

July 31, 2023

RE: Survey and Evaluation Results for the Special Status of Native Plant Populations and Sensitive Natural Communities performed for a portion of APN 027-200-017-000 located at the Niebaum Coppola Estate Winery, Rutherford, Napa County, California

A special-status plant survey was performed by Anya Perron-Burdick, M.S. within the project boundary on February 7, April 5, and May 10, 2023. Botanical field surveys were completed in accordance with California Department of Fish and Wildlife (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (March 2018). A map and table from the CDFW California Natural Diversity Database Rare Find database and a table from the California Native Plant Society Rare Plant Inventory of known special-status plant species in the proximity and within the nine quadrangles of the project site was evaluated prior to botanical field surveys with specific attention given to occurrences within 5 miles of the project site or those most likely to occur on-site (Table 1 - Potential for Occurrence). Weather data collected for 2022 would be considered dry with 3.95 inches of rainfall between January-April 2022, followed in 2023 by a wet winter season with 27.07 inches of rainfall between January-April 2023. The surveyed area soils are classified as 75.4 percent Bale clay loam on a 2 to 5 percent slope, 19 percent Millsholm loam on a 6 to 55 percent slope, 3.5 percent Perkins gravelly loam on a 5 to 9 percent slope, and 2 percent Forward silt loam on a 12 to 57 percent slope. The vegetation was not modified prior to surveys. A Manual of California Vegetation (Sawyer 2009) classifies the habitat communities within the project boundaries as Douglas Fir Evergreen Forest, Riparian Corridor, and ruderal non-native annual grassland.

The dominant vegetation alliances within the habitat communities was perennial rye grass (41.321.00) and annual brome grasslands (42.027.00), followed by *Acer macrophyllum* riparian corridor (61.450.00). The perennial rye and annual brome grassland alliance is dominated by non-native annual grasses including *Festuca perenne*, *Bromus diandrus*, *Hordeum murinum*, *Elymus caput-medusae*, *Elymus glaucus*, *Avena barbata*. The riparian corridor is dominated by *Acer macrophyllum*, *Umbellularia californica*, *Aesculus californica*, *Salix lasiolepis*, and *Rubus armeniacus* (Table 2 - Plant Species Observed Onsite). No rare plants were observed onsite during the 2023 rare plant surveys.

Anya Perron-Burdick, M.S.
Vegetation Ecologist

Enclosed:

Plate 1 - Rare Plant Survey Boundary

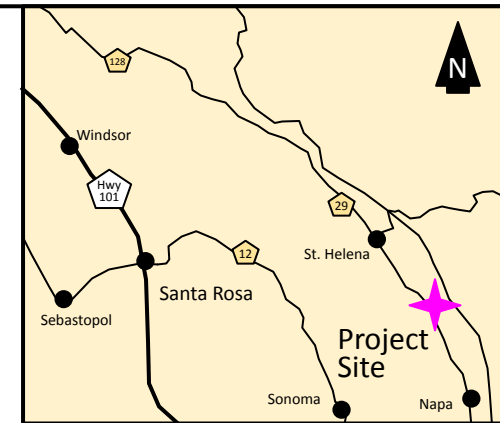
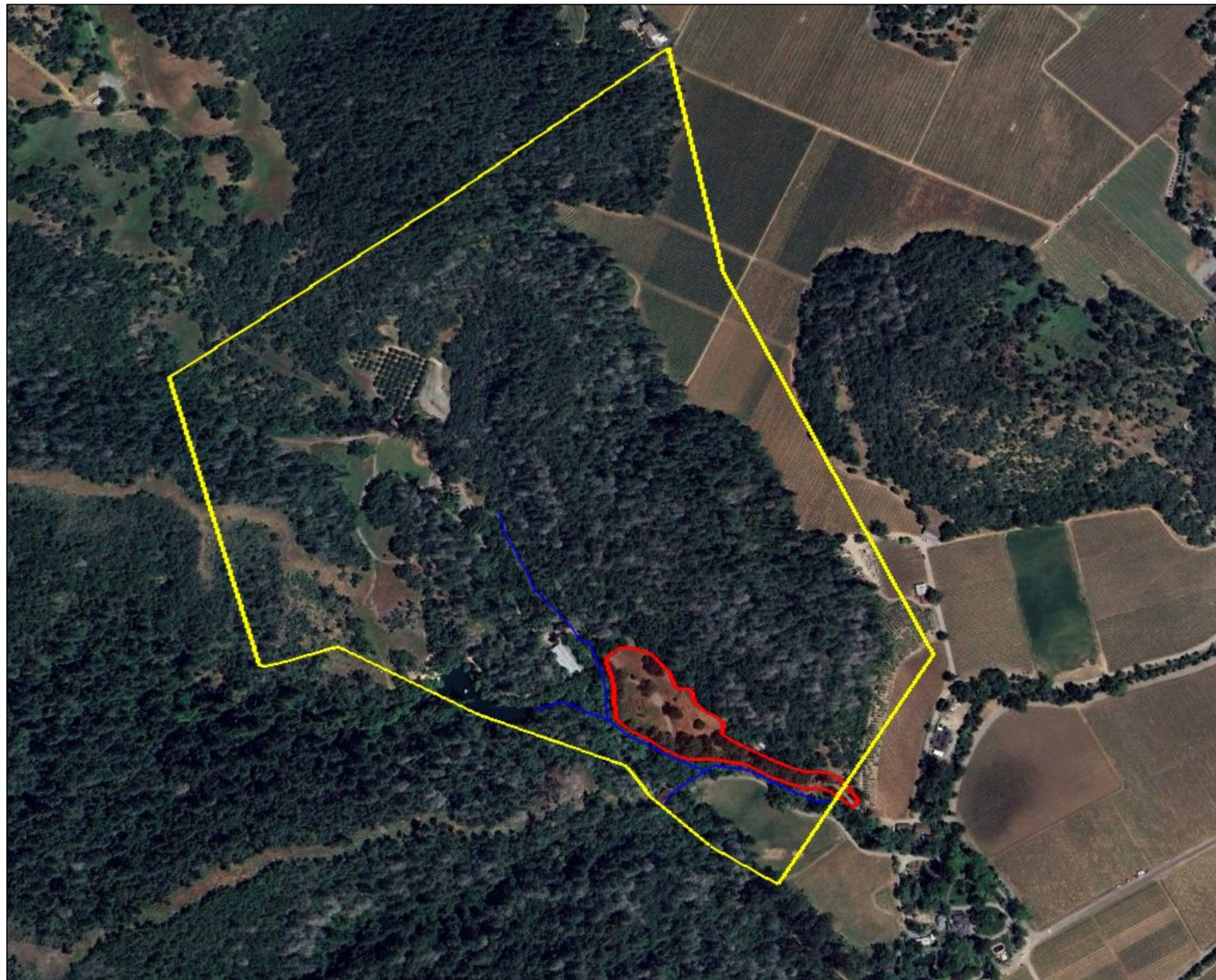
Table 1 - Special-status Plant Species within 5 miles of Project Site or Potential to Occur

Table 2 - Vascular Plant Species Observed Onsite in 2023

Plate 1

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Rare Plant Survey Boundary




Map Key

- Parcel Boundary
- Creek
- Survey Boundary

Anya Perron-Burdick, M.S.
Professional Ecological Services
 (707) 529-0904 anya.burdick@gmail.com

MAP DETAILS: APB
 DRAFT: 07/21/2023
 REVISION:
 REVISION:


 0.25 in = 100 ft

Rare Plant Survey Boundary

Niebaum Coppola Estate
 Rutherford, Napa County, CA 95473
 APN 027-200-017-000

PLATE
1

Table 1

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**Special-status Plant Species
within 5 miles of Project Site or Potential to Occur**

Table 1 - Special-status Plant Species within 5 miles of Project Site or Potential to Occur

Scientific Name	Common Name	Status Federal, State, CRPR, GRank, SRank	Habitat	Flowering Period	Occurs Within 5 miles of Project Site or Likely Potential for Occurrence
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	1B.2; S2; G5T2	Broadleaf upland forest, chaparral, cismontane woodland, North Coast coniferous forest.	April-July	Suitable habitat occurs in the survey area. Potential None observed during the 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 the survey area. No Potential None observed during the 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	No suitable habitat occurs in the survey area. No suitable substrate was found on site. No Potential None observed during the 2023 survey.
<i>Brodiaea leptandra</i>	narrow-anthered brodiaea	1B.2; G3; S3	Gravelly soil, volcanic substrate; broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland.	May-July	No suitable habitat occurs in the survey area. No suitable substrate was found on site. No Potential None observed during the 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 the survey area. No Potential None observed during the 2023 survey.

Table 1 - Special-status Plant Species within 5 miles of Project Site or Potential to Occur
 Niebaum Coppola Estate Winery, Rutherford, CA 94573
 APN 027-200-017-000

<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 the survey area. No Potential None observed during the 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 the survey area. No Potential None observed during the 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 the survey area. No suitable substrate was found on site. No Potential None observed during the 2023 survey.
<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	Suitable habitat occurs in the survey area. No suitable substrate was found on site. No Potential No ceanothus species observed within the survey area. None observed during the 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 the survey area. No suitable substrate was found on site. No Potential No ceanothus species observed within the survey area. None observed during the 2023 survey.

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<i>Ceanothus purpureus</i>	holly-leaved ceanothus	1B.2; G2; S2	Chaparral, Cismontane woodland; rocky, volcanic substrate	February-June	Suitable habitat occurs in the survey area. No suitable substrate was found on site. No Potential No ceanothus species observed within the survey area. None observed during the 2023 survey.
<i>Ceanothus sonomensis</i>	Sonoma ceanothus	1B.2; G2; S2	Chaparral (sandy, serpentinite, volcanic)	February-April	No suitable habitat occurs in the survey area. No Potential None observed during the 2023 surveys.
<i>Clarkia gracilis ssp. tracyi</i>	Tracy's clarkia	4.2; G5; S3	Chaparral (openings, serpentinite)	April-July	No suitable habitat occurs in the survey area. No Potential None observed during the 2023 surveys.
<i>Cordylanthus tenuis ssp. brunneus</i>	serpentine bird's-beak	4.3; G4; S3	Closed-cone coniferous forest, Chaparral, Cismontane woodland; serpentine soils	July-August	Suitable habitat occurs in the survey area. No suitable substrate was found on site. Low Potential None observed during the 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	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
<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	May-September	No suitable habitat occurs in the survey area. No suitable substrate was found on site. No Potential None observed during 2023 surveys.

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			coniferous forest, lower montane coniferous forest		
<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 the survey area. Potential None observed during the 2023 survey.
<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 the survey area. Most observations occur in Yountville. Low Potential None observed during the 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 the survey area. No suitable substrate was found in the survey area. Potential None observed during the 2023 survey.
<i>Leptosiphon latisectus</i>	broad-lobed leptosiphon	4.3; G4; S4	Broadleaf upland forest, Cismontane woodland	April-June	Suitable habitat occurs in the survey area. Potential None observed during the 2023 survey.
<i>Lilium rubescens</i>	redwood lily	4.2; G3; S3	Broadleaf upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; sometimes on roadsides and	March-September	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.

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			serpentine substrate		
<i>Lomatium repostum</i>	Napa lomatium	1B.2; G2; S2	Chaparral, Cismontane woodland; usually on serpentine substrates	March-June	Suitable habitat occurs in the survey area. No suitable substrate was found in the survey area. Potential None observed during the 2023 survey.
<i>Lupinus sericatus</i>	Cobb Mountain lupine	1B.2; G2; S2	Open wooded areas, gravelly soil; broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest.	March-June	Suitable habitat occurs in the survey area. Potential None observed during the 2023 survey.
<i>Monardella viridis</i>	green monardella	4.3; G3; S3	Broadleaf upland forest, Chaparral, Cismontane woodland	June-September	Suitable habitat occurs in the survey area. Most occurrences are at higher elevations. Low Potential None observed during the 2023 survey.
<i>Navarretia rosulata</i>	Marin County navarretia	1B.2; G2; S2	Chaparral, Closed-cone coniferous forest; often on rocky and serpentine substrate	May-July	Suitable habitat occurs in the survey area. No suitable substrate occurs within the survey area. Low Potential None observed during 2023 surveys.
<i>Penstemon newberryi</i> var. <i>sonomensis</i>	Sonoma beardtongue	1B.3; G4; S3	Chaparral (rocky)	April-August	No suitable habitat occurs in the 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	Suitable habitat occurs in the survey area. Observations usually occur at higher elevations

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					Low Potential None observed during the 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	Suitable habitat occurs in the survey area. Alkaline soils not found within the survey area. Low 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 the survey area. Most occurrences in Sonoma Valley and in North Napa County. Low Potential None observed during the 2023 survey.
<i>Sidalcea hickmanii ssp. napensis</i>	Napa checkerbloom	1B.1; G3; S1	Chaparral	April-June	No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
<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 the survey area. Most documented occurrences at higher elevations in the east part of the county. Low Potential None observed during the 2023 survey.
<i>Triteleia lugens</i>	dark-mouthed triteleia	4.3; G4; S4	Broadleaf upland forest, Chaparral, Coastal scrub, Lower montane coniferous forest	April-June	Suitable habitat occurs in the survey area. Most documented occurrences at higher elevations Low Potential None observed during 2023 surveys.

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 (California): 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.

Table 2

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Vascular Plants Observed On-Site

Table 2 - Vascular Plants Observed Onsite - February, April, and May 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
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

Table 3 - Vascular Plants Observed Onsite
 Niebaum Coppola Estate Winery, Rutherford, CA 94573
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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>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
	<i>Rubus armeniacus</i>	Himalayan blackberry	I
RUBIACEAE	<i>Galium parisiense</i>	wall bedstraw	I
SALICACEAE	<i>Salix lasiolepis</i>	arroyo willow	N
SAPINDACEAE	<i>Aesculus californica</i>	California buckeye	N
	<i>Acer macrophyllum</i>	big leaf maple	N