

Biological Resources Assessment
Inglenook
Niebaum Lane, Napa, Napa County, California
(Portion of APN 027-200-017 and -032)



Prepared For:

Mr. Derek Wintermote
Niebaum Coppola Estate Winery
P.O. Box 208
Rutherford, CA

Prepared by:

Ms. Lucy Macmillan, M.S.
Environmental Scientist
108 Rising Road
Mill Valley, California 94941
415-389-9199

Ms. Anya Peron-Burdick, M.S.
Restoration Ecologist
2923 Grinnel Drive
Davis, California 95619
(707) 529-0904

March 2023

EXECUTIVE SUMMARY	4
1.0 INTRODUCTION	5
2.0 SITE DESCRIPTION	5
3.0 WETLANDS ASSESSMENT	11
3.1 U.S. Army Corps of Engineers Jurisdictional Criteria Review	11
3.1.1 Potential Wetlands	11
3.1.2 Waters of the U.S. (Other Waters)	13
3.2 Regional Water Quality Control Board	13
3.3 California Department of Fish and Wildlife	14
3.4 Background Review	14
3.5 Wetland Assessment and Results	15
4.0 SPECIAL-STATUS SPECIES	17
4.3 Special-status Animals	17
4.3.1 Foothill yellow-legged frog (<i>Rana boylei</i>)	18
4.3.2 California giant salamander (<i>Dicamptodon ensatus</i>)	18
4.3.5 Purple martin (<i>Progne subis</i>)	18
4.3.6 Rufous hummingbird (<i>Selasphorus rufus</i>)	20
4.3.7 Pallid bat (<i>Antrozous pallidus</i>)	20
4.4 Wildlife Corridor Assessment	20
4.5 Recommendations for Special-status Wildlife	20
4.5.1 Birds	20
4.5.2 Mammals	21
4.5.3 Amphibians	22
4.1 Special-status Plant Species	29
4.2 Recommendations Special-status Plants	49
REFERENCES	53

This assessment is based on information available at the time of the study and on-site conditions that were observed on the date of the site visits referenced in the report. In cases where little information is known about species occurrences and habitat requirements, the species evaluation was based on best professional judgment of the biologist with experience working with the species and habitats. For some threatened and endangered species, a site survey at the level conducted for this report may not be sufficient to determine presence or absence of a species to the specifications of regulatory agencies.

EXECUTIVE SUMMARY

This report presents the results of a biological resources assessment conducted for portions of APN 027-200-017 and -032 located north of Niebaum Lane Road in Napa, Napa County, California (Figure 1). The project site is located approximately 1 mile west of St. Helena Highway and is currently undeveloped. A small single-family residence is proposed on the site.

The purpose of the assessment is to identify special-status plant and wildlife species and sensitive habitats (including wetlands and creeks) that have the potential to occur on or in the vicinity of the project site and to determine if the proposed construction of a small single-family residence and associated driveway improvements would potentially affect these resources. Based on information and data collected for the analysis, mitigation measures designed to minimize and/or avoid potential biological resource impacts resulting from proposed project are also provided.

Based on our assessment we have determined that the following special-status species and sensitive habitats could potentially be impacted by the project:

- Nesting birds and raptors
- Foot-hill yellow-legged frog
- California giant salamander
- Red-bellied newt
- Western pond turtle
- Special-status bats
- Bear Creek

No rare plants were observed during protocol-level rare plant surveys conducted on February 7, 2023. A late spring/early summer survey will be conducted in 2023 for later flowering species.

1.0 INTRODUCTION

This report presents the results of a biological resources assessment conducted for portions of APN 027-200-017 and -032 located north of Niebaum Lane Road in Napa, Napa County, California (Figure 1) The project site is located approximately 1 mile west of St. Helena Highway and is currently undeveloped. A small single-family residence is proposed on the site.

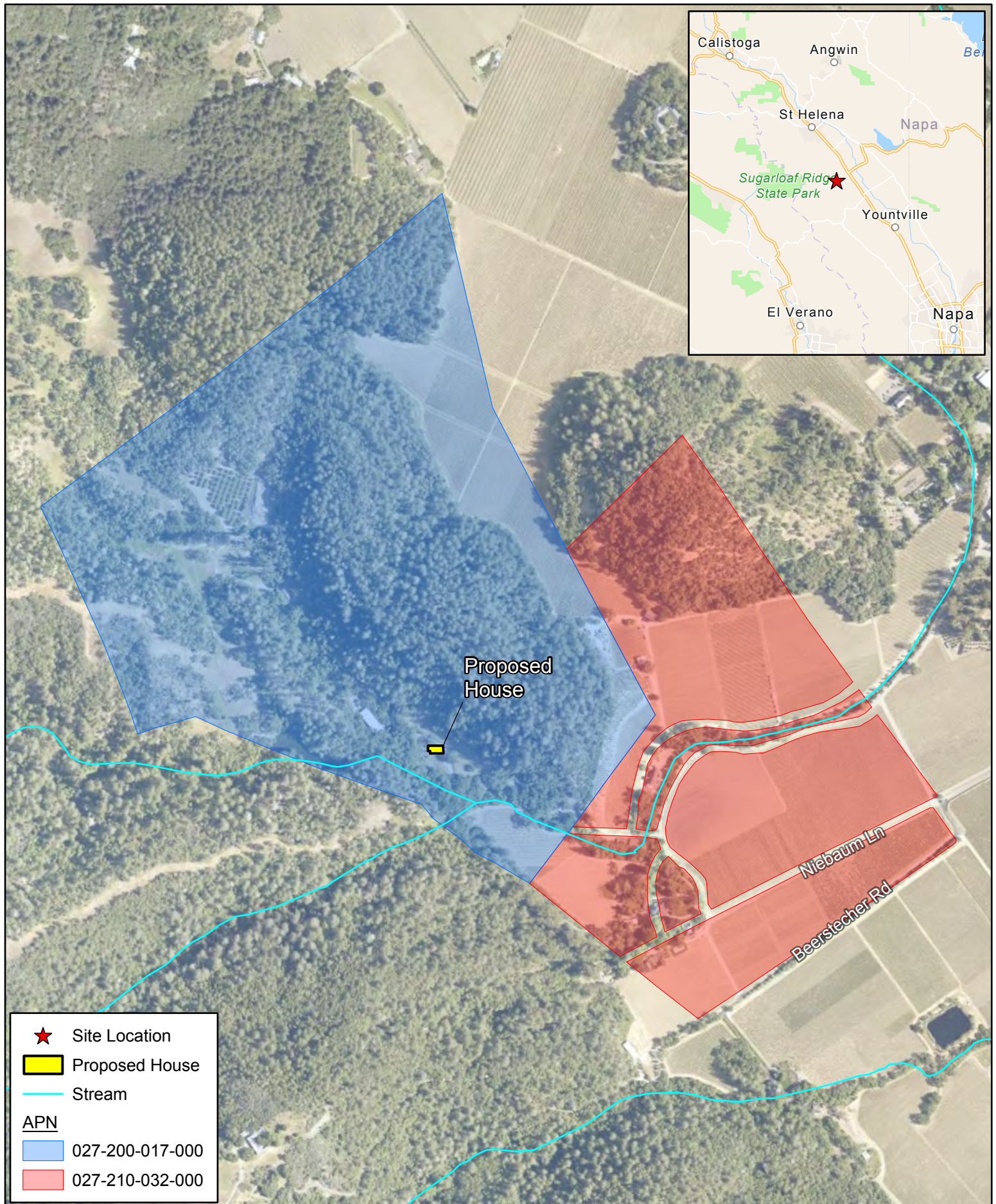
The purpose of the assessment is to identify special-status plant and wildlife species and sensitive habitats (including wetlands and creeks) that have the potential to occur on or in the vicinity of the project site and to determine if the proposed construction of a small single-family residence and associated driveway improvements would potentially affect these resources. Based on information and data collected for the analysis, mitigation measures designed to minimize and/or avoid potential biological resource impacts resulting from proposed project are also provided.

2.0 SITE DESCRIPTION

The survey area is located on the Rutherford USGS 7.5' quadrangle on Sections 18 and 17 approximately one mile west of Highway 29 southwest of downtown Rutherford. The site is accessed by a road from Niebaum Lane into Bear Canyon adjacent to Bear Creek. The project consists of improving the access road to the proposed building lot which is on the south side of the road north of Bear Creek.

The dominant habitat within the project site is Riparian Forest, with indirect adjacent habitat comprised of Oak Woodland and Mixed Evergreen Forest. The area proposed for the house is primarily non-native grasses.

The methods and results of our wetlands assessment and evaluation of special-status species follows.



Sources: Napa County (2021/2022), CDFW (2020), ESRI

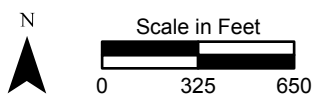
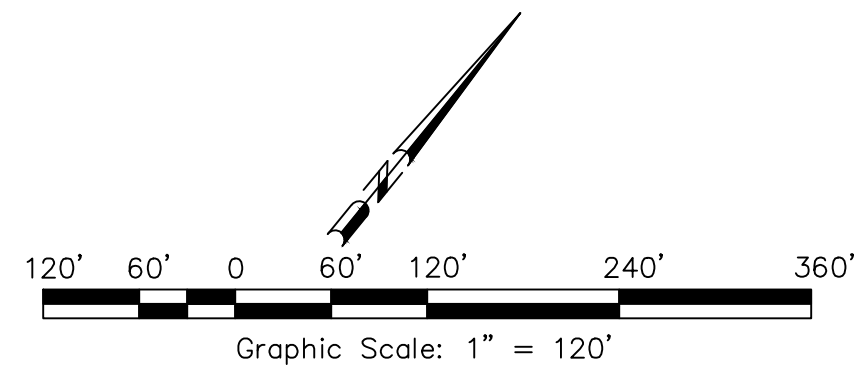


Figure 1. Site Location
Inglenook House
Rutherford, CA
Napa County

\\s01\Company\2017 PROJECTS\17158\dwg\Adobe-Design\Consol Docs-Pub House\Exhibit\17158.02-PubHouse Driveway.dwg, Author: Proffman, 8/25/2022 11:17:37 AM



SHEET 1 OF 4

August 25, 2022

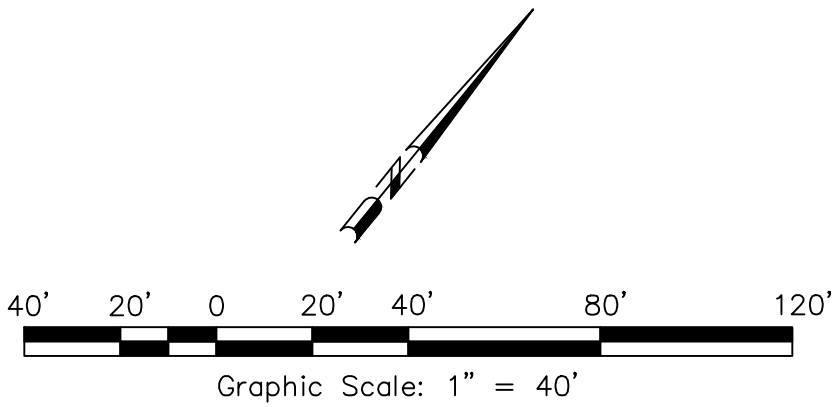
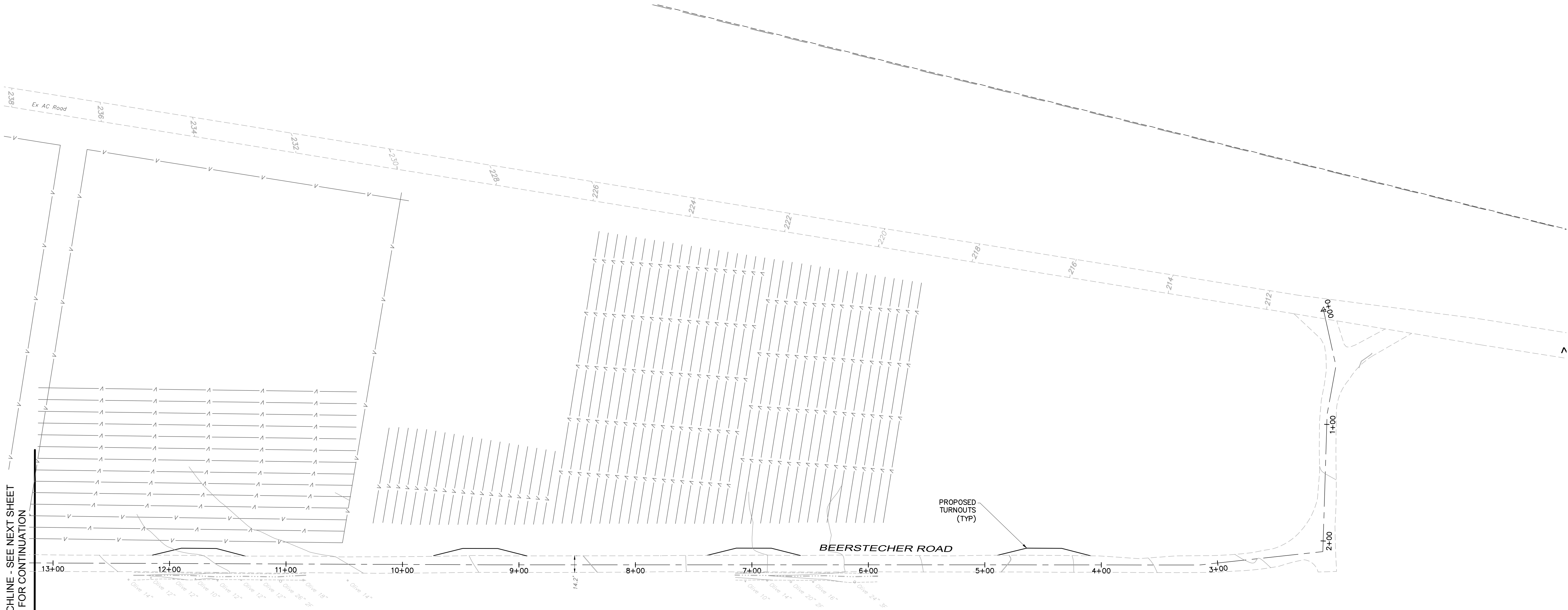
OVERALL SITE PLAN

INGLENOOK- HOUSE
Beerstecher Rd, Saint Helena, Napa, CA
APN 027-210-042

adobe associates, inc.
civil engineering | land surveying | wastewater
1220 N. Dutton Ave., Santa Rosa, CA 95401
P: (707) 541-2300 F: (707) 541-2301
Website: www.adobeinc.com
"A Service You Can Count On!"

T:\2017 PROJECTS\7158.dwg Adobe-Design\Corral Docs-Plan House\Exhibit\7158 02-Driveway.dwg, Askar Prodhan, 3/10/2022 9:31:03 AM

MATCHLINE - SEE NEXT SHEET
FOR CONTINUATION



SHEET 2 OF 4

March 10, 2022

DRIVEWAY IMPROVEMENTS

INGLENOOK- HOUSE
Beerstecher Rd, Saint Helena, Napa, CA
APN 027-200-017

adobe associates, inc.
civil engineering | land surveying | wastewater

1220 N. Dutton Ave., Santa Rosa, CA 95401
P: (707) 541-2300 F: (707) 541-2301
Website: www.adobecinc.com

"A Service You Can Count On!"

T:\2017 PROJECTS\7158.dwg House\Exhibit\7158.02-Pubhouse Driveway.dwg, Author: Prodfon, 3/10/2022 9:31:08 AM

MATCHLINE - SEE NEXT SHEET
FOR CONTINUATION

MATCHLINE - SEE PREVIOUS SHEET
FOR CONTINUATION

PROPOSED ROAD
WIDENING (WITHIN CREEK
SETBACK) (TYP)

PROPOSED ROAD
WIDENING (TYP)

PROPOSED
TURNOUTS
(TYP)

BEAR CREEK

BEERSTECHER ROAD



Graphic Scale: 1" = 40'

SHEET 3 OF 4

March 10, 2022

DRIVEWAY IMPROVEMENTS

INGLENOOK- HOUSE
Beerstecher Rd, Saint Helena, Napa, CA
APN 027-200-017

adobe associates, inc.
civil engineering | land surveying | wastewater
1220 N. Dutton Ave., Santa Rosa, CA 95401
P: (707) 541-2300 F: (707) 541-2301
Website: www.adobeinc.com
"A Service You Can Count On!"

3.0 WETLANDS ASSESSMENT

3.1 U.S. Army Corps of Engineers Jurisdictional Criteria Review

Unless exempt from regulation, all proposed discharges of dredged or fill material into waters of the United States require U.S. Army Corps of Engineers (Corps) authorization under Section 404 of the Clean Water Act (33 U.S.C. 1344) and Clean Water Act Section 401 authorization from the Regional Water Quality Control Board (RWQCB). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), wetlands (excluding isolated wetlands for the Corps), and farmed wetlands.

The Corps identifies wetlands using a "multi-parameter approach" which requires positive wetland indicators in three distinct environmental categories: hydrology, soils, and vegetation. The *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West*, which was released in early 2007 and revised in 2008 (version 2.0), is utilized when conducting jurisdictional wetland determinations in areas identified within the boundaries of the Arid West (U.S. Army Corps of Engineers, 2008). The project site falls within the Arid West region and so wetlands identified on the site were delineated using that guidance.

3.1.1 Potential Wetlands

Section 328.3 of the Federal Code of Regulations defines wetlands as:

"Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

EPA, 40 CFR 230.3 and CE, 33 CFR 328.3 (b)

The three parameters used to delineate wetlands are the presence of hydrophytic vegetation, wetland hydrology, and hydric soils. According to the Corps Manual, for areas not considered "problem areas" or "atypical situations":

"....[E]vidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland delineation."

Vegetation

Plant species identified are assigned a wetland status according to the U.S. Fish and Wildlife Service list of plant species that occur in wetlands (Reed 1988). This wetland classification system is based on the expected frequency of occurrence in wetlands as follows:

OBL	Always found in wetlands	>99% frequency
FACW	Usually found in wetlands	67-99%
FAC	Equal in wetland or non-wetlands	34-66%
FACU	Usually found in non-wetlands	1-33%
UPL/NL	Upland/Not listed (upland)	<1%

The Corps Manual and Supplements require that a three-step process be conducted to determine if hydrophytic vegetation is present. The first step is the Dominance Test (Indicator 1); the second is the Prevalence Index (Indicator 2); the third is Morphological Adaptations (Indicator 3). The Dominance Test requires the delineator to apply the "50/20 rule". The dominant species are chosen independently from each stratum of the community. In general, dominant species are determined for each vegetation stratum from a sampling plot of an appropriate size surrounding the sample point. Dominants are defined as the most abundant species that individually or collectively account for more than 50 percent of the total vegetative cover in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total cover. If greater than 50 percent of the dominant species has an OBL, FACW, or FAC status, the sample point meets the hydrophytic vegetation criterion.

If the sample point fails the 50/20 rule and both hydric soils and wetland hydrology are not present, then the sample point does not meet the hydrophytic vegetation criterion, unless the site is a problematic wetland situation. However, if the sample point fails Indicator 1, but hydric soils and wetland hydrology are both present, the delineator must apply the Indicator 2, Prevalence Index. The Indicator 3, Morphological Adaptations, is rarely used in this region.

Hydrology

The Corps jurisdictional wetland hydrology criterion is satisfied if an area is inundated or saturated for a period sufficient to create anoxic soil conditions during the growing season (a minimum of 14 consecutive days). Evidence of wetland hydrology can include primary indicators, such as visible inundation or saturation or oxidized root channels, or secondary indicators such as the FAC-neutral test or the presence of a shallow aquitard. Only one primary indicator is required to meet the wetland hydrology criterion; however, if secondary indicators are used, at least two secondary indicators must be present to conclude that an area has wetland hydrology.

Soils

The Natural Resource Conservation Service (NRCS) defines a hydric soil as follows:

“A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.” Federal Register July 13, 1994, U.S. Department of Agriculture, NRCS

Soils formed over long periods under wetland (anaerobic) conditions often possess characteristics that indicate they meet the definition of hydric soils. The supplement provides a list of the hydric soil indicators that are known to occur in region. Soil samples were collected and described according to the methods provided in the supplements. Soil chroma and values were determined using a Munsell soil color chart (Kollmorgen 1975). If any of the soil samples met one or more of the hydric soil indicators described in the supplement hydric soils were determined to be present.

3.1.2 Waters of the U.S. (Other Waters)

“Other waters” or “Waters of the United States” (WUS) other than wetlands are also potentially subject to Corps jurisdiction. WUS subject to Corps jurisdiction include ponds, lakes, rivers, streams (including ephemeral and intermittent streams), and all areas below the High Tide Line (HTL) subject to tidal influence. Jurisdiction in non-tidal areas extends to the ordinary high water mark (OHWM) defined as:

“...that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the characteristics of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

Federal Register Vol. 51, No. 219, Part 328.3 (e). November 13, 1986

3.2 Regional Water Quality Control Board

The Regional Water Quality Control Board regulates waters of the State pursuant to Sections 13260(a)(1) and 13050(e) of the State Water Code, and the Porter Cologne Act. In addition, anyone proposing to conduct a project that requires a federal permit or involves dredge or fill activities that may result in a discharge to U.S. surface waters and/or "Waters of the State" are required to obtain a Clean Water Act (CWA) Section 401 Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects) from the Regional Water Quality Control Board, verifying that the project activities will comply with state water quality standards. The most common federal permit for dredge and fill activities is a CWA Section 404 permit issued by the Corps of Engineers (North

Coast Regional Water Quality Control Board, 2007). In general, the RWQCB employs similar wetland delineation techniques for identifying wetland areas potentially subject to its regulation.

Section 401 of the CWA grants each state the right to ensure that the State's interests are protected on any federally permitted activity occurring in or adjacent to Waters of the State. In California, the Regional Water Quality Control Boards (Regional Board) are the agency mandated to ensure protection of the State's waters. So if a proposed project requires a U.S. Army Corps of Engineers CWA Section 404 permit, falls under other federal jurisdiction, and has the potential to impact Waters of the State, the Regional Water Quality Control Board will regulate the project and associated activities through a Water Quality Certification determination (Section 401) (North Coast Regional Water Quality Control Board, 2007). The project site falls within the San Francisco Regional Water Quality Control Board's jurisdiction.

However, if a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a fill discharge to "Waters of the State", the Regional Board has the option to regulate the project under state authority (Porter-Cologne) in the form of Waste Discharge Requirements or Waiver of Waste Discharge Requirements (North Coast Regional Water Quality Control Board, 2007). Waters of the State include isolated wetlands, which are not regulated by the Corps.

3.3 California Department of Fish and Wildlife

Activities that result in the substantial modification of the bed, bank or channel of a stream or lake may require a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600-1607 of the California Fish and Game Code. On streams, creeks and rivers, the extent of CDFW jurisdiction extends from the top of bank to top of bank or the outer limits of the riparian canopy, whichever is wider.

3.4 Background Review

Prior to conducting the on-site wetlands assessment within the project area, various background materials relating to the site were reviewed. These include aeriels from Google earth and the Rutherford USGS 7.5-minute quadrangle. The riparian corridor associated with Bear Creek was observed on Google Earth. Bear Creek is shown as a blue-line stream on the Rutherford USGS map.

No potential wetlands were observed in the background review.

Additionally, the Soil Survey (web soil survey) was reviewed to determine if any of the soils on the project site are mapped as hydric soils. The presence of a hydric soil-mapping

unit on a project site suggests the presence of potential wetland habitats and therefore is another tool helpful in wetland identification.

The soil units mapped on the project site are:

- Bale clay loam, 2 to 5 percent slopes on the majority of the site
- Millsholm loam, 6 to 55 percent slopes associated with Bear Creek

Neither of these soils units is listed as hydric on the County or National list.

3.5 Wetland Assessment and Results

On February 7, 2023, 2020, Ms. Lucy Macmillan, M.S. and Ms. Anya Perron-Burdick, M.S. conducted a preliminary wetlands delineation on the project site utilizing the methods and procedures prescribed in the Arid West Supplement and Corps of Engineers Federal Manual from 1987.

Bear Creek traverses the project site to the south. Bear Creek originates in the hills to the west and ultimately drains to the Napa River. The road accessing the proposed lot is bridged over the creek. The channel of the creek consists of cobbles and patches of emergent wetland vegetation. The ordinary high-water mark in the vicinity of the proposed house measures approximately 20-25 feet wide.

No potential wetlands were observed on the site.

No improvements associated with the project will impact the bed, bank or channel of Bear Creek.



Bear Creek located south of the proposed building lot.



Access road adjacent to Bear Creek

4.0 Special-status Species

4.3 *Special-status Animals*

Potential occurrence of special-status wildlife species in the Project Site was evaluated by first determining which special-status species occur near the Project Site through a literature and database search. Database searches for known occurrences of special-status species focused on the Rutherford 7.5-minute USGS quadrangle and the eight surrounding USGS quadrangles. The following sources were reviewed to determine which special-status wildlife species have been documented to occur in the surrounding 5-mile vicinity of the Project Site:

- California Natural Diversity Database (CNDDDB) records and Spotted Owl Viewer (CDFW 2023)
- USFWS Information for Planning and Conservation Species Lists (USFWS 2023)
- CDFG publication “California’s Wildlife, Volumes I-III” (Zeiner et al. 1990)

On February 7, 2023, Ms. Lucy Macmillan, M.S. conducted a reconnaissance level evaluation of the project site. The focus of the survey was to identify whether suitable habitat elements for each of the special status species documented in the surrounding vicinity or in the range of the site are present on the site or not and whether the project would have the potential to result in impacts to any of these species and/or their habitats either on- or off-site. Habitat elements examined included the presence of: dispersal habitat, foraging habitat, refugia or estivation habitat, and breeding (or nesting) habitat.

The project site was also assessed for the potential presence of wildlife corridors that may potentially be impacted by the proposed project. A wildlife corridor may be one of three types: dispersal corridor (one-way movement from a natal area); migration corridor (seasonal, cyclical movement due to changing conditions); and home range (movement for locating resources). The biologist evaluated nearby habitats surrounding the project site and possible connectivity routes to determine whether such movement corridors may be present or affected by the proposed project.

Special status species are those species in California that are afforded special protections under state and federal regulation. In addition to wildlife listed as federal or state endangered and/or threatened, CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW Special-status Invertebrates are all considered special-status species. Although these species generally have no special legal status, they are given special consideration under CEQA. Furthermore, CDFG Fish and Game Code and the Migratory Bird Treaty Act (MBTA)

prohibits the take of actively nesting birds as well as common maternity roosting bats (CDFG Code only).

Fifteen special-status wildlife species have been documented within five miles of the Project Site (Figure 3). Based on the biological communities present on the site, the site has the potential to support four of these species, plus additional species known to occur in similar habitats within the County. The remaining species documented in the area either are not likely to occur due to absence of suitable habitat elements such as open grassland and chaparral. Species that may potentially be present and impacted by the proposed project are described below.

4.3.1 Foothill yellow-legged frog (*Rana boylei*)

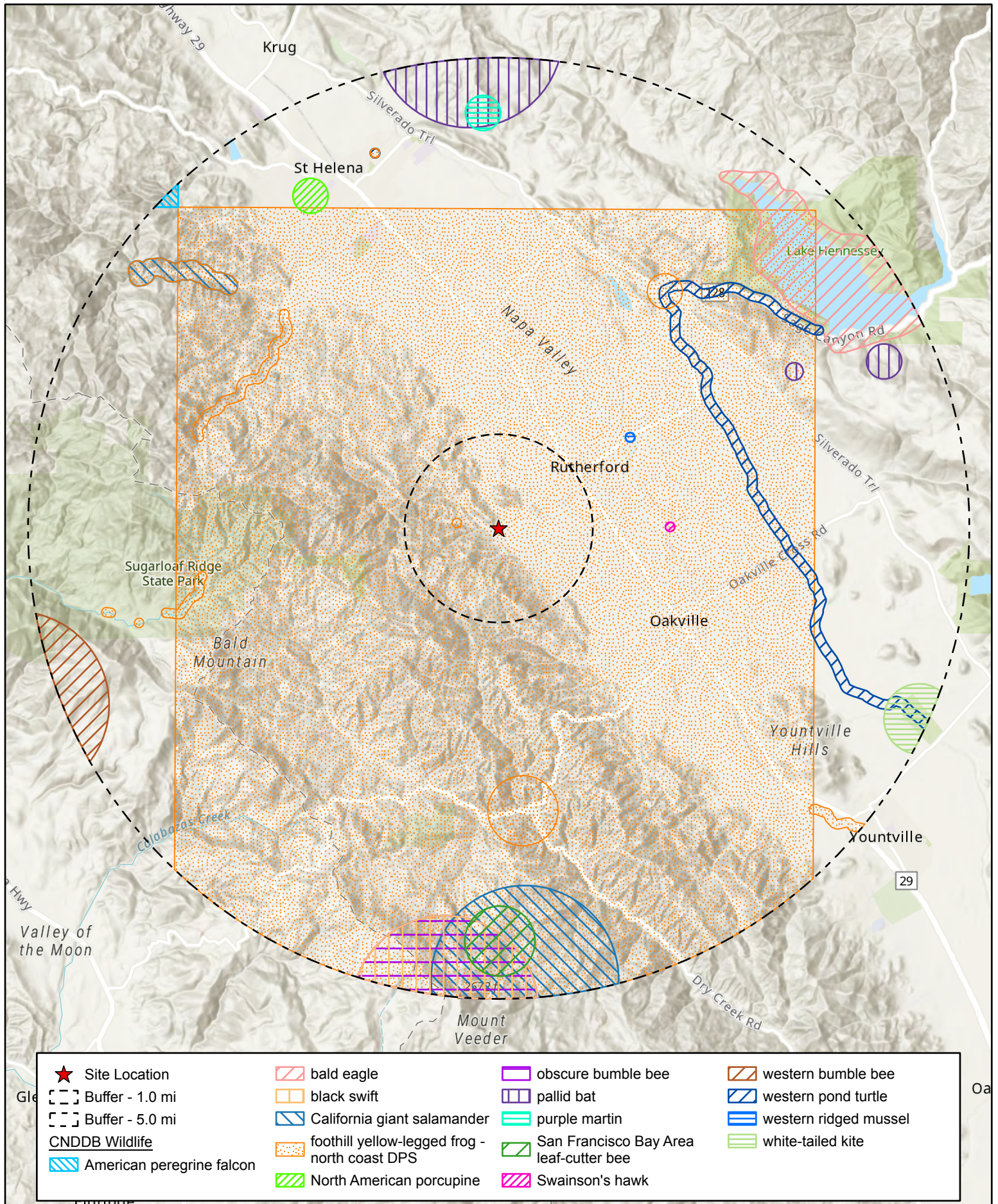
Bear Creek provides potential habitat for Foothill yellow-legged frog (FYLF). FYLF is listed as a Species of Special Concern and occurs in the Coast ranges from northern California to Los Angeles. This frog is found in or near creeks and streams with rocky substrates in a variety of habitats. This species is infrequently found away from a permanent water source, even on rainy nights (Zeiner, 1988). The site occurs within the northwest/north coast Distinct Population for this species.

4.3.2 California giant salamander (*Dicamptodon ensatus*)

Bear Creek provides potential habitat for California giant salamander, which is listed as a Species of Special Concern by CDFW. The California giant salamander is known from coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Adults may be found under rocks, logs and other debris adjacent to water sources. Aquatic larvae are found in cold, clear streams, sometimes in lakes or ponds.

4.3.5 Purple martin (*Progne subis*)

The purple martin is an uncommon summer resident in California, occurring in woodlands and low-elevation hardwood and coniferous forest. This species is considered a CDFW Species of Special Concern. It usually feeds on insects captured in flight 100-200 feet above ground. The purple martin nests in cavities often located in tall, isolated trees or snags in open forest or woodland. This species may nest in tall, isolated trees or snags located adjacent to the project site.



Sources: ESRI, CDFW CNDDDB (1/3/2023)



Figure 2. CNDDDB Wildlife
Inglenook House
Rutherford, CA
Napa County

4.3.6 Rufous hummingbird (*Selasphorus rufus*)

The Rufous Hummingbird is a USFWS Bird of Conservation and is a common migrant and uncommon summer resident in California. Rufous Hummingbirds typically breed in open or shrubby areas. During their migration, Rufous Hummingbirds may be found in mountain meadows up to 12,600 feet elevation. The female builds the nest alone using soft plant down held together with spider web, and camouflages the outside with lichen, moss, and bark. They put their nests up to 30 feet high in coniferous or deciduous trees.

4.3.7 Pallid bat (*Antrozous pallidus*)

Pallid bats are distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma, and Kansas. This species is considered a CDFW Species of Special Concern and a WBWG High Priority species. Pallid bat occurs in a variety of habitats ranging from rocky arid deserts to grasslands, and into higher elevation coniferous forests. Pallid bats often roost in colonies of between 20 and several hundred individuals. Roosts are typically in rock crevices, tree hollows, mines, caves, and a variety of man-made structures, including vacant and occupied buildings. Pallid bat is documented within approximately 4 miles of the site and may roost in larger trees on or immediately adjacent to the site. Tree roosting on site is likely limited to individual or small-sized colony maternity roosts or night roost habitat by pallid bat, if present.

4.4 Wildlife Corridor Assessment

The project site was assessed for the potential presence of wildlife corridors that may potentially be impacted by the proposed project. There are three types of wildlife corridors: dispersal corridor (one-way movement from a natal area); migration corridor (seasonal, cyclical movement due to changing conditions); and home range (movement for locating resources). Habitat elements and surrounding core areas were examined to determine the potential for the project site to support any of the three types of corridors. Primary elements include: water, cover, and food.

Bear Creek provides a wildlife corridor for all of the above types listed. However, the project will not alter or directly affect Bear Creek therefore the project is not likely to result in impacts to any wildlife corridor or barriers to wildlife movements.

4.5 Recommendations for Special-status Wildlife

4.5.1 Birds

Two special status birds may be present or nest on or immediately adjacent to the project site. Impacts to both migratory and special status nesting birds if present is considered a significant impact. These species may be impacted by removal of the nest (tree) or by noise and visual impacts associated with construction.

To avoid impacts to nesting birds, the following measures are recommended:

- Vegetation removal and construction activities should be initiated during the non-nesting season from September 1 to January 31.
- If work cannot be initiated during this period, or if there is a break in activity lasting more than 14 days after February 1 then nesting bird surveys should be performed in suitable nesting substrate within 500 feet of proposed activities.
- If nests are found, a no-disturbance buffer should be placed around the nest until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer may be determined by the biologist based on species and proximity to activities; larger buffers up to 500 feet are recommended for special status raptor species.

4.5.2 Mammals

One special status bat, pallid bat may roost in trees present on the project site. Removal of suitable tree roosts has the potential to impact this species as well as other common bat species, if present. Likewise, noise, vibration, and dust from activities has the potential to impact maternity roosting bats in nearby habitats, if present. To minimize impacts to this species, the following measures are recommended:

- To the extent practical, tree removal and construction-related activities should be conducted between September 15 and April 15 to avoid impacts to pregnant females and active maternity roosts (colonial or solitary).
- To avoid impacts to solitary roosters, trees should be removed in pieces, rather than felling the entire tree. Felled tree pieces should be shaken gently to rouse any bats and then left overnight prior to removal from the site or on-site chipping to allow any bats to exit the roost.
- If roosts cannot be removed during the non-maternity season, a pre-construction roost assessment and emergence survey should be conducted in suitable habitat on or adjacent to the project site. If a maternity roost is located, that roost must remain undisturbed until September 15 or until a qualified biologist has determined the roost is no longer active.

- If an active maternity roost is found, compensatory mitigation shall be provided through consultation with CDFW and may include construction and installation of suitable replacement habitat on-site.

4.5.3 Amphibians

Foothill yellow-legged frog and California giant salamander may occur in Bear Creek and disperse through the project area especially during rain events. To minimize potential impacts to these species during construction, the following mitigation measures are recommended.

- Prior to work, all workers on the crew should be trained by a qualified biologist as to the sensitivity of the special-status species potentially occurring in the project area.
- No construction activities will occur during rain events, defined as ¼ inch of rain falling within a 24-hour period. Construction activities may resume 24 hours after the end of the rain event.
- Work should not be conducted any time 30 minutes before sunrise or sunset.

Table 2. Special-Status Animal Species Potentially Occurring on or in Vicinity of Survey Area

Animal*	Status	Habitat	Potential for Occurrence on of In Vicinity of Site
Amphibians and Reptiles			
California tiger salamander (<i>Ambystoma californiense</i>)	FE ¹ , FT	Needs underground refuges especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	No suitable habitat on site.
Pacific pond turtle (<i>Emys marmorata</i>)	CSC	Associated with permanent or nearly permanent water in a wide variety of habitats. Requires basking sites, nest sites may be found up to 0.5 km from water.	Potential for occurrence low.
California red-legged frog (<i>Rana aurora draytonii</i>)	FT, CSC	Lowlands and foothills in or near permanent sources of deepwater with dense, shrubby or emergent riparian vegetation.	No suitable habitat on site.
Foothill yellow-legged frog (<i>Rana boylei</i>)	CSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	Bear Creek provides potential habitat.

¹ Listed as federally endangered in Sonoma County (Santa Rosa Plain) and Santa Barbara counties.

Animal*	Status	Habitat	Potential for Occurrence on or in Vicinity of Site
Fish			
Steelhead-Central California Coast ESU (<i>Oncorhynchus mykiss irideus</i>)	FT	Anadromous. Adults and fry recorded in upstream portions of creeks north of San Pablo Bay. Juveniles may rear in lower reaches of larger river systems and Bay before moving out to sea.	No suitable habitat on site.
Birds**			
Tricolored blackbird (<i>Agelaius tricolor</i>)	CSC	Colonial nester. Most numerous in the Central Valley & Vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	No suitable habitat on site.
Burrowing owl (<i>Athene cunicularia</i>)	CSC	Open, dry annual or perennial grasslands; deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent on burrowing animals, most notably the California ground squirrel.	No suitable habitat on site.

Animal*	Status	Habitat	Potential for Occurrence on or in Vicinity of Site
Birds			
Black swift (<i>Cypseloides niger</i>)	CSC	(Nesting) coastal belt of Santa Cruz & Monterey County; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf.	No suitable habitat on site.
Northern spotted owl (<i>Strix occidentalis caurina</i>)	FT, CSC	In northern California, the spotted owl resides in dense, old-growth, multi-layered mixed conifer, redwood, and Douglas fir habitats from sea level to nearly 2300 meters.	Potential for occurrence unlikely due to presence of two nesting territories within approximately 1 mile to the north and south. Site does not fall within designated critical habitat for this species.
Western yellow billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FC, SE	(Nesting) Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with low story of blackberry, nettles or wild grape.	No suitable habitat on site.
White-tailed kite (<i>Elanus leucurus</i>)	SFP	(Nesting) rolling foothills/valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland.	Potential for occurrence unlikely.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	SE	Ocean shore, lake margins, and rivers both for nesting and wintering within one mile of water. Nests in large, old growth or dominant live tree with open branches, especially Ponderosa pine.	Potential for occurrence unlikely.

Animal*	Status	Habitat	Potential for Occurrence on or in Vicinity of Site
American peregrine falcon (<i>Falco peregrinus anatum</i>)	SFP, BCC	Near wetlands, lakes, rivers or other waters. On cliffs, banks, dunes and mounds as well as human-made structures.	Potential for occurrence unlikely.
Purple martin (<i>Progne subis</i>)	CSC	Inhabits woodlands, low elevation coniferous forest of Douglas fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, and in human structures.	Project site and adjacent woodland provide potential habitat.
Bank swallow (<i>Riparia riparia</i>)	ST	(Nesting) Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks or cliffs with fine-textured/sandy soils near streams, river, lakes, and ocean to dig nest hole.	No suitable habitat on project site.
Rufous hummingbird (<i>Selaphorus rufus</i>)	USFWS BC	A common migrant and uncommon summer resident in California. Rufous Hummingbirds typically breed in open or shrubby areas.	Project site and adjacent woodland provide potential habitat.
Mammals			
Pallid bat (<i>Antrozous pallidus</i>)	CSC, WBWG-H	Deserts, grasslands, woodlands and forests. Most common in open dry habitats with rocky areas for roosting. Very sensitive to disturbance of roosting sites.	Potential for occurrence on or adjacent to the project site.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	SCT, CSC	Throughout California in a variety of habitats. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Potential for occurrence unlikely.

Animal*	Status	Habitat	Potential for Occurrence on or in Vicinity of Site
Mammals			
American porcupine (<i>Erethizon dorsatum</i>)	CSC	Found in a variety of habitats from forest to chaparral to desert.	May pass through project site.
American badger (<i>Taxidea taxus</i>)	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Potential for occurrence low. No dens observed during February 2023 evaluation.
Invertebrates			
Obscure bumblebee (<i>Bombus coliginosus</i>)	S1S2	Coastal areas from Santa Barbara County to north Washington State. Host plants include coyote bush, lupine, and grindelia.	Potential for occurrence unlikely.
Western bumble bee (<i>Bombus occidentalis</i>)	S1, IUCN-VU	Once common and widespread, species has declined precipitously from Central CA to Southern B.C., perhaps from disease. Nests primarily in underground cavities.	Potential for occurrence unlikely.

*Note: FSC = U.S. Fish and Wildlife Service Species of Concern; FE = federally listed as endangered; FT = federally listed as threatened; SE = state listed as endangered; ST = state listed as threatened; SCT = State candidate threatened. SFP = State fully protected (may not be taken or possessed without a permit from the Fish and Wildlife Commission and/or CDFW). CSC = California species of special concern; WBWG (Western Bat Working Group) high priority = represents those species considered the highest priority for funding, planning, and conservation actions. These species are imperiled or are at high risk of imperilment; LM = Low priority. IUCN-V = International Union for Conservation of Nature, vulnerable. G1 – Critically imperiled globally – at very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors. G2 – Imperiled globally at high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other risk factors. S1 – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state. S2- State rank imperiled because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines or other risk factors making it very vulnerable to extirpation from the state.

**All migratory birds are protected by the Migratory Bird Treaty Act (50 CFR 10), which makes it unlawful to take, possess, buy, sell, purchase or barter any migratory bird, including feathers or other parts, nests, eggs or products, except as allowed by implementing regulations (50 CFR 21). In addition, Section 2080

of the California Fish and Wildlife Code prohibits the killing of a listed species, and Sections 3503, 3503.5, and 3800 of the Fish and Wildlife Code prohibit the take, possession, or destruction of birds, their nests, or eggs.

Based on review of the CNDDDB 2023 for Rutherford and surrounding quadrangles.

4.1 Special-status Plant Species

Special-status plants are legally protected under the State and Federal Endangered Species Acts or other regulations, and species that are considered rare by the scientific community. Special status species include those plants that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed and proposed species. Plant species on California Native Plant Society (CRPR) Lists 1 and 2 are also considered special status plant species and must be considered under CEQA.

Rare plants are defined here to include: (1) all plants that are federal- or state-listed as rare, threatened or endangered, (2) all federal and state candidates for listing, (3) all plants included in Lists 1 through 2 of the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380.

Other sensitive biological communities not discussed above include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in its California Natural Diversity Database. Sensitive plant communities are also identified by CDFW. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or USFWS must be considered and evaluated under CEQA. Specific habitats may also be identified as sensitive in city or county general plans or ordinances.

Prior to conducting a site evaluation, a focused review of literature and data sources was conducted to identify special-status plant species with potential to occur in the survey area. Sources reviewed include California Natural Diversity Data Base (CNDDB) occurrence records for the Rutherford USGS 7.5' quadrangle, the quadrangle on which the survey area is located, and the eight quadrangles surrounding it; county and USGS quadrangle occurrence records in the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants* (CNPS 2018) for the same nine quadrangles.

Sources consulted for up-to-date information on conservation status included the U.S. Fish and Wildlife Service for federally listed species (including Proposed and Candidate species) and California Department of Fish and Wildlife (CDFW) (2018) for State of California listed species. Special-status species also include species with California Rare Plant Rank (CRPR) 1A (Plants Presumed Extinct in California), CRPR 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere), or CRPR 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere), as indicated by

the CNPS *Inventory* (CNPS 2018). Impacts to these species must be reviewed under the provisions of the California Environmental Quality Act (CEQA) Guidelines.

Also considered as special-status species are those with CRPR 3 (Plants About Which We Need More Information—A Review List) and CRPR 4 (Plants of Limited Distribution—A Watch List) of the CNPS *Inventory*. These species are considered to be of lower sensitivity, and generally do not fall under specific state or federal regulatory authority. Specific mitigation considerations are generally not required for species in these categories.

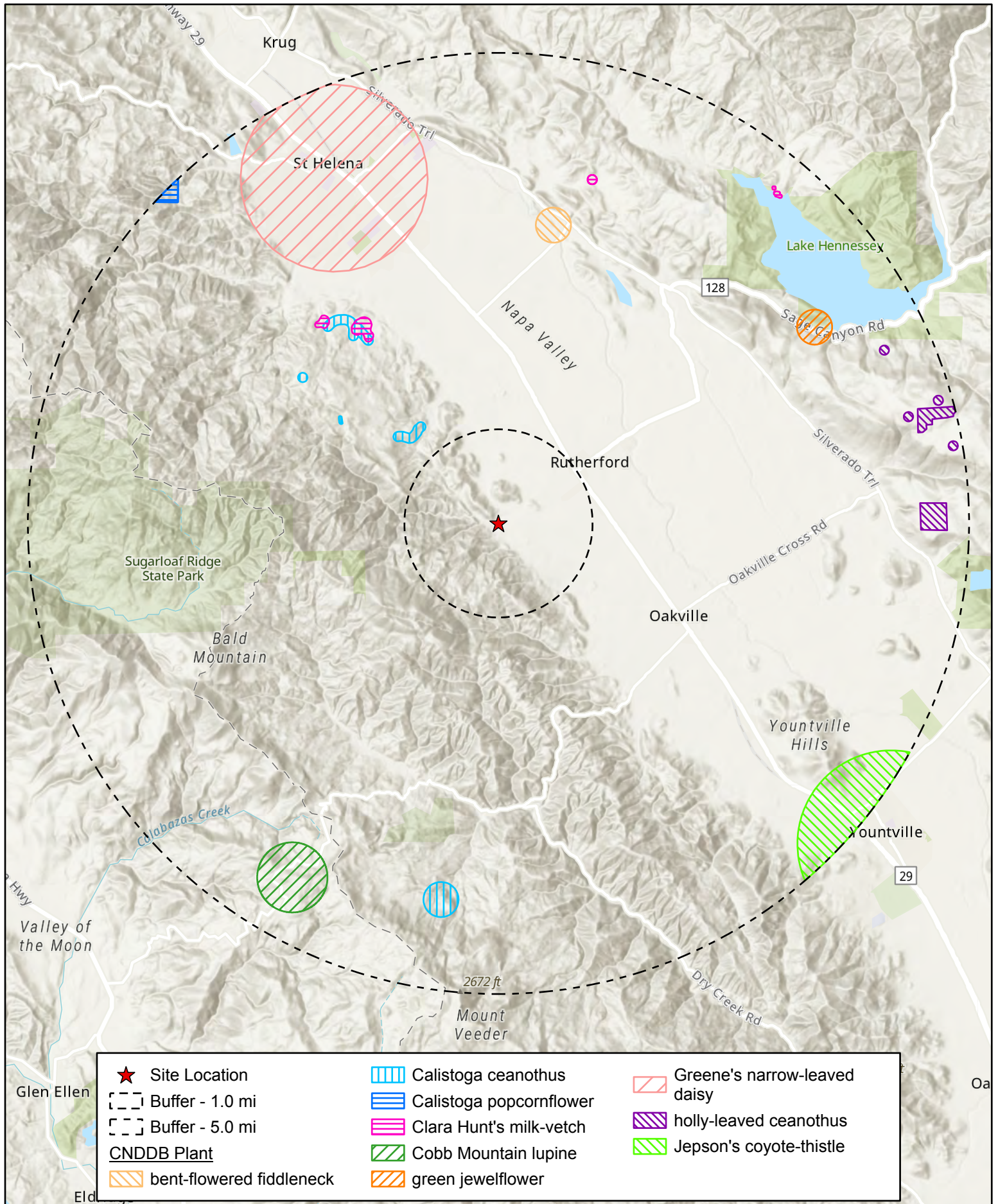
Based on information from the above sources, a target list of special-status plant species with potential to occur in the vicinity of the study area was prepared (Table 1) (see Figure 2).

Sensitive habitats include: riparian corridors, wetlands, habitats for legally protected species and CDFW Species of Special Concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDDB working list of “high priority” habitats for inventory (i.e., those habitats that are rare or endangered within the borders of California).

The dominant habitat within the project site is Riparian Forest, with indirect adjacent habitat comprised of Oak Woodland and Mixed Evergreen Forest. The Riparian Forest is dominated by a *Quercus agrifolia* (coast live oak) vegetation alliance, with the primary canopy cover consisting of *Quercus agrifolia* (coast live oak), *Salix lasiolepis* (Arroyo willow), *Acer macrophyllum* (big-leaf maple), *Aesculus californica* (California buckeye), and *Rubus armeniacus* (Himalayan blackberry). The Riparian Forest soil on-site is primarily composed of clay loam and loam with geological formations of Sonoma Volcanic and Great Valley Sequence. The adjacent Oak Woodland habitat is dominated by *Quercus agrifolia* - *Umbellularia californica* - *Arbutus menziesii* vegetation alliance and the adjacent Mixed Evergreen Forest is dominated by *Pseudotsuga menziesii*.

A list of plant species observed on the project site on February 7, 2023 is included as Appendix A.

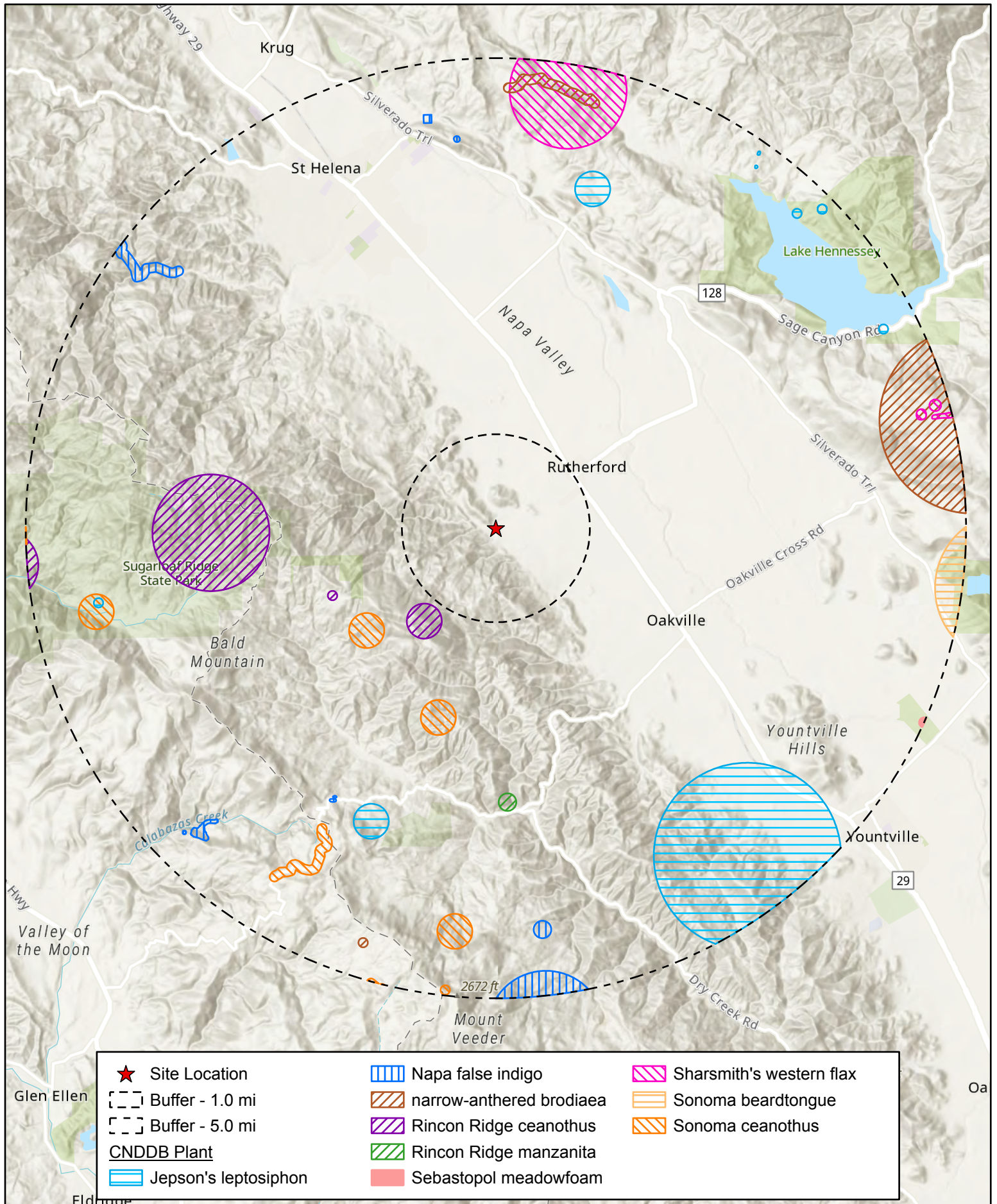
No rare plants were observed during a protocol-level survey on February 7, 2023. A second survey will be conducted later in the season for those species that flower in April through May.



Sources: ESRI, CDFW CNDDDB (1/3/2023)



Figure 3a. CNDDDB Plant
Inglenook House
Rutherford, CA
Napa County



Sources: ESRI, CDFW CNDDDB (1/3/2023)

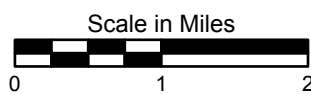


Figure 3b. CNDDDB Plant
Inglenook House
Rutherford, CA
Napa County

Table 2
Special-status Plant Species Potentially Occurring on or Near Project Site

Scientific Name	Common Name	Status Federal, State, CRPR, GRank, SRank	Habitat	Flowering Period	Potential for Occurrence on Project Site
<i>Allium peninsulare</i> var. <i>franciscanum</i>	Franciscan onion	1B.2; G5T2; S2	Clay soil, volcanic or serpentine substrate; cismontane woodland, valley and foothill grassland.	April-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	1B.2; S2; G5T2	Broadleafed upland forest, chaparral, cismontane woodland, North Coast coniferous forest.	April-July	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	1B.2	Coastal bluff scrub, cismontane woodland, valley and foothill grassland, openings in broadleaved upland forest.	March-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Antirrhinum virga</i>	twig-like snapdragon	4.3; G3; S3	Chaparral, Lower montane coniferous forest; often found in rocky, serpentinite openings	June-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 survey.
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i>	Rincon Ridge manzanita	1B.1; G3; S1	Chaparral (rhyolitic), Cismontane woodland	February-May	Suitable habitat occurs in survey area. No manzanita species observed within survey area. No Potential

					None observed during 2023 survey.
<i>Astragalus breweri</i>	Brewer's milk-vetch	4.2; G3; S3	Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland (open, often gravelly, serpentine and/or volcanic soils)	April-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Astragalus claranus</i>	Clara Hunt's milk-vetch	CE; FE; 1B.1; S1; G1	Red rhyolitic substrate; chaparral, cismontane woodland; other substrates include clay, rocky, serpentinite (sometimes), volcanic (sometimes)	February-May	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Astragalus clevelandii</i>	Cleveland's milk-vetch	4.3; G4; S4	Chaparral, Cismontane woodland, Riparian forest	June-September	Suitable habitat occurs in survey area. Most documented observations occur in North Napa County at higher elevations Low Potential None observed during 2023 survey.
<i>Astragalus tener</i> var. <i>tener</i>	Alkali milk-vetch	1B.2; G2T; S1	Alkaline, often adobe clay soil; playas, vernal pools, alkali flats within valley and foothill grassland, coastal salt marsh.	March-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 survey.
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	1B.2; G2; S2	Chaparral, cismontane woodland, valley and foothill	March-July	Suitable habitat occurs in survey area. Potential

			grassland, sometimes serpentine substrate.		None observed during 2023 survey.
<i>Brodiaea leptandra</i>	narrow-anthered brodiaea	1B.2; G3; S3	Gravelly soil, volcanic substrate; broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland.	May-July	Suitable habitat occurs in survey area. Species prefers rocky, southwest facing slopes. Low Potential None observed during 2023 survey.
<i>Calamagrostis ophitidis</i>	serpentine reed grass	4.3; G3; S3	Chaparral (openings, often north-facing slopes), Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland; rocky, serpentine substrate	April-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 survey.
<i>Calandrinia breweri</i>	Brewer's calandrinia	4.2; G4; S4	Chaparral, Coastal scrub; Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes)	March-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 survey.
<i>Calochortus uniflorus</i>	pink star-tulip	4.2; G4; S4	Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 survey.
<i>Calystegia collina ssp. oxyphylla</i>	Mt. Saint Helena morning-glory	4.2; G4; S3	Chaparral, Lower montane coniferous forest, Valley and foothill grassland; serpentine substrate	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 survey.

<i>Castilleja ambigua</i> var. <i>ambigua</i>	johnny-nip	4.2; G4; S3	Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Valley and foothill grassland, Vernal pools (margins)	March-August	No suitable habitat occurs in survey area. No Potential None observed during 2023 survey.
<i>Castilleja ambigua</i> var. <i>meadii</i>	Mead's owl's-clover	1B.1; G4T1; S1	Gravelly clay soil, volcanic substrate; meadows and seeps, vernal pools.	April-May	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	1B.1; G1; S1	Dry sites, volcanic or serpentine substrate; closed-cone coniferous forest, chaparral, cismontane woodland.	February-June	Site is wet. No suitable habitat occurs in survey area. No ceanothus species observed within survey area. No Potential None observed during 2023 survey.
<i>Ceanothus divergens</i>	Calistoga ceanothus	1B.2; G2; S2	Rocky places, serpentine or volcanic substrate; chaparral, cismontane woodland.	February-April	Suitable habitat occurs in survey area. No ceanothus species observed within survey area. No Potential None observed during 2023 survey.
<i>Ceanothus pinetorum</i>	Kern ceanothus	4.3; G3; S3	Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest; granite and rocky substrate	May-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Ceanothus purpureus</i>	holly-leaved ceanothus	1B.2; G2; S2	Chaparral, Cismontane woodland; rocky, volcanic substrate	February-June	Suitable habitat occurs in survey area. No ceanothus species observed within survey area.

					No Potential None observed during 2023 survey.
<i>Ceanothus sonomensis</i>	Sonoma ceanothus	1B.2; G2; S2	Chaparral (sandy, serpentinite, volcanic)	February-April	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Centromadia parryi</i> ssp. <i>parryi</i>	pappose tarplant	1B.2; G2; S2	Chaparral, Coastal prairie, Marshes and swamps (coastal salt), Meadows and seeps, Valley and foothill grassland (vernally mesic); alkaline soils	May-November	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Clarkia breweri</i>	Brewer's clarkia	4.2; G4; S4	Chaparral, Cismontane woodland, Coastal scrub; often in serpentine substrates	April-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Clarkia gracilis</i> ssp. <i>tracyi</i>	Tracy's clarkia	4.2; G5; S3	Chaparral (openings, serpentinite)	April-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Collomia diversifolia</i>	serpentine collomia	4.3; G4; S4	Chaparral, Cismontane woodland, Foothill woodland (sometimes found in gravelly, serpentine, rocky substrate)	May-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.

<i>Cordylanthus tenuis ssp. brunneus</i>	serpentine bird's- beak	4.3; G4; S3	Closed-cone coniferous forest, Chaparral, Cismontane woodland	July-August	Suitable habitat occurs in survey area. No suitable substrate was found on site. Most documented observations occur in North Napa County at higher elevations Low Potential None observed during 2023 survey.
<i>Delphinium uliginosum</i>	swamp larkspur	4.2; G3; S3	Chaparral, Valley and foothill grassland, mostly in seeps and serpentine soils	May-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Downingia pusilla</i>	dwarf downingia	2B.2; G2; S2	Vernal pools, vernal moist places in valley and foothill grassland, sometimes ditches.	March-May	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Eleocharis parvula</i>	small spikerush	4.3; G5; S3	Marches and swamps	April-September	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Erigeron biolettii</i>	streamside daisy	2B.2; G3; S3	Broadleafed upland forest, Cismontane woodland, North Coast coniferous forest; often in mesic or rocky substrates	June-October	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.

<i>Erigeron greenei</i>	Greene's narrow-leaved daisy	1B.2; G3; S3	Generally serpentine substrate, sometimes volcanic substrate or rocky alluvium, generally among shrubs; chaparral, cismontane woodland, North Coast coniferous forest, lower montane coniferous forest	May-September	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Eryngium jepsonii</i>	Jepson's coyote-thistle	1B.2; G2; S2	Valley and foothill grassland, Vernal pools; clay soils	April-August	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Erythronium helenae</i>	St. Helena fawn lily	4.2; G3; S3	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland; sometimes in serpentine and volcanic soils	March-May	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Extriplex joaquinana</i>	San Joaquin spearscale	1B.2; G2; S2	Seasonally wet areas, alkaline soil; chenopod scrub, meadows, playas, valley and foothill grassland, vernal pools; chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland; alkaline soils	April-October	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Fritillaria purdyi</i>	Purdy's fritillary	4.3; G4; S4	Chaparral, Cismontane woodland, Lower montane coniferous forest; usually in serpentine soils	March-June	Suitable habitat occurs in survey area. No suitable substrate was found in survey area. Low Potential

					None observed during 2023 survey.
<i>Harmonia nutans</i>	nodding harmonia	4.3; G3; S3	Chaparral, Cismontane woodland; sometimes in gravelly, rocky, volcanic substrates	March-May	Suitable habitat occurs in survey area. Low Potential None observed during 2023 survey.
<i>Hesperolinon sharsmithiae</i>	Sharsmith's western flax	1B.2; G2; S2	Serpentine substrate; chaparral.	May-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Lasthenia burkei</i>	Burke's goldfields	FE; SE; 1B.1	Wet or moist (at least vernal) places; generally vernal pools and swales, sometimes meadows.	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Lasthenia conjugens</i>	Contra Costa goldfields	FE; 1B.1; G1; S1	Vernally moist, open, low-lying places, sometimes alkaline soil; vernal pools, wet meadows, valley and foothill grassland, cismontane woodland, alkaline playas.	March-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	Delta tule pea	1B.2; G5; S2	Marshes and swamps (brackish, freshwater)	May-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.

<i>Layia septentrionalis</i>	Colusa layia	1B.2; G2; S2	Sandy or serpentine soil; chaparral, cismontane woodland, valley and foothill grassland; often in sandy and serpentine substrate	April-June	Suitable habitat occurs in survey area. No suitable substrate was found in survey area. Low Potential None observed during 2023 survey.
<i>Legenere limosa</i>	legenere	1B.1; G2; S2	Vernal pools and swales.	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Leptosiphon acicularis</i>	bristly leptosiphon	4.2; G4; S4	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland	April-July	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Leptosiphon jepsonii</i>	Jepson's leptosiphon	1B.2; G2; S2	Usually volcanic soil (sometimes periphery of serpentine), chaparral, cismontane woodland.	March-May	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Leptosiphon latisectus</i>	broad-lobed leptosiphon	4.3; G4; S4	Broadleafed upland forest, Cismontane woodland	April-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Lessingia hololeuca</i>	woolly-headed lessingia	3; G2; S2	Clay or serpentine soil, broadleafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland.	June-October	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.

<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	1B.1; G2; S2	Marshes and swamps (brackish, freshwater), Riparian scrub	April-November	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Lilium rubescens</i>	redwood lily	4.2; G3; S3	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	April-August	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Lilium rubescens</i>	redwood lily	4.2	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; sometimes on roadsides and serpentine substrate	March-September	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Limnanthes vinculans</i>	Sebastopol meadowfoam	FE, SE, 1B.1; G1; S1	Seasonally wet places, poorly drained, clay or sandy soil; meadows, valley and foothill grassland, vernal pools.	April-May	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Lomatium repostum</i>	Napa lomatium	1B.2; G2; S2	Chaparral, Cismontane woodland; usually on serpentine substrates	March-June	Suitable habitat occurs in survey area. No suitable substrate was found in survey area. Low Potential None observed during 2023 survey.

<i>Lupinus sericatus</i>	Cobb Mountain lupine	1B.2; G2; S2	Open wooded areas, gravelly soil; broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest.	March-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Micropus amphibolus</i>	Mt. Diablo cottonweed	3.2; G3; S3	Sparsely vegetated places, rocky soil; broadleafed upland forest, chaparral, cismontane woodland, valley and foothill grassland, coastal prairie.	March-June	Suitable habitat occurs in survey area. No suitable substrate was found in survey area. Low Potential None observed during 2023 survey.
<i>Monardella viridis</i>	green monardella	4.3; G3; S3	Broadleafed upland forest, Chaparral, Cismontane woodland	June-September	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Navarretia cotulifolia</i>	cotula navarretia	4.2; G4; S4	Chaparral, Cismontane woodland, Valley and foothill grassland	May-June	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Navarretia heterandra</i>	Tehama navarretia	4.3; G4; S4	Valley and foothill grassland (mesic), Vernal pools	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	Baker's navarretia	1B.1; G4; S2	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools	April-July	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.

<i>Navarretia leucocephala</i> <i>ssp. pauciflora</i>	Few-flowered navarretia	FE, CT, 1B.1; G4; S1	Volcanic ash flow vernal pools.	May-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Navarretia rosulata</i>	Marin County navarretia	1B.2; G2; S2	Chaparral, Closed-cone coniferous forest; often on rocky and serpentine substrate	May-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Orobanche valida</i> <i>ssp.</i> <i>howellii</i>	Howell's broomrape	4.3; G4; S3	Chaparral (serpentinite, volcanic)	June-September	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Penstemon newberryi</i> <i>var. sonomensis</i>	Sonoma beardtongue	1B.3; G4; S3	Chaparral (rocky)	April-August	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Plagiobothrys strictus</i>	Calistoga popcornflower	FE; CT; 1B.1	Wet places; valley and foothill grassland, coastal salt marshes; mostly in alkaline soils	May-July	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Poa napensis</i>	Napa blue grass	FE; CE; 1B.1; G1; S1	Meadows and seeps, Valley and foothill grassland; mostly in alkaline soils	May-August	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Puccinellia simplex</i>	California alkali grass	1B.2; G2; S2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools	March-May	No suitable habitat occurs in survey area. No Potential

					None observed during 2023 surveys.
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	4.2; G4; S3	Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland, Vernal pools; usually mesic environments	February-May	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	1B.2; G3; S3	Marshes and swamps (shallow freshwater)	May-October	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Sidalcea hickmanii</i> ssp. <i>napensis</i>	Napa checkerbloom	1B.1; G3; S1	Chaparral	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	marsh checkerbloom	1B.2; G5; S2	Meadows and seeps, Riparian forest; usually in mesic soils	June-August	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Spergularia macrotheca</i> var. <i>longistyla</i>	long-styled sand-spurrey	1B.2; G5; S2	Marshes and swamps, Meadows and seeps	February-May	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.

<i>Streptanthus hesperidis</i>	green jewelflower	1B.2; G2; S2	Rocky places, often barrens, serpentine substrate; cismontane woodland, chaparral openings, valley and foothill grassland, closed-cone coniferous forest	May-July	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Symphyotrichum lentum</i>	Suisun Marsh aster	1B.2; G2; S2	Brackish and freshwater marshes and swamps.	May-November	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Toxicoscordion fontanum</i>	marsh zigadenus	4.2; G3; S3	Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps; often found in serpentine and vernal mesic substrates	April-July	Suitable habitat occurs in survey area. Potential None observed during 2023 survey.
<i>Trichostema ruygtii</i>	Napa bluecurls	1B.2; G1; S1	Open, seasonally wet areas, clay soil; chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools.	June-October	Suitable habitat occurs in survey area. Low Potential Most documented occurrences at higher elevations None observed during 2023 survey.
<i>Trifolium amoenum</i>	two-fork clover	FE; 1B.1; G1; S1	Moist open sites, heavy soil, sometimes serpentine substrate, sometimes roadsides or eroded areas; coastal bluff scrub, valley and foothill grassland.	April-June	Suitable habitat occurs in survey area. Most observations found in areas with coastal atmospheric influences. Low Potential

					None observed during 2023 survey.
<i>Trifolium hydrophilum</i>	saline clover	1B.2; G2; S2	Moist or seasonally moist sites, alkaline or saline soil; marshes and swamps (including coastal salt marshes), valley and foothill grassland, vernal pools.	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Triteleia lugens</i>	dark-mouthed triteleia	4.3; G4; S4	Broadleafed upland forest, Chaparral, Coastal scrub, Lower montane coniferous forest	April-June	No suitable habitat occurs in survey area. No Potential None observed during 2023 surveys.
<i>Viburnum ellipticum</i>	oval-leaved viburnum	2B.3; G4; S3	Often north-facing slopes; chaparral, cismontane woodland, lower montane coniferous forest.	May-June (August)	Suitable habitat occurs in survey area. Most documented occurrences within Skyline Wilderness Park in South Napa County Low Potential None observed during 2023 survey.

List of special-status species has been compiled based on plant species listed in the CNDDDB for the Rutherford USGS quadrangles (2023) and based on CNPS Inventory (CNPS 2023) records for the Rutherford quadrangle and the surrounding eight quadrangles. Note: FE = federally listed as Endangered; FT = federally listed as Threatened; SE = state listed as Endangered under the California Endangered Species Act and the California Native Plant Protection Act; ST = state listed as Threatened; SR = state listed as Rare. CNPS 1A = Plants presumed extinct in California; CNPS 1B = Rare, threatened, or endangered in California and elsewhere; CNPS 2 = plants rare, threatened or endangered in California, but more common elsewhere; CNPS 3 = plants about which more information is needed. Global Ranking: G1 = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres; G2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-

10,000 acres; G3 = 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres; G4 = Apparently secure; but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.; G5 = Population or stand demonstrably secure to ineradicable due to being commonly found in the world. State Rank (Californica): S1 = Less than 6 EOs OR less than 1,000 individuals OR less than 2,000 acres; S1.1 = very threatened; S1.2 = threatened; S1.3 = no current threats known; S2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres; S2.1 = very threatened; S2.2 = threatened; S2.3 = no current threats known; S3 = 21-80 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres; S3.1 = very threatened; S3.2 = threatened; S3.3 = no current threats known; S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat; S5 = Demonstrably secure to ineradicable in California.

4.2 Recommendations Special-status Plants

No rare plants were observed during protocol-level surveys conducted on February 7, 2023.

A follow-up survey for later blooming species should be conducted later in April or May 2023.

Table 3
Vascular Plants Observed Onsite - February 7, 2023

Family	Scientific Name	Common Name	Native (N) Non-native Invasive (I)
ANACARDIACEAE	<i>Toxicodendron diversilobum</i>	poison oak	N
APIACEAE	<i>Daucus carota</i>	wild carrot	I
	<i>Sanicula crassicaulis</i>	Pacific sanicle	N
APOCYNACEAE	<i>Vinca major</i>	vinca	I
ARALIACEAE	<i>Hedera helix</i>	English ivy	I
ASTERACEAE	<i>Baccharis pilularis</i>	coyote brush	N
	<i>Calendula arvensis</i>	field marigold	I
	<i>Carduus pycnocephalus</i>	Italian thistle	I
	<i>Helminthotheca echinodes</i>	bristly ox-tongue	I
	<i>Taraxacum officinale</i>	common dandelion	I
BRASSICACEAE	<i>Hirschfeldia incana</i>	common mustard	I
	<i>Raphanus raphanistrum</i>	wild radish	I
CACTACEAE	<i>Opuntia ficus-indica</i>	prickly pear cactus	I
CAPRIFOLIACEAE	<i>Lonicera hispidula</i>	honeysuckle	N
	<i>Symphoricarpos albus</i>	common snowberry	N
CHLOROGALUM	<i>Chlorogalum pomeridianum</i>	common soaproot	N
CYPERACEAE	<i>Carex praegracilis</i>	field sedge	N
	<i>Cyperus eragrostis</i>	umbrella sedge	N
DRYOPTERIDACEAE	<i>Polystichum munitum</i>	sword fern	N
ERICACEAE	<i>Arbutus menziesii</i>	Pacific madrone	N
EUPHORBIACEAE	<i>Cynosurus echinatus</i>	dogtail grass	I
	<i>Croton setiger</i>	turkey mullein	N
EQUISETACEAE	<i>Equisetum arvense</i>	common horsetail	N
FABACEAE	<i>Medicago polymorpha</i>	bur-clover	I
	<i>Trifolium hirtum</i>	rose clover	I
	<i>Vicia sativa</i>	spring vetch	I

FAGACEAE	<i>Quercus agrifolia</i>	coast live oak	N
	<i>Quercus lobata</i>	valley oak	N
HYDROPHYLLACEAE	<i>Phacelia distans</i>	common phacelia	N
JUNCACEAE	<i>Juncus effusus</i>	common rush	N
LAMIACEAE	<i>Stachys ajugoides</i>	hedge nettle	N
	<i>Mentha pulegium</i>	pennyroyal	I
LAURACEAE	<i>Umbellularia californica</i>	California bay laurel	N
LYTHRACEAE	<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	I
MYRSINACEAE	<i>Lysimachia arvensis</i>	scarlet pimpernel	I
PAPAVERACEAE	<i>Eschscholzia californica</i>	California poppy	N
PINACEAE	<i>Pseudotsuga menziesii</i>	Douglas fir	N
PHRYMACEAE	<i>Diplacus aurantiacus</i>	sticky monkeyflower	N
PLANTAGINACEAE	<i>Plantago lanceolata</i>	English plantain	I
POACEAE	<i>Avena barbata</i>	slender wild oat	I
	<i>Avena fatua</i>	wild oat	I
	<i>Briza maxima</i>	rattlesnake grass	I
	<i>Bromus diandrus</i>	rip-gut brome	I
	<i>Festuca perennis</i>	perennial Italian rye grass	I
	<i>Hordeum murinum</i>	foxtail barley	I
	<i>Polypogon monspeliensis</i>	rabbit's foot grass	I
POLYGONACEAE	<i>Eriogonum nudum</i>	naked buckwheat	N
	<i>Rumex acetosella</i>	sheep sorrel	I
	<i>Rhinotropis californica</i>	California milkwort	N
	<i>Polygonum aviculare</i>	knotweed	I
PTERIDACEAE	<i>Adiantum jordanii</i>	maiden hair fern	N
ROSACEAE	<i>Heteromeles arbutifolia</i>	toyon	N
		Himalayan blackberry	I
RUBIACEAE		wall bedstraw	I
SALICACEAE		arroyo willow	N
SAPINDACEAE		Californica buckeye	N

		big leaf maple	N
--	--	----------------	---

References

California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database. Wildlife and Habitat Data Analysis Branch, Sacramento, CA.

California Native Plant Society. 2023. California Native Plant Society inventory of rare and endangered plants. Online edition. v7-19sept. <http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi>. May.

Natural Resources Conservation Service. 2023. Web Soil survey, Version 2.3. United States Department of Agriculture, Natural Resources Conservation Service. <http://websoilsurvey.nrcs.usda.gov>.

United States Fish and Wildlife Service (USFWS). 2023. Information for Conservation and Planning Database. Available online at: <https://ecos.fws.gov/ipac/>; most recently accessed:

[WBWG] Western Bat Working Group. 2023. Species Accounts. Available online at: <http://wbwg.org/western-bat-species/>; Accessed January.