ATTACHMENT "I"

Anya Perron-Burdick, M.S.

Vegetation Ecologist

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September 1, 2023

RE: Survey and Evaluation Results for the Special Status of Native Plant Populations and Sensitive Natural Communities performed for APNs 133-112-020 and a portion of 133-220-003 located at 810 W. Agua Caliente Road, Sonoma County, California.

A special-status plant survey was performed by Anya Perron-Burdick, M.S. within the project boundary on April 21, May 18, and June 15, 2023 (Plate 1). 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 (Table 1 - Potential for Occurrence). Weather data collected for 2022 would be considered dry with 2.94 inches of rainfall between January-April 2022, followed in 2023 by a wet winter season with 26 inches of rainfall between January-April 2023. The surveyed area soils are classified as 37.7 percent Pleasanton clay loam within the first 37 inches on a 2-5 percent slope, 25.9 percent Spreckels loam within the first 18 inches on a 2-9 percent slope, 14.6 percent Huichica loam within the first 14 inches on a 2-9 percent slope, 13.3 percent Yolo loam within the first 24 inches on a 0-10 percent slope, 4 percent Tuscan cobbly clay loam within the first 9 inches on a 0-9 percent slope, 2.5 percent Riverwash within the first 60 inches on a 0 percent slope, 2.1 percent Los Robles gravelly clay loam within the first 30 on a 2-9 percent slope, and 0.4 percent Spreckels loam within the first 18 inches on a 15-30 percent slope. A Manual of California Vegetation (Sawyer 2009) classifies the habitat communities within the project boundaries as Annual and Perennial non-native Grassland with pockets of seasonal wetland (as mapped in 2018), Oak Woodland, and Riparian Corridor.

The dominant vegetation alliances within the habitat communities are 42.026-02 Wild oats and annual brome grasslands, 42.051.02 *Phalaris aquatica* with pockets of seasonal wetland dominated by 42.052.01 *Hordeum brachyantherum* and *Pleuropogon californicus*, 71.040.00 Valley oak woodland and forest, and 71.045.00 Valley oak riparian forest and woodland. The Wild oats and annual brome grasslands are dominated by *Avena barbata*, *Avena fatua*, *Bromus diandrus*, *Bromus hordeaceus*, *Elymus capu-meusae*, and *Festuca perennis*. The *Phalaris aquatica* grasslands are dominated by *Phalaris aquatica*, *Festuca perennis*, *Briza minor*, and *Carduus pycnocephalus*. The pockets of seasonal wetlands within the *Phalaris aquatica* habitat are dominated by *Hordeum brachyantherum*, *Pleuropogon californicus*, *Cynosurus echinatus*, *Juncus bufonis*, *Cyperus eragrostis*, and *Rumex crispus*. The Valley oak woodland and forest habitat is dominated by *Quercus lobata*, *Quercus agrifolia*, *Quercus kelloggii*, *Eucalyptus globulus*, *Aesculus californica*, *Genista monspessulana*, *Toxicodendron diversilobum*, and *Vinca major*. The Valley oak riparian forest and woodland is dominated by *Quercus lobata*, *Eucalyptus globulus*, *Fraxinus latifolia*, *Umbellularia californica*, *Brassica nigra*, *Rubus armeniacus Salix*

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lasiolepis, *Genista monspessulana*, and *Toxicodendron diversilobum* (Table 2 - Plant Species Observed Onsite). No rare plants were observed onsite during the 2023 plant surveys.

Anya Perron-Burdick, M.S. Vegetation Ecologist

September 1, 2023

Enclosed:

Plate 1 - Rare Plant Survey Boundary

Table 1 - Special Status Plant Species Potential for Occurrence

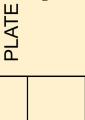
Table 2 - Vascular Plant Species Observed Onsite in 2023

Plate 1 Rare Plant Survey Boundary



Rare Plant Survey Boundary

810 W. Agua Caliente Road Sonoma, Sonoma County, CA 95476 APNs 133-112-020 and 133-220-003



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REVISION: REVISION:

DRAFT: 08/31/2023

1 in = 150 ft

Table 1 Special-status Plant Species Potentially Occurring on or Near Project Site

Table 1 - Special Status Plant Species Potential for Occurrence 810 W. Agua Caliente Road Sonoma, Sonoma County, CA 95467 APNs 133-112-020 and 133-220-003

Table 1 - Special-status Plant Species Potentially Occurring on or Near Project Site

Scientific Name	Common Name	CRPR; GRank; SRAnk; Other Status; CESA; FESA	Habitat; Micro-habitat; Elevation (ft) low; high	Flowering Period	Potential for Occurrence on Project Site
Allium peninsulare var. franciscanum	Franciscan onion	1B.2; G4G5T2; S2; SB_CalBG/RSAB G; None; None	Cismontane woodland, Valley and foothill grassland, Chaparral; Clay, Serpentinite (often), Volcanic; 170; 1000	(Apr)May-Jun	Suitable habitat occurs in the survey area. Usually found in chaparral habitat. Low Potential None observed during 2023 surveys.
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	1B.1; G5T1; S1; SB_CalBG/RSAB G; None; FE	Marshes and swamps (freshwater), Riparian scrub; 15; 1200	May-Jul	Riparian habitat occurs in the survey area. Most known occurrences are in west Sonoma and Marin counties. Low Potential None observed during 2023 surveys.
Amorpha californica var. napensis	Napa false indigo	1B.2; G4T2; S2; SB_CalBG/RSAB G; None; None	Broadleaf upland forest (openings), Chaparral, Cismontane woodland; 165; 6560	Apr-Jul	Broadleaf forest and woodland habitat occurs in the survey area. Potential None observed during 2023 surveys.
Amsinckia lunaris	bent-flowered fiddleneck	1B.2; G3; S3; BLM_S; SB_UCBG; SB_UCSC; None; None	Cismontane woodland, Coastal bluff scrub, Valley and foothill grassland; 10; 1640	Mar-Jun	Valley and foothill habitat occurs in the survey area. Potential None observed during 2023 surveys.
Antirrhinum virga	twig-like snapdragon	4.3; G3; S3?; None; None	Chaparral, Lower montane coniferous forest; Openings, Rocky, Serpentinite (often); 330; 6610	Jun-Jul	No suitable habitat occurs in the survey area. Most occurrences are in Lake County. No Potential None observed during 2023 surveys.
Arctostaphylos stanfordiana ssp. decumbens	Rincon Ridge manzanita	1B.1; G3T1; S1; SB_UCSC; None; None	Chaparral (rhyolitic), Cismontane woodland; 245; 1215	Feb-Apr(May)	Woodland habitat occurs in the survey area. No manzanita plants seen on site. No Potential None observed during 2023 surveys.

Astragalus claranus	Clara Hunt's milk-vetch	1B.1; G1; S1; SB_CalBG/RSAB G; CE; FE	Chaparral (openings), Cismontane woodland, Valley and foothill grassland; Clay, Rocky, Serpentinite (sometimes), Volcanic (sometimes); 245; 900	Mar-May	Suitable habitat occurs in the survey area. Most occurrences are found at higher elevations on the border of Napa and Sonoma. Low Potential None observed during 2023 surveys.
Astragalus clevelandii	Cleveland's milk-vetch	4.3; G4; S4; None; None	Chaparral, Cismontane woodland, Riparian forest; Seeps, Serpentinite; 655; 4920	Jun-Sep	Suitable habitat occurs in the survey area. Most occurrences are found in Lake and Napa counties. Low Potential None observed during 2023 surveys.
Astragalus tener var. tener	alkali milk-vetch	1B.2; G2T1; S1; None; None	Playas, Valley and foothill grassland (adobe clay), Vernal pools; Alkaline ; 5; 195	Mar-Jun	Suitable habitat occurs in the survey area. Most occurrences are in Solano County and the San Francisco Bay Area. Low potential None observed during 2023 surveys.
Balsamorhiza macrolepis	big-scale balsamroot	1B.2; G2; S2; BLM_S; USFS_S; None; None	Chaparral, Cismontane woodland, Valley and foothill grassland; Serpentinite (sometimes); 150; 5100	Mar-Jun	Suitable habitat occurs in the survey area. Most occurrences are found in Lake County, the San Francisco Bay Area, and in the Sierras. Low Potential None observed during 2023 surveys.
Blennosperma bakeri	Sonoma sunshine	1B.1; G1; S1; SB_CalBG/RSAB G; CE; FE	Valley and foothill grassland (mesic), Vernal pools; 35; 360	Mar-May	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Brodiaea leptandra	narrow-anthered brodiaea	1B.2; G3?; S3?; SB_CalBG/RSAB G; None; None	Broadleaf upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland; Volcanic; 360; 3000	May-Jul	Suitable habitat occurs in the survey area. Most occurrences are found in rocky dry chaparral habitat. Low Potential None observed during 2023 surveys.

Calamagrostis ophitidis	serpentine reed grass	4.3; G3; S3; None; None	Chaparral (openings, often north-facing slopes), Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland; Rocky, Serpentinite; 295; 3495	Apr-Jul	Suitable habitat occurs in the survey area. Most occurrences are in North Sonoma, Marin, and Napa Counties. Low Potential
Calandrinia breweri	Brewer's calandrinia	4.2; G4; S4; SB_SBBG; SB_UCSC; None; None	Chaparral, Coastal scrub; Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes); 35; 4005	(Jan)Mar-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Calochortus uniflorus	pink star-tulip	4.2; G4; S4; SB_SBBG; None; None	Coastal prairie, Coastal scrub, Meadows and seeps, North Coast coniferous forest; 35; 3510	Apr-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Calystegia collina ssp. oxyphylla	Mt. Saint Helena morning-glory	4.2; G4T3; S3; None; None	Chaparral, Lower montane coniferous forest, Valley and foothill grassland; Serpentinite; 915; 3315	Apr-Jun	Suitable habitat occurs in the survey area. Most often found in northern Sonoma and Napa Counties. Low Potential None observed during 2023 surveys.
Castilleja ambigua var. ambigua	johnny-nip	4.2; G4T4; S3S4; SB_CalBG/RSAB G; None; None	Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Valley and foothill grassland, Vernal pools (margins); 0; 1425	Mar-Aug	Suitable habitat occurs in the survey area. Most common along the coast. Low Potential None observed during 2023 surveys.
Ceanothus confusus	Rincon Ridge ceanothus	1B.1; G1; S1; BLM_S; SB_SBBG; None; None	Chaparral, Cismontane woodland, Closed-cone coniferous forest; Serpentinite (sometimes), Volcanic (sometimes); 245; 3495	Feb-Jun	Woodland habitat occurs in the survey area. Most often found in chaparral. No ceanothus plants observed on-site. Low Potential None observed during 2023 surveys.

Gennothus divergens	Calistoga reanothus	1B.2; G2; S2; SB_UCSC; None;	Chaparral (rocky, serpentinite, volcanic); 560; 3115	Feb-Anr	No suitable habitat occurs in the survey area. No Potential
Ceanothus foliosus var.	Vine Hill ceanothus	1B.1; G3T1; S1; None; None	Chaparral; 150; 1000	Mar-May	No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Ceanothus gloriosus var. exaltatus	glory brush	4.3; G4T4; S4; SB_UCSC; None; None	Chaparral; 100; 2000	Mar-Jun(Aug)	No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Ceanothus masonii	Mason's ceanothus	SR: 1B.2	Rocky places, serpentine substrate; openings in chaparral.	March-May	No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Ceanothus purpureus	holly-leaved ceanothus	18.2; G2; S2	Chaparral, Cismontane woodland	February-June	Woodland habitat occurs in the survey area. Most often found in chaparral. No ceanothus plants observed on-site. Low Potential None observed during 2023 surveys.
Ceanothus sonomensis	Sonoma ceanothus	18.2	Chaparral	February-April	No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Centromadia parryi ssp. parryi	pappose tarplant	1B.2; G3T2; S2; BLM_S; None; None	Chaparral, Coastal prairie, Marshes and swamps (coastal salt), Meadows and seeps, Valley and foothill grassland (vernally mesic); Alkaline (often); 0; 1380	May-Nov	Chaparral habitat occurs in the survey area. Most often found in Napa and Solano Counties. Low Potential

ministrana mornina	14 co 2004 d + viod	1B 3. G42T2. C3.	on works but sodawch		No suitable habitat occurs in the survey area.
ssp. palustre	bird's-beak	15.2, 34: 12, 32, None; None	(coastal salt); 0; 35	Jun-Oct	None observed during 2023 surveys.
Chloropyron molle ssp. molle	soft salty bird's-beak	1B.2; G2T1; S1; CR; FE	Marshes and swamps (coastal salt); 0; 10	nn-Nov	No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Chorizanthe valida	Sonoma spineflower	1B.1; G1; S1; SB_CalBG/RSAB G; CE; FE	Coastal prairie (sandy); 35; 1000	Jun-Aug	No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Clarkia breweri	Brewer's clarkia	4.2; G4; S4; None; None	Chaparral, Cismontane woodland, Coastal scrub; Serpentinite (often); 705; 3660	Apr-Jun	Chaparral habitat occurs in the survey area. Most occur in counties south of the Bay Area. Low Potential None observed during 2023 surveys.
Cordylanthus tenuis ssp. brunneus	serpentine bird's- beak	4.3	Closed-cone coniferous forest, Chaparral, Cismontane woodland	July-August	Woodland habitat occurs in the survey area. Most occurrences are in closed-cone coniferous forest. Low Potential None observed during 2023 surveys.
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	2B.2; G5T4?; SH; None; None	Marshes and swamps (freshwater); 50; 920	Jul-Oct	No suitable occurs in the survey area. No Potential None observed during 2023 surveys.
Cypripedium montanum	mountain lady's-slipper	4.2; G4G5; S4; BLM_S; IUCN_VU; USFS_S; None; None	Broadleaf upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest; 605; 7300	Mar-Aug	Woodland habitat occurs in the survey area. Most occurrences are in North Sonoma County or east of Napa County. Low Potential None observed during 2023 surveys.
Downingia pusilla	dwarf downingia	2B.2; GU; S2; None; None	Valley and foothill grassland (mesic), Vernal pools; 5; 1460	Mar-May	Suitable occurs in the survey area. Potential None observed during 2023 surveys.

Eastwoodiella californica	swamp harebell	1B.2; G3; S3; BLM_S; SB_CalBG/RSAB G; None; None	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Marshes and swamps (freshwater), Meadows and seeps, North Coast coniferous forest; Mesic; 5; 1330	Jun-Oct	Suitable occurs in survey area. Most occurrences are on the coast. Low Potential None observed during 2023 surveys.
Eleocharis parvula	small spikerush	4.3; G5; S3; None; None	Marshes and swamps; 5; 9910	(Apr)Jun-Aug(S ep)	No suitable occurs in the survey area. No Potential None observed during 2023 surveys.
Elymus californicus	California bottle-brush grass	4.3; G4; S4; None; None	Broadleaf upland forest, Cismontane woodland, North Coast coniferous forest, Riparian woodland; 50; 1540	May-Aug(Nov)	Suitable habitat occurs in the survey area. Most occurrences are along the coast. Low Potential None observed during 2023 surveys.
Erigeron biolettii	streamside daisy	3; G3; S3; None; None	Broadleaf upland forest, Cismontane woodland, North Coast coniferous forest; Mesic, Rocky; 100; 3610	Jun-Oct	Woodland habitat occurs in the survey area. Most occurrences are at higher elevations and rocky substrates. Low Potential None observed during 2023 surveys.
Erigeron greenei	Greene's narrow-leaved daisy	18.2	Generally serpentine substrate, sometimes volcanic substrate or rocky alluvium, generally among shrubs; chaparral, cismontane woodland, North Coast coniferous forest, lower montane coniferous forest	May-Septembe r	Woodland habitat occurs in the survey area. Most occurrences are at higher elevations and rocky substrates. Low Potential
Eriogonum umbellatum var. bahiiforme	bay buckwheat	4.2; G5T3; S3; None; None	Cismontane woodland, Lower montane coniferous forest; Rocky, Serpentinite (often); 2295; 7220	Jul-Sep	Woodland habitat occurs in the survey area. Most occurrences are are in Lake County at higher elevations and rocky substrate.

					None observed during 2023 surveys.
Eriophorum gracile	slender cottongrass	4.3; G5; S4; None; None	Bogs and fens, Meadows and seeps, Upper montane coniferous forest; Acidic; 4200; 9515	May-Sep	Suitable habitat occurs in the survey area. Most occurrences are in the Sierra Mountains. No Potential
Eryngium constancei	Loch Lomond button-celery	1B.1; G1; S1; SB_CalBG/RSAB G; CE; FE	Vernal pools; 1510; 2805	Apr-Jun	Suitable occurs in the survey area. All occurrences are at higher elevations. No Potential None observed during 2023 surveys.
Erythronium helenae	St. Helena fawn lily	4.2; G3; S3; None; None	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland; Serpentinite (sometimes), Volcanic (sometimes); 1150; 4005	Mar-May	Suitable occurs in the survey area. All occurrences are at higher elevations. No Potential None observed during 2023 surveys.
Fritillaria liliacea	fragrant fritillary	1B.2; G2; S2; SB_CalBG/RSAB G; USFS_S; None; None	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland; Serpentinite (often); 10; 1345	Feb-Apr	Suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Gratiola heterosepala	Boggs Lake hedge-hyssop	1B.2; G2; S2; BLM_S; CE; None	Marshes and swamps (lake margins), Vernal pools; Clay; 35; 7790	Apr-Aug	Suitable habitat occurs in the survey area. Most occurrences are east of Napa County, with one occurrence in Marin County. No Potential None observed during 2023 surveys.
Harmonia nutans	nodding harmonia	4.3; G3; S3; SB_UCBG; None; None	Chaparral, Cismontane woodland; Gravelly (sometimes), Rocky (sometimes), Volcanic; 245; 3200	Mar-May	Woodland habitat occurs in the survey area. Most occurrences are in Napa County. Low Potential None observed during 2023 surveys.

Hemizonia congesta ssp. congesta	congested-headed	1B.2; G5T2; S2; SB_UCBG; None; None	Valley and foothill grassland; Roadsides (sometimes); Grassy places, often disturbed areas, fallow fields, other ruderal areas; adjacent to wetlands; 65; 1835	Apr-Nov	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Hesperevax caulescens	hogwallow starfish	4.2; G3; S3; None; None	Valley and foothill grassland (mesic clay), Vernal pools (shallow); Alkaline (sometimes); 0; 1655	Mar-Jun	Suitable habitat occurs in the survey area. Most occurrences are east of Napa County. Low Potential None observed during 2023 surveys.
Hesperolinon congestum	Marin western flax	1B.1; G1; S1; CT; FT	Chaparral, Valley and foothill grassland; Serpentinite; 15; 1215	Apr-Jul	Suitable habitat occurs in the survey area. Most occurrences are in Marin County. Low Potential None observed during 2023 surveys.
Horkelia tenuiloba	thin-lobed horkelia	1B.2; G2; S2; SB_CalBG/RSAB G; None; None	Broadleaf upland forest, Chaparral, Valley and foothill grassland; Mesic, Openings, Sandy; 165; 1640	May-Jul(Aug)	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Hosackia gracilis	harlequin lotus	4.2; G3G4; S3; SB_CalBG/RSAB G; SB_UCSC; None; None	Broadleaf upland forest, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Valley and foothill grassland; wetlands; Roadsides; 0; 2295	Mar-Jul	Suitable habitat occurs in the survey area. Most occurrences are along the coast. Low Potential

		,	Coastal prairie, Lower		Suitable habitat occurs in the survey area. Most occurrences are along the
		4.2; G3; S3; SB UCSC; None;	montane coniferous forest, Meadows and seeps; Mesic;		coast. Low Potential
Iris longipetala	coast iris	None	0; 1970	Mar-May(Jun)	None observed during 2023 surveys.
I aethonia hurkoi	Burke's goldfields	1B.1; G1; S1; SB_CalBG/RSAB G; SB_UCBG; CE: EE	Meadows and seeps (mesic),	Apr.lin	Suitable occurs in the survey area. Rarely found outside of the Santa Rosa Plain. Low Potential
Lasthenia californica ssp.	Baker's goldfields	1B.2; G3T1; S1; None; None	Closed-cone coniferous forest (openings), Coastal scrub, Marshes and swamps, Meadows and seeps; 195; 1705	Apr-Oct	Suitable habitat occurs in the survey area. Most occurrences are found along the coast and north of Sonoma County. Low Potential None observed during 2023 surveys.
Lasthenia conjugens	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 occurrences are found in Solano County. Low Potential None observed during 2023 surveys.
Lathyrus jepsonii var. jepsonii	Delta tule pea	1B.2; G5T2; S2; None; None	Marshes and swamps (brackish, freshwater); 0; 15	May-Jul(Aug-Se p)	No suitable occurs in the survey area. No Potential None observed during 2023 surveys.
Layia septentrionalis	Colusa layia	1B.2; G2; S2; BLM_S; SB_UCBG; None; None	Chaparral, Cismontane woodland, Valley and foothill grassland; Sandy, Serpentinite; 330; 3595	Арг-Мау	Suitable habitat occurs in the survey area. Most occurrences are found in Napa County and northeast. Low Potential None observed during 2023 surveys.
Legenere limosa	legenere	1B.1; G2; S2; BLM_S; SB_UCBG; None; None	Vernal pools; 5; 2885	Apr-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.

Leptosiphon aureus	bristly leptosiphon	4.2; G4?; S4?; None; None	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland; 180; 4920	Apr-Jul	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Leptosiphon jepsonii	Jepson's leptosiphon	1B.2; G2G3; S2S3; SB_CalBG/RSAB G; SB_USDA; None; None	Chaparral, Cismontane woodland, Valley and foothill grassland; Volcanic (usually); 330; 1640	Mar-May	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Leptosiphon latisectus	broad-lobed leptosiphon	4.3; G4; S4; None; None	Broadleaf upland forest, Cismontane woodland; 560; 4920	Apr-Jun	Suitable habitat occurs in the survey area. Most occurrences are in Napa and Lake Counties. Low Potential None observed during 2023 surveys.
Lessingia hololeuca	woolly-headed lessingia	3; G2G3; S2S3; None; None	Broadleaf upland forest, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland; Clay, Serpentinite; 50; 1000	Jun-Oct	Suitable habitat occurs in the survey area. Low Potential None observed during 2023 surveys.
Lilium pardalinum ssp. pitkinense	Pitkin Marsh lily	1B.1; G5T1; S1; SB_BerrySB; SB_CalBG/RSAB G; SB_USDA; CE; FE	Cismontane woodland, Marshes and swamps (freshwater), Meadows and seeps; Mesic, Sandy; 115; 215	Jun-Jul	Suitable habitat occurs in the survey area. Most occurrences are in West Sonoma County. Low Potential None observed during 2023 surveys.
Lilium rubescens	redwood lily	4.2; G3; S3; SB_CalBG/RSAB G; SB_USDA; None; None	Broadleaf upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; Roadsides (sometimes), Serpentinite (sometimes); 100; 6265	(Mar)Apr-Aug(Sep)	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.

Limnanthes vinculans	Sebastopol meadowfoam	1B.1; G1; S1; SB_CalBG/RSAB G; SB_UCBG; CE; FE	Meadows and seeps, Valley and foothill grassland, Vernal pools; Vernally Mesic; 50; 1000	Apr-May	Suitable habitat occurs in the survey area. All occurrences are found in the Santa Rosa Plain. Low Potential None observed during 2023 surveys.
Lomatium repostum	Napa lomatium	4.2; G2G3; S2S3; SB_UCSC; None; None	Broadleaf upland forest, Chaparral, Cismontane woodland; Flat to steep slopes in chaparral and woodland (mixed evergreen forest, often with madrone).; Gravelly (sometimes), Openings (often), Rocky (sometimes), Sandstone (rarely), Serpentinite, Volcanic (often); 295; 4725	Mar-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Lupinus sericatus	Cobb Mountain lupine	1B.2; G2?; S2?; BLM_S; SB_UCSC; None; None	Broadleaf upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest; 900; 5005	Mar-Jun	Suitable habitat occurs in the survey area. Usually occurs at higher elevation and most occurrences found in Napa County. Low Potential None observed during 2023 surveys.
Microseris paludosa	marsh microseris	1B.2; G2; S2; BLM_S; SB_SBBG; SB_UCSC; None; None	Cismontane woodland, Closed-cone coniferous forest, Coastal scrub, Valley and foothill grassland; 15;	Apr-Jun(Jul)	Suitable habitat occurs in the survey area. Most occurrences found in along the coast or in Northwest Sonoma County. Low Potential None observed during 2023 surveys.
Monardella viridis	green monardella	4.3; G3; S3; None; None	Broadleaf upland forest, Chaparral, Cismontane woodland ; 330; 3315	Jun-Sep	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.

Navarretia leucocephala ssp. bakeri	Baker's navarretia	18.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools	April-July	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Navarretia Ieucocephala ssp. plieantha	many-flowered navarretia	FE, SE, CRPR 1B.2	Volcanic ash flow vernal pools.	May-June	Vernal pools are onsite, but not volcanic ash flow. No Potential None observed during 2023 surveys.
Navarretia cotulifolia	cotula navarretia	4.2; G4; S4; None; None	Chaparral, Cismontane woodland, Valley and foothill grassland; Adobe; 15; 6005	May-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Navarretia heterandra	Tehama navarretia	4.3; G4; S4; None; None	Valley and foothill grassland (mesic), Vernal pools; 100; 3315	Apr-Jun	Suitable habitat occurs in the survey area. Most occurrences are found in Napa County and northeast of Napa. Low Potential None observed during 2023 surveys.
Navarretia leucocephala ssp. bakeri	Baker's navarretia	18.1; G4T2; S2; SB_CalBG/RSAB G; None; None	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools; Mesic; 15;	Apr-Jul	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Navarretia leucocephala ssp. plieantha	many-flowered navarretia	1B.2; G4T1; S1; SB_CalBG/RSAB G; CE; FE	Vernal pools (volcanic ash); 100; 3115	May-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Penstemon newberryi var. sonomensis	Sonoma beardtongue	1B.3; G4T3; S3; None; None	Chaparral (rocky) ; 2295; 4495	Apr-Aug	No suitable occurs in the survey area. No Potential None observed during 2023 surveys.

Plagiobothrys mollis var. vestitus	Petaluma popcornflower	1A; G4?TX; SX; None; None	Marshes and swamps (coastal salt), Valley and foothill grassland (mesic); 35; 165	Jun-Jul	Suitable habitat occurs in the survey area. Only known occurrence in Southern Sonoma County. Low Potential None observed during 2023 surveys.
Pleuropogon hooverianus	North Coast semaphore grass	1B.1; G2; S2; SB_BerrySB; SB_CalBG/RSAB G; CT; None	Broadleaf upland forest, Meadows and seeps, North Coast coniferous forest; Mesic, Openings; 35; 2200	Apr-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Pleuropogon refractus	nodding semaphore grass	4.2; G4; S4; IUCN_LC; None; None	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest; Mesic; 0; 5250	(Feb-Mar)Apr- Aug	Suitable habitat occurs in the survey area. Most occurrences are found along the North Coast or in Marin County. Low Potential None observed during 2023 surveys.
Polygonum marinense	Marin knotweed	3.1; G2Q; S2; None; None	Marshes and swamps (brackish, coastal salt) ; 0; 35	(Apr)May-Aug(Oct)	No suitable occurs in the survey area. No Potential None observed during 2023 surveys.
Potentilla uliginosa	Cunningham Marsh cinquefoil	1A; GX; SX; None; None	Marshes and swamps (freshwater); permanent oligotrophic wetlands; 100; 130	May-Aug	No suitable occurs in the survey area. No Potential None observed during 2023 surveys.
Ranunculus lobbii	Lobb's aquatic buttercup	4.2; G4; S3; IUCN_LC; None; None	Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland, Vernal pools; Mesic; 50; 1540	Feb-May	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Rhynchospora alba	white beaked-rush	2B.2; G5; S2; IUCN_LC; None; None	Bogs and fens, Marshes and swamps (freshwater), Meadows and seeps; 195; 6695	Jun-Aug	Suitable habitat occurs in the survey area. Most occurrences are in West Sonoma County. Low Potential None observed during 2023 surveys.

Rhynchospora californica	California beaked-rush	1B.1; G1; S1; SB_UCSC; None; None	Bogs and fens, Lower montane coniferous forest, Marshes and swamps (freshwater), Meadows and seeps (seeps); 150; 3315	May-Jul	Suitable habitat occurs in the survey area. Most occurrences are in West Sonoma County. Low Potential None observed during 2023 surveys.
Rhynchospora capitellata	brownish beaked-rush	2B.2; G5; S1; IUCN_LC; None; None	Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Upper montane coniferous forest; Mesic; 150; 6560	Jul-Aug	Suitable habitat occurs in the survey area. Most occurrences are in West Sonoma County. Low Potential None observed during 2023 surveys.
Rhynchospora globularis	round-headed beaked-rush	2B.1; G5; S1; None; None	Marshes and swamps (freshwater); 150; 195	Jul-Aug	Suitable habitat occurs in the survey area. Most occurrences are in West Sonoma County. Low Potential None observed during 2023 surveys.
Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom	1B.2; G5T2; S2; None; None	Marshes and swamps (freshwater, near coast) ; 10; 245	Apr-Sep	Suitable habitat occurs in the survey area. Most occurrences are along the coast. Low Potential None observed during 2023 surveys.
Sidalcea hickmanii ssp. napensis	Napa checkerbloom	1B.1; G3T1; S1; SB_CalBG/RSAB G; None; None	Chaparral; rhyolitic; 1360; 2000	Apr-Jun	No suitable occurs in the survey area. No Potential None observed during 2023 surveys.
Sidalcea oregana ssp. valida	Kenwood Marsh checkerbloom	1B.1; G5T1; S1; SB_CalBG/RSAB G; SB_UCBG; CE; FE	Marshes and swamps (freshwater); 375; 490	Jun-Sep	Suitable habitat occurs in the survey area. Most occurrences are in Napa County. Low Potential None observed during 2023 surveys.
Trichostema ruygtii	Napa bluecurls	1B.2; G1G2; S1S2; SB_CalBG/RSAB G; None; None	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland, Vernal pools; 100; 2230	Jun-Oct	Suitable habitat occurs in the survey area. Most occurrences are in Napa County. Low Potential None observed during 2023 surveys.

Trifolium amoenum	two-fork clover	1B.1; G1; S1; SB_CalBG/RSAB G; SB_UCBG; SB_USDA; None; FE	Coastal bluff scrub, Valley and foothill grassland (sometimes serpentinite); 15; 1360	Apr-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Trifolium buckwestiorum	Santa Cruz clover	1B.1; G2; S2; BLM_S; SB_SBBG; SB_UCSC; SB_USDA; None; None	Broadleaf upland forest, Cismontane woodland, Coastal prairie; margins; Gravelly; 115; 2000	Apr-Oct	Suitable habitat occurs in the survey area. Most occurrences are along the coast. Low Potential None observed during 2023 surveys.
Trifolium hydrophilum	saline clover	1B.2; G2; S2; None; None	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools; 0; 985	Apr-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Trifolium polyodon	Pacific Grove clover	1B.1; G1; S1; CR; None	Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Valley and foothill grassland; Granitic (sometimes), Mesic; 15; 1395	Apr-Jun(Jul)	Suitable habitat occurs in the survey area. Most occurrences are south of San Francisco Bay. Low Potential None observed during 2023 surveys.
Triquetrella californica	coastal triquetrella	1B.2; G2; S2; USFS_S; None; None	Coastal bluff scrub, Coastal scrub; soil; 35; 330		No suitable habitat occurs in the survey area. No Potential None observed during 2023 surveys.
Triteleia lugens	dark-mouthed triteleia	4.3; G4?; S4?; None; None	Broadleaf upland forest, Chaparral, Coastal scrub, Lower montane coniferous forest; 330; 3280	Apr-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.
Viburnum ellipticum	oval-leaved viburnum	2B.3; G4G5; S3?; None; None	Chaparral, Cismontane woodland, Lower montane coniferous forest; 705; 4595	May-Jun	Suitable habitat occurs in the survey area. Potential None observed during 2023 surveys.

mperiled, at high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors; G3 = declines, threats, or other factors; G4 = Secure, at fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, California Plant Rescue Institutions: SB_CalBG/RSABG = California/Rancho Santa Ana Botanic Garden, SB_SBBG = Santa Barbara Botanic Garden, SB_UCBG = UC imperiled in the state because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation, typically 6 to 20 occurrences or few International Union for Conservation of Nature: IUCN_CE = critically endangered, ICUN_E = endangered, IUCN_LC = least concern, IUCN_NT = near threatened, threatened. State listed under the California Endangered Species Act and the California Native Plant Protection Act CESA: CE = state listed as endangered; CT = but with possible cause for some concern as a result of local recent declines, threats, or other factors. State Rank: S1 = Critically Imperiled At very high risk of remaining individuals (1,000 to 3,000); S3 = Uncommon not of conservation concern, typically, 21 to 50 known occurrences or populations; S3 ranked species are not yet susceptible to becoming extirpated in the state but may be if additional populations are destroyed. California Rare Plant Rank: CRPR 1A = Plants or IUCN_V = vulnerable. California Plant Rescue Institutions. Bureau of Land Management sensitive (BLM_S). United States Forest Service sensitive (USF_S). Botanical Garden at Berkeley, SB_UCSC = UC Santa Cruz, SB_BSB = Berry Seed Bank, SB_KRBG = Kew Royal Botanic Gardens, SB_SDZC = San Diego Zoo CRES, presumed extinct in California; CRPR 1B = Rare, threatened, or endangered in California and elsewhere; CRPR 2 = plants rare, threatened or endangered in Inventory (CNPS 2023) records for the Sonoma quadrangle and the eight surrounding quadrangles. Note: FESA: FE = federally endangered; FT = federally Vulnerable, at moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors; S2 = state listed as threatened; CR = state listed as rare. Global Rank: G1 = critical imperilment on a global basis, the species is at great risk of extinction; G2 = List of special-status species has been compiled based on plant species listed in the CNDDB for the Sonoma USGS quadrangle (2023) and based on CNPS California, but more common elsewhere; CRPR 3 = plants about which more information is needed; CRPR 4 = Uncommon in California. Other Status: SB_NGSB = Native Gene Seed Bank, SB_USDA = US Department of Agriculture.

Table 2Vascular Plants Observed Onsite

Table 2 - Vascular Plants Observed Onsite - April, May, June 2023

					Habitat Communities	unities	
Family	Scientific Name	Common Name	Native (N) Non-native Invasive (I) Cultivar (C)	Wetlands	Annual Grassland	Oak Woodland	Riparian
AGAVACEAE	Chlorogalum pomeridianum	common soaproot	Z			×	×
ANACARDIACEAE	Toxicodendron diversilobum	poison oak	Z			×	×
ALLIACEAE	Allium vineale	vineyard onion	1	×			
APIACEAE	Daucus carota	wild carrot			×	×	×
	Foeniculum vulgare	sweet fennel	1		×		
	Sanicula crassicaulis	Pacific sanicle	Z		X	×	×
APOCYANACEAE	Asclepias fascicularis	narrow leaf milkweed	Z			×	×
	Vinca major	perwinkle	1			×	×
ASTERACEAE	Atemisia douglasiana	mugwort	Z				×
	Baccharis pilularis	coyote brush	Z			×	×
	Calendula arvensis	field marigold	ı		×		
	Carduus pycnocephalus	Italian thistle	1	×	×	×	×
	Centaurea solstitialis	yellow starthistle			×	×	
	Cichorium intybus	chicory			Х		
	Helminthotheca echioides	bristly ox-tongue	1		×		
	Hypochaeris glabra	smooth cat's ear	ı	×	×	×	×

Table 2 - Vascular Plants Observed Onsite April, May, June 2023 810 W. Agua Caliente Road Sonoma, Sonoma County, CA 95467 APNs 133-112-020 and 133-220-003

	Matricaria discoidea	pineapple weed	Z		×	×	
	Lactuca serriola	prickly lettuce	I		X	X	×
	Silybum marianum	milk thistle	ı		X	X	
	Sonchus asper	prickly sow thistle	ı		X	×	
	Tragopogon porrifolius	purple salsify	ı		X		
BORAGINACEAE	Amsinchkia menziesii	common fiddleneck	Z		X		×
BRASSICACEA	Brassica nigra	black mustard	1		X	X	×
	Hirschfeldia incana	short-pod mustard	I		X	X	
	Raphanus sativus	wild radish	I		X	×	
CAPRIFOLIACEAE	Symphoricarpos albus	snowberry	Z				×
CARYPHYLLACEAE	Stellaria media	common chickweed	I		X	X	
CONVOLVULACEAE	Convolvulus arvensis	field bindweed	ı		X	X	×
CUCURBITACEAE	Marah fabacea	California man-root	Z			X	×
CYPERACEAE	Carex barbarae	valley sedge	Z				×
	Carex praegracilis	clustered field-sedge	Z				×
	Cyperus eragrostis	tall flatsedge	Z				×
DRYOPTERIDACEAE	Dryopteris arguta	wood fern	Z				×
EUPHORBIACEAE	Croton setiger	turkey mullein	Z		X	X	
		bird's foot trefoil,					
FABACEAE	Acmispon americanus	Spanish lotus	Z	×	×	×	
	Genista monspessulana	French broom	ı			×	×
	Lathyrys cicera	red pea	_		×		×

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	Lotus corniculatus	deer vetch				×	×
	Lupinus bicolor	miniature lupine	Z		X	×	
	Lipinus nanus	sky lupine	Z		X	×	
	Medicago polymorpha	burclover	1		X	×	×
	Trifolium hirtum	rose clover	1		X	×	
	Trifolium repens	white clover	ı		X		
	Trifolium subterraneum	subterranean clover	1		×		
	Vicia villosa	hairy vetch	1		X	×	×
FAGACEAE	Quercus agrifolia	coast live oak	Z			×	×
	Quercus lobata	valley oak	Z			×	×
	Quercus kelloggii	black oak	Z			×	×
GERANIACEAE	Erodium botrys	broad leaf filaree			×		×
	Erodium cicutarium	red-stem filaree	1		X	×	×
	Geranium dissectum	cut-leaf geranium	ı			×	×
	Geranium molle	crane's bill	1		×	×	×
	Geranium purpureum	little robins geranium	-			×	×
		Common St. John's					
HYPERIACEAE	Hypericum perforatum	Wart	_			×	×
JUNCACEAE	Juncus bufonis	toad rush	Z	×			×
	Juncus effuses	common rush	Z				×
	Juncus patens	spreading rush	Z				×

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LAMIACEAE	Marrubium vulgare	white horehound	Z				×
	Mentha pulegium	pennyroyal	Z				×
	Lamium purpureum	purple deadnettle				X	
LAURACEAE	Umbellularia californica	California bay laurel	Z			X	×
LYTHRACEAE	Lythrum hyssopifolia	hyssop loosestrife	1			X	
MALVACEAE	Malva neglecta	common mallow	ı		×	X	
MORACEAE	Ficus carica	common fig	C			X	
MONTIACEAE	Claytonia perfoliata	miner's lettuce	Z				×
MYRSINACEAE	Lysimachia arvensis	scarlet pimpernel	1		×	X	
MYRTACEAE	Eucalyptus globulus	plue gum	1			X	×
OLEACEAE	Fraxinus latifolia	Oregon ash	Z				×
	Olea europaea	olive	-			X	
ONAGRACEAE	Clarkia purpurea	winecup clarkia	Z	×			
OROBANCHACEAE	Parentucellia viscosa	yellow glandweed	Z		×		
OXALIDACEAE	Oxalis pes-caprae	sourgrass, bermuda buttercup	_			×	×
PAPAVERACEAE	Eschscholzia californica	California poppy	Z		×		
PLANTAGINACEAE	Kickxia elatine	sharp leaved fluellin	ı		×		
	Plantago lanceolata	English plantain	ı		×		
POACEAE	Avena barbata	slender wild oat	ı		X	X	×
	Avena fatua	wild oat	-		×	×	×
	Briza major	rattlesnake grass	_		×	×	×

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	Briza minor	little quaking grass			×	×	×
	Bromus diandrus	rip-gut brome	1		X	X	×
	Bromus hordeaceus	soft chess brome	1		X	X	
	Cynodon dactylon	burmudagrass	1		X		
	Cynosurus echinatus	dog tail grass	1		X		×
	Elymus caput-medusae	medusa head	1		X		
	Elymus glaucus	blue wild rye	N		X	X	×
	Festuca myuros	rattail six week grass	ı		X	X	
	Factura noronnis	perennial Italian rye			*	X	×
	Hordeum brachyantherum	meadow barley	Z	×	×		:
	Hordeum marinum	wall barley	_	×	×	×	×
	Phalaris aquatica	harding grass	-	×	×		
	Pleuropogon californicus	semaphore grass	Z	×	×		
	Poa annua	bluegrass	ı		X		
	Stipa pulchra	purple needlegrass	N		X	X	
POLEMONIACEAE	Navarretia squarrosa	skunkweed	N		X		
POLYGONACEAE	Polygonum avicuulare	knotweed	1		X		
	Rumex acetosella	sheep sorrel	1	×			×
	Rumex crispus	curly dock	1	Х			×
POLYPODIACEAE	Polypodium californicum	California polypody	N				×
PTERIDACEAE	Pentagramma triangularis	gold back fern	N				×

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RANUNCULACEAE	Ranunculus muricatus	spiny-fruit buttercup	ı	×			×
ROSACEAE	Prunus cersifera	cherry plum	Э			X	×
		Himalayan					
	Rubus armeniacus	blackberry	1				×
RUBIACEAE	Galium porrigens	graceful bedstraw	Z		×	×	×
SALICACEAE	Salix lasiolepis	arroyo willow	Z				×
SAPINDACEAE	Aesculus californica	buckeye	Z			×	×