.

Occurrence No. 41	Map Index: 46262	EO Index: 46262	_____ Dates Last Seen _____
Occ Rank: Poor			Element: 1997-04-26
Origin: Natural/Native occurrence			Site: 1997-04-26
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-10-24

Quad Summary: Sonoma (3812234/500C)

County Summary: Napa

Lat/Long: 38.36190° / -122.41998°	Township: 06N
UTM: Zone-10 N4246129 E550672	Range: 05W
Mapping Precision: SPECIFIC	Section: 16 Qtr: SW
Symbol Type: POINT	Meridian: M
Radius: 80 meters	Elevation: 1,860 ft

Location: MT. VEEDER VINEYARDS, ABOUT 0.6 MILE SOUTH OF LOKOYA ROAD AND 1 MILE ENE OF BISMARK KNOB, NNE OF SONOMA.

Location Detail: MAPPED WITHIN THE SE 1/4 OF THE SW 1/4 OF SECTION 16.

Ecological: NEXT TO A STUMP IN DOUGLAS FIR FOREST WITH QUERCUS CHRYSOLEPIS UNDERSTORY OF TOXICODENDRON, CAREX MULTICAULIS, GALIUM CALIFORNICUM, MADIA MAIDIODES. ON VOLCANIC SOILS. ON GRADUAL EAST FACING SLOPE.

Threat: PROPOSED VINEYARD LESS THAN 25 FEET AWAY FROM PLANT.

General: 1 PLANT OBSERVED IN 1997.

Owner/Manager: PVT

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Lupinus sericatus

Cobb Mountain lupine

Element Code: PDFAB2B3J0

Status	NDDB Element Ranks	Other Lists
Federal: None State: None	Global: G2 State: S2.2	CNPS List: 1B.2

Habitat Associations

General: CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.
Micro: IN STANDS OF KNOBCONE PINE-OAK WOODLAND, ON OPEN WOODED SLOPES IN GRAVELLY SOILS;
SOMETIMES ON SERPENTINE. 180-1500M.

Occurrence No. 42	Map Index: 46273	EO Index: 46273	Dates Last Seen
Occ Rank: Unknown			Element: XXXX-XX-XX
Origin: Natural/Native occurrence			Site: XXXX-XX-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2001-10-24

Quad Summary: Sonoma (3812234/500C)
County Summary: Sonoma, Napa

Lat/Long: 38.34973° / -122.42829°	Township: 06N
UTM: Zone-10 N4244774 E549955	Range: 05W
Mapping Precision: SPECIFIC	Section: 20 Qtr: SE
Symbol Type: POINT	Meridian: M
Radius: 80 meters	Elevation: 1,800 ft

Location: ABOUT 0.4 MILE NORTH OF SUMMIT OF HOGBACK MOUNTAIN, JUST NORTH OF NAPA-SONOMA COUNTY LINE, SOUTHEAST OF BISMARCK KNOB.

Location Detail: MAPPED WITHIN THE NE 1/4 OF THE SE 1/4 OF SECTION 20.

Ecological:

Threat:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS UNDATED ARCVIEW SHAPEFILE OF RARE PLANT LOCATIONS FROM NAPA COUNTY CNPS; NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Trifolium amoenum

showy rancheria clover

Element Code: PDFAB40040

Status	NDDB Element Ranks	Other Lists
Federal: Endangered State: None	Global: G1 State: S1.1	CNPS List: 1B.1

Habitat Associations

General: VALLEY AND FOOTHILL GRASSLAND, COASTAL BLUFF SCRUB.

Micro: SOMETIMES ON SERPENTINE SOIL, OPEN SUNNY SITES, SWALES. MOST RECENTLY SITED ON ROADSIDE AND ERODING CLIFF FACE. 5-560M.

Occurrence No. 7

Map Index: 46525

EO Index: 46525

— Dates Last Seen —

Occ Rank: Unknown

Element: 1951-06-24

Origin: Natural/Native occurrence

Site: 1951-06-24

Presence: Presumed Extant

Trend: Unknown

Record Last Updated: 2001-11-27

Quad Summary: Napa (3812233/500D)

County Summary: Napa

Lat/Long: 38.29747° / -122.28784°

Township: 05N

UTM: Zone-10 N4239060 E562272

Range: 04W

Mapping Precision: NON-SPECIFIC

Section: 10 Qtr: XX

Symbol Type: POINT

Meridian: M

Radius: 1 mile

Elevation: 100 ft

Location: NAPA.

Location Detail:

Ecological:

Threat:

General: SPECIES SEEN IN 1951. ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1951 COLLECTION BY RAVEN FROM "NAPA"; NEEDS FIELDWORK.

Owner/Manager: PVT, UNKNOWN

California Department of Fish and Game
Natural Diversity Database
Full Report for Selected Elements Species Known Within Five Miles

Viburnum ellipticum

oval-leaved viburnum

Element Code: PDCPR07080

_____ Status _____	_____ NDDDB Element Ranks _____	_____ Other Lists _____
Federal: None	Global: G5	CNPS List: 2.3
State: None	State: S2.3	

_____ **Habitat Associations** _____

General: CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.
Micro: 215-1400M.

Occurrence No. 18	Map Index: 50093	EO Index: 50093	_____ Dates Last Seen _____
Occ Rank: Unknown			Element: 1914-05-XX
Origin: Natural/Native occurrence			Site: 1914-05-XX
Presence: Presumed Extant			
Trend: Unknown			Record Last Updated: 2008-12-31

Quad Summary: Sonoma (3812234/500C)

County Summary: Sonoma

Lat/Long: 38.29080° / -122.44660°	Township: 05N
UTM: Zone-10 N4238225 E548394	Range: 05W
Mapping Precision: NON-SPECIFIC	Section: 07 Qtr: XX
Symbol Type: POINT	Meridian: M
Radius: 1 mile	Elevation:

Location: NEAR EL CERRITO RANCH, SONOMA.

Location Detail: MAPPED BY CNDDDB BTWN BUENA VISTA & SONOMA ACC TO A FIELD OBS BY KUHN WHICH STATES THAT "THE PLANT GROWS NEAR SONOMA IN THE FIRST LITTLE CANYON TO THE LEFT WHEN ONE HAS PASSED EL CERRITO RANCH, ALONG THE RD BTWN BUENA VISTA & SONOMA TOWN."

Ecological:

Threat:

General: SITE BASED ON TWO 1914 KUHN COLLECTIONS & A FIELD OBSERVATION BY KUHN IN MADRONO VOL. 1 (1916). ACCORDING TO KUHN, THE PLANT IS ALSO FOUND "2 MILES HIGHER UP ALONG THE SAME ROAD." NEEDS FIELDWORK.

Owner/Manager: UNKNOWN