

September 19, 2014

Caroline Christman The Golden Gate National Parks Conservancy Fort Mason, Bldg. 201 San Francisco, CA 94123

Re: Special-Status Plant Surveys of Redwood Creek Trail Realignment and Decommission, Mt. Tamalpais State Park

Dear Caroline Christman:

The Golden Gate National Parks Conservancy (GGNPC) requested URS Corporation to conduct focused plant surveys for special-status plant species potentially impacted by proposed trail work along the Redwood Creek Trail in Mt. Tamalpais State Park. The assessment of sensitive botanical resources in the survey area included a desktop analysis to identify species with potential to occur. In addition, URS staff conducted three seasons of special-status plant surveys.

No special-status plants were documented in the survey area. This technical memorandum outlines the desktop review and field survey methods and the results.

Survey Area

The scope of work defined the survey area as the 1-mile Construct New Alignment segment of the Redwood Creek Trail (Figure 1). Following a conversation between Anna Larsen and Caroline Christman during a field site visit on June 6, 2013, the survey area was expanded to include the approximate 1.75 miles of Existing Trail, Decommission Trail (including horse spurs), and Reconstruct Trail (Figure 1). The Existing Trail segment was not surveyed during the 2014 survey because it was closed for construction. The survey buffer along the Construct New Alignment segment was fifteen feet on either side of the proposed trail alignment. The survey buffer along the Decommission Trail, Reconstruct Trail, and Existing Trail segments was three feet on each side of the trail segment.

Desktop Review

Prior to field surveys, a list of special-status plant species with potential to occur in the survey area was compiled from queries of the California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants for special-status species known to occur in the nine USGS quads that are centered on the San Rafael quad. The combined queries generated a list of 92 taxa. The potential for each taxon on this list to occur within the survey area was evaluated based on the known distribution and habitat preferences of the taxon. The distribution of the taxon was assessed based on geo-referenced specimens in the Consortium of California Herbaria (CCH), observation data in Calflora, and the geographic subdivisions listed in the Jepson eFlora. The habitat and edaphic preferences of each species were assessed based on data in Calflora, the CNDDB, and the Jepson eFlora. The Geologic Map and Map Database of Parts of Marin, San Francisco,



Alameda, Contra Costa, and Sonoma Counties, California (Blake, *et al* 2000) and the Marin County Soil Survey (NRCS, 2013) was consulted to determine the characteristics and distribution of the local soil types. If appropriate habitat and/or soils were not present in the survey area or the survey area was outside the documented range of the species, the species was deemed to have no reasonable potential to occur in the project area. The species that were evaluated for their potential to occur in the survey area are listed in the Special-Status Plant Species Evaluated for Potential to Occur (Attachment A).

Field Survey Methods

Special-status plant surveys were conducted in the survey area June 6, June 12, July 2, 2013 and April 17, 2014 by URS botanists Anna Larsen, Dina Robertson, Katherine Dudney, Julie Garren, and Ivan Parr.

Special-status plant surveys were conducted in grassland, northern coastal scrub, coast live oak-California bay woodland, and riparian habitats, following the California Department of Fish and Wildlife (CDFW) protocols for evaluating impacts to special-status plants and the CNPS botanical survey guidelines (CNPS 1983). The surveys were floristic in nature and timed such that special-status plants would be evident and identifiable. All plants encountered were identified to a level necessary to confirm if they were special-status plant species. Special-status plant surveys were conducted during the appropriate bloom periods for each plant. All plant species observed in the Redwood Creek Watershed were recorded (Attachment B).

Results

No special-status plant species were observed in the survey area. These findings are limited by the fact that the Existing Trail segment was not surveyed during the April 2014 survey window due to active trail maintenance construction.

If you have any questions regarding this technical memo, please contact Dina Robertson at (510) 874-1751 or Anna Larsen at (510) 874-3204.

Sincerely,

Dina Robertson Anna Larsen
Project Ecologist Botanist

URS Corporation URS Corporation

Figures and Attachments:

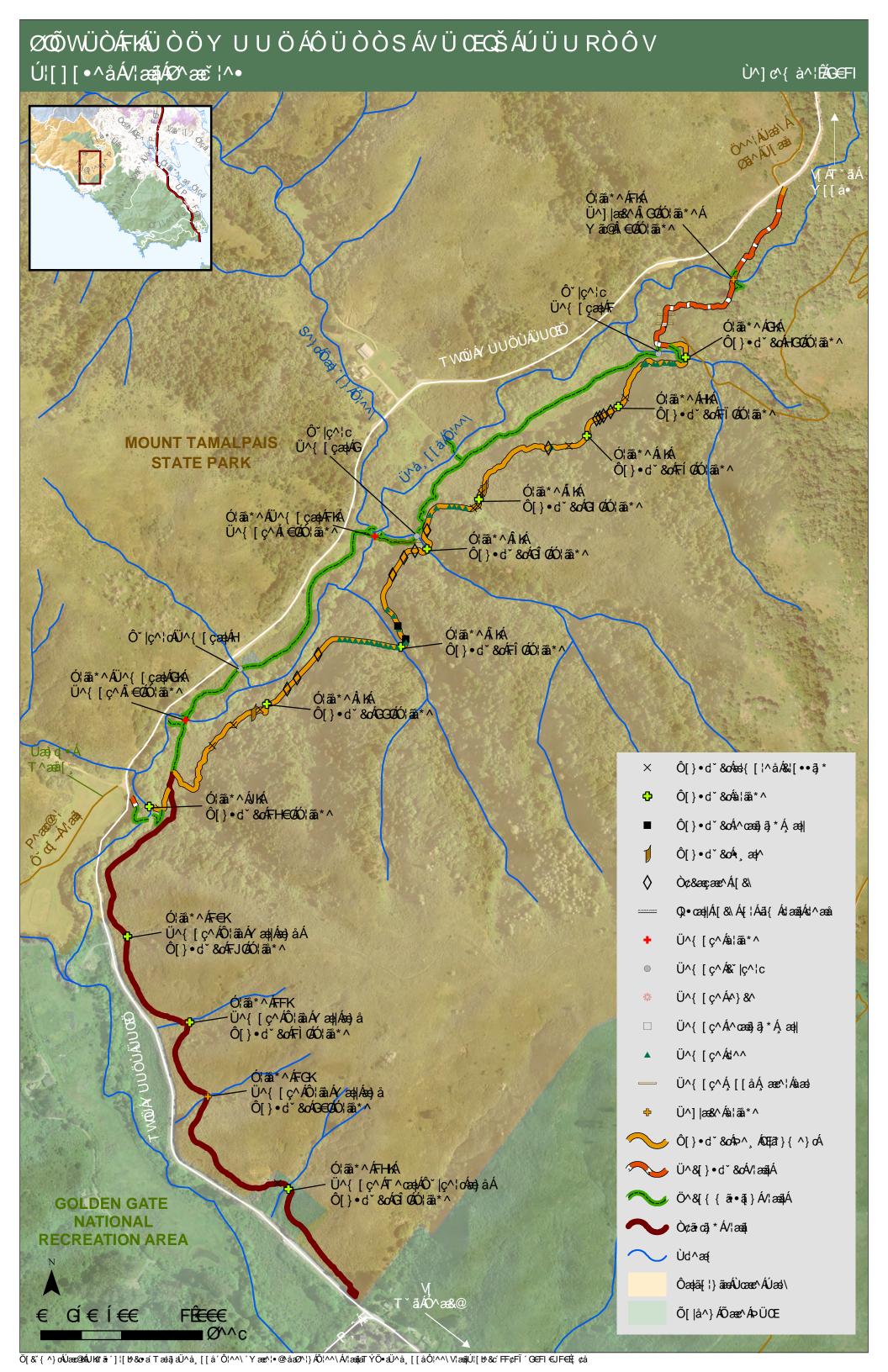
Figure 1: Redwood Creek Trail Alignments Surveyed for Special-Status Plants Attachment A: Special-Status Plant Species Evaluated for Potential to Occur

Attachment B: Plant Species Observed During Field Surveys



References

- Calflora: Information on California plants for education, research and conservation. [web application]. 2014. Berkeley, California: The Calflora Database [a non-profit organization]. Available: http://www.calflora.org/ (Accessed: May 2013, February 2014).
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 Sacramento, CA.
- California Native Plant Society (CNPS). 1983. CNPS Botanical Survey Guidelines. Revised June 2001.
- CNPS, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed May 2013, February 2014].
- Jepson Flora Project (eds.) [2014] *Jepson eFlora*, http://ucjeps.berkeley.edu/IJM.html [accessed May 2013, February 2014]
- Natural Resources Conservation Service (NRCS), United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed May 2013 and February 2014.
- Blake, M.C., R.W. Graymer, and D.L. Jones. 2000. Geologic Map and Map Database of Parts of Marin, San Francisco, Alameda, Contra Costa, and Sonoma Counties, California. U.S. Geological Survey, Miscellaneous Field Studies MF 2337, Online Version 1.0, accessed June 4, 2013 at http://pubs.usgs.gov/mf/2000/2337/



		Status					
Scientific Name	Common Name	Fed	State	CRPR	Habitat Requirements	Reported Bloom Period	Potential to Occur
					Potential to occur		
Amorpha californica var. napensis	Napa false indigo			1B.2	Broadleaved upland forest Chaparral Cismontane woodland	April - July	Yes - target for early season survey
Amsinckia lunaris	bent-flowered fiddleneck			1B.2	Cismontane woodland Valley & foothill grassland	March - June	Yes - target for early season survey
Arabis blepharophylla	coast rockcress				rocky Broadleafed upland forest Coastal bluff scrub Coastal prairie Coastal scrub	Feb - May	Yes - target for early season survey
Arctostaphylos franciscana	Franciscan manzanita			1B.1	Chaparral Ultramafic	Feb - April	Yes - target for early season survey
Arctostaphylos montana ssp. montana	Mt. Tamalpais manzanita			1B.3	Chaparral Ultramafic Valley & foothill grassland	Feb - April	Yes - target for early season survey
Arctostaphylos montana ssp. ravenii	Presidio manzanita	Е	Е	1B.1	Chaparral Coastal prairie Coastal scrub Ultramafic	Feb - March	Yes - target for early season survey
Arctostaphylos virgata	Marin manzanita			1B.2	Broadleaved upland forest Chaparral Closed-cone coniferous forest North coast coniferous forest	Jan - March	Yes - target for early season survey
Astragalus breweri	Brewer's milk-vetch			4.2	often serpentinite, volcanic Chaparral Cismontane woodland Meadows and seeps Valley and foothill grassland (open, often gravelly)	April - June	Yes - target for early/ mid season survey
Calandrinia breweri	Brewer's calandrinia			4.2	sandy or loamy, disturbed sites and burns Chaparral Coastal scrub	March - June	Yes - target for early season survey
Calochortus umbellatus	Oakland star-tulip				often serpentinite Broadleafed upland forest Chaparral Cismontane woodland Lower montane coniferous forest Valley and foothill grassland	March - May	Yes - target for early season survey
Cardamine angulata	seaside bittercress			2.1	Lower montane coniferous forest North coast coniferous forest Wetland	March - July	Yes - target for early season survey
Carex comosa	bristly sedge			2.1	Freshwater marsh Marsh & swamp Wetland Coastal Prairie	May - Sept	Yes - target for mid season survey
Ceanothus gloriosus var. exaltatus	glory brush			4.3	Chaparral	March - May	Yes - target for early season survey
Cirsium andrewsii	Franciscan thistle			1B.2	mesic, sometimes serpentinite Broadleafed upland forest Coastal bluff scrub Coastal prairie Coastal scrub	March - June	Yes - target for early season survey
Cistanthe maritima	seaside cistanthe			4.2	sandy Coastal bluff scrub Coastal scrub Valley and foothill grassland	Feb - Aug	Yes - target for early/ mid season survey
Collinsia multicolor	San Francisco collinsia			1B.2	Closed-cone coniferous forest Coastal scrub	March - May	Yes - target for early/ mid season survey

		Status		S			
Scientific Name	Common Name	Fed	State	CRPR	Habitat Requirements	Reported Bloom Period	Potential to Occur
Dirca occidentalis	western leatherwood			1B.2	Broadleaved upland forest Chaparral Cismontane woodland Closed-cone coniferous forest North coast coniferous forest Riparian woodland	Jan - April	Yes - target for early/ mid season survey
Elymus californicus	California bottle-brush grass			4.3	Broadleafed upland forest Cismontane woodland North Coast coniferous forest Riparian woodland	May - Nov	Yes - target for mid/ late season survey
Entosthodon kochii	Koch's cord moss			1B.3	Cismontane woodland (soil) Valley & foothill grassland	n/a	Yes - target for early season survey
Fissidens pauperculus	minute pocket moss			1B.2	North coast coniferous forest Redwood	n/a	Yes - target for early season survey
Fritillaria liliacea	fragrant fritillary			1B.2	Coastal prairie Coastal scrub Ultramafic Valley & foothill grassland	Feb - April	Yes - target for early season survey
Grindelia hirsutula var. maritima	San Francisco gumplant			3.2	Coastal bluff scrub Coastal scrub Ultramafic Valley & foothill grassland	June - Sept	Yes - target for late season survey
Helianthella castanea	Diablo helianthella			1B.2	Broadleaved upland forest Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	March - June	Yes - target for early/ mid season survey
Hemizonia congesta ssp. congesta	white seaside tarplant			1B.2	Coastal scrub Valley & foothill grassland sometimes roadsides	April - Nov	Yes - target for early season survey; note: presumed extirpated from the vicinity
Holocarpha macradenia	Santa Cruz tarplant	Т	Е	1B.1	Coastal prairie Coastal scrub Valley & foothill grassland	June - Oct	Yes - target for early season survey; note: presumed extirpated from the vicinity
Horkelia cuneata var. sericea	Kellogg's horkelia			1B.1	Chaparral Closed-cone coniferous forest Coastal dunes Coastal scrub	April - Sept	Yes - target for early season survey; note: presumed extirpated from the vicinity
Horkelia tenuiloba	thin-lobed horkelia			1B.2	Chaparral Coastal scrub	May - Aug	Yes - target for mid season survey
Iris longipetala	coast iris			4.2	mesic Coastal prairie Lower montane coniferous forest Meadows and seeps	March - May	Yes - target for early season survey
Kopsiopsis hookeri	small groundcone			2.3	North coast coniferous forest	April - Aug	Yes - target for mid/l ate season survey
Leptosiphon acicularis	bristly leptosiphon			4.2	Chaparral Cismontane woodland Coastal prairie Valley and foothill grassland	April - July	Yes - target for early season survey
Leptosiphon croceus	coast yellow leptosiphon			1B.1	Coastal bluff scrub Coastal prairie	April - May	Yes - target for early season survey
Leptosiphon grandiflorus	large-flowered leptosiphon			4.2	usually sandy Coastal bluff scrub Closed- cone coniferous forest Cismontane woodland Coastal dunes Coastal prairie Coastal scrub Valley and foothill grassland	April - Aug	Yes - target for early season survey

		Status		S			
Scientific Name	Common Name	Fed	State	CRPR	Habitat Requirements	Reported Bloom Period	Potential to Occur
Lessingia hololeuca	woolly-headed lessingia			3	clay, serpentinite Broadleafed upland forest Coastal scrub Lower montane coniferous forest Valley and foothill grassland	June - Oct	Yes - target for late season survey
Micropus amphibolus	Mt. Diablo cottonweed			3.2	rocky Broadleafed upland forest Chaparral Cismontane woodland Valley and foothill grassland	March - May	Yes - target for early season survey
Microseris paludosa	marsh microseris			1B.2	Cismontane woodland Closed-cone coniferous forest Coastal scrub Valley & foothill grassland	April - July	Yes - target for mid season survey
Mielichhoferia elongata	elongate copper moss			2.2	Cismontane woodland	n/a	Yes - target for early season survey
Navarretia leucocephala ssp. bakeri	Baker's navarretia			1B.1	Mesic Cismontane woodland Lower montane coniferous forest Meadows and seeps Valley and foothill grassland Vernal pools	April - July	Yes - target for early season survey
Pentachaeta bellidiflora	white-rayed pentachaeta	Е	Е	1B.1	Ultramafic Valley & foothill grassland	March - May	Yes - target for early season survey
Perideridia gairdneri ssp. gairdneri	Gairdner's yampah			4.2	vernally mesic Broadleafed upland forest Chaparral Coastal prairie Valley and foothill grassland Vernal pools	June - Oct	Yes - target for late season survey
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower			1B.2	Chaparral Coastal prairie Coastal scrub	March - June	Yes - target for early season survey
Plagiobothrys diffusus	San Francisco popcornflower		Е	1B.1	Coastal prairie Valley & foothill grassland	March - June	Yes - target for early season survey
Pleuropogon hooverianus	North Coast semaphore grass		Т	1B.1	Broadleaved upland forest Meadow & seep North coast coniferous forest Wetland	April - June	Yes - target for early season survey
Pleuropogon refractus	nodding semaphore grass			4.2	Mesic Lower montane coniferous forest Meadows and seeps North Coast coniferous forest Riparian forest	March - April	Yes - target for early season survey
Polemonium carneum	Oregon polemonium			2.2	Coastal prairie Coastal scrub Lower montane coniferous forest	April - Sept	Yes - target for early/ mid season survey
Quercus parvula var. tamalpaisensis	Tamalpais oak			1B.3	Lower montane coniferous forest	March - April	Yes - target for all surveys
Ranunculus lobbii	Lobb's aquatic buttercup			4.2	Mesic Cismontane woodland North Coast coniferous forest Valley and foothill grassland Vernal pools	Feb - May	Yes - target for early season survey
Ribes victoris	Victor's gooseberry			4.3	Mesic, shady Broadleafed upland forest Chaparral	March - April	Yes - target for early season survey

		Status					
Scientific Name	Common Name	Fed	State	CRPR	Habitat Requirements	Reported Bloom Period	Potential to Occur
Sanicula maritima	adobe sanicle		R	1B.1	Chaparral Coastal prairie Meadow & seep Ultramafic Valley & foothill grassland	Feb - May	Yes - target for early season survey
Stebbinsoseris decipiens	Santa Cruz microseris			1B.2	Broadleaved upland forest Chaparral Closed-cone coniferous forest Coastal prairie Coastal scrub Ultramafic	April - May	Yes - target for early season survey
Trifolium amoenum	showy rancheria clover	Е		1B.1	Coastal bluff scrub Ultramafic Valley & foothill grassland	April - June	Yes - target for early season survey
Trifolium hydrophilum	saline clover			1B.2	Marsh & swamp Valley & foothill grassland Vernal pool Wetland	April - June	Yes - target for early season survey
Triphysaria floribunda	San Francisco owl's-clover			1B.2	Coastal prairie Ultramafic Valley & foothill grassland	April - June	Yes - target for early season survey
Triquetrella californica	coastal triquetrella			1B.2	Coastal bluff scrub Coastal scrub Valley & foothill grassland	n/a	Yes - target for early season survey
					No potential to occur		
Alopecurus aequalis var. sonomensis	Sonoma alopecurus	Е		1B.1	Freshwater marsh Marsh & swamp Riparian scrub Wetland	May - July	None - species of habitats not present in the Project Area; only known from areas north of Project Area
Arenaria paludicola	marsh sandwort	Е	Е	1B.1	Freshwater marsh Marsh & swamp Wetland	May - Aug	None - species of substrates and habitats not found in the Project Area; species documented in San Francisco in 1899 but otherwise from Santa Cruz County and south.
Aspidotis carlotta-halliae	Carlotta Hall's lace fern			4.2	generally serpentinite Chaparral Cismontane woodland	Jan - Dec	None - species of substrates and habitats not found in the Project Area.
Astragalus nuttallii var. nuttallii	ocean bluff milk-vetch			4.2	Coastal bluff scrub Coastal dunes	Jan - Nov	None - species of habitats not present in the Project Area
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch			1B.2	Coastal dunes (mesic) Marsh & swamp (coastal salt, streamsides) Wetland	April - Oct	None - species of habitats not present in the Project Area
Astragalus tener var. tener	alkali milk-vetch			1B.2	Alkali playa Valley & foothill grassland (adobe clay) Vernal pool Wetland	March - June	None - species of alkali substrates not present in the Project Area
Calamagrostis ophitidis	serpentine reed grass			4.3	serpentinite, rocky Chaparral (open, often north-facing slopes) Lower montane coniferous forest Meadows and seeps Valley and foothill grassland	April - July	None - species of habitats not present in the Project Area
Calochortus tiburonensis	Tiburon mariposa-lily	Т	Т	1B.1	Ultramafic Valley & foothill grassland	March - June	None - species of substrates and habitats not found in the Project Area; known only from the Tiburon Peninsula.
Carex lyngbyei	Lyngbye's sedge			2.2	Marsh & swamp Wetland; brackish	April - Aug	None - species of habitats not present in the Project Area

		Status		s			
Scientific Name	Common Name	Fed	State	CRPR	Habitat Requirements	Reported Bloom Period	Potential to Occur
Castilleja affinis ssp. neglecta	Tiburon paintbrush	Е	Т	1B.2	Ultramafic Valley & foothill grassland	April - June	None - species of substrates and habitats not found in the Project Area.
Ceanothus masonii	Mason's ceanothus		R	1B.2	Chaparral Ultramafic	March - April	None - species of substrates and habitats not found in the Project Area.
Chloropyron maritimum ssp. palustre	Point Reyes bird's-beak			1B.2	Marsh & swamp Salt marsh Wetland	June - Oct	None - species of habitats not present in the Project Area
Chorizanthe cuspidata var. cuspidata	San Francisco Bay spineflower			1B.2	Coastal bluff scrub Coastal dunes Coastal prairie Coastal scrub	April - Aug	None - species of habitats not present in the Project Area
Chorizanthe valida	Sonoma spineflower	FE	CE	1B.1	Coastal prairie (sandy)	June - Aug	None - species of habitats not present in the Project Area
Cirsium hydrophilum var. vaseyi	Mt. Tamalpais thistle			1B.2	Broadleaved upland forest Chaparral Meadow & seep Ultramafic Wetland	May - Aug	None - species of habitats not present in the Project Area
Clarkia franciscana	Presidio clarkia	Е	Е	1B.1	Coastal scrub Ultramafic Valley & foothill grassland	May - July	None - species of habitats not present in the Project Area
Collinsia corymbosa	round-headed Chinese- houses			1B.2	Coastal dunes	April - June	None - species of habitats not present in the Project Area
Eriogonum luteolum var. caninum	Tiburon buckwheat			1B.2	Chaparral Cismontane woodland Coastal prairie Ultramafic Valley & foothill grassland	May - Sept	None - species of habitats not present in the Project Area
Eriophorum gracile	slender cottongrass			4.3	acidic Bogs and fens Meadows and seeps Upper montane coniferous forest	May - Sept	None - species of habitats not present in the Project Area
Erysimum franciscanum	San Francisco wallflower			4.2	often serpentinite or granitic, sometimes roadsides Chaparral Coastal dunes Coastal scrub Valley and foothill grassland	March - June	None - species of substrates and habitats not found in the Project Area.
Fritillaria lanceolata var. tristulis	Marin checker lily			1B.1	Coastal bluff scrub Coastal prairie Coastal scrub Ultramafic	Feb - May	None - species of substrates and habitats not found in the Project Area.
Gilia capitata ssp. chamissonis	blue coast gilia			1B.1	Coastal dunes Coastal scrub	April - July	None - species of habitats not present in the Project Area
Gilia capitata ssp. tomentosa	woolly-headed gilia			1B.1	Coastal bluff scrub Ultramafic Valley & foothill grassland	May - July	None - species of substrates and habitats not found in the Project Area.
Gilia millefoliata	dark-eyed gilia			1B.2	Coastal dunes	April - July	None - species of habitats not present in the Project Area
Hesperolinon congestum	Marin western flax	T	Т	1B.1	Chaparral Ultramafic Valley & foothill grassland	April - July	None - species of substrates and habitats not found in the Project Area.
Layia carnosa	beach layia	Е	Е	1B.1	Coastal dunes Coastal scrub	March - July	None - species of habitats not present in the Project Area
Leptosiphon rosaceus	rose leptosiphon			1B.1	Coastal bluff scrub	April - July	None - species of habitats not present in the Project Area
Lessingia germanorum	San Francisco lessingia	Е	Е	1B.1	Coastal scrub (remnant dunes)	June - Nov	None - species of habitats not present in the Project Area
Lessingia micradenia var. micradenia	Tamalpais lessingia			1B.2	Chaparral Ultramafic Valley & foothill grassland	June - Oct	None - species of substrates and habitats not found in the Project Area.

		Status		S			
Scientific Name	Common Name	Fed	State	CRPR	Habitat Requirements	Reported Bloom Period	Potential to Occur
Navarretia rosulata	Marin County navarretia			1B.2	Chaparral Closed-cone coniferous forest Ultramafic	May - July	None - species of substrates and habitats not found in the Project Area.
Plagiobothrys glaber	hairless popcornflower			1A	Marsh & swamp Salt marsh Vernal pool Wetland	March - May	None - species of habitats not present in the Project Area; presumed extinct
Polygonum marinense	Marin knotweed				Brackish marsh Marsh & swamp Salt marsh Wetland	April - Oct	None - species of habitats not present in the Project Area
Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom			1B.2	Freshwater marsh Marsh & swamp Wetland	April - Sept	None - species of habitats not present in the Project Area
Sidalcea hickmanii ssp. viridis	Marin checkerbloom			1B.3	Chaparral Ultramafic	May - June	None - species of substrates and habitats not found in the Project Area.
Silene verecunda ssp. verecunda	San Francisco campion				Chaparral Coastal bluff scrub Coastal prairie Coastal scrub Ultramafic Valley & foothill grassland	March - Aug	None - species of substrates and habitats not found in the Project Area.
Streptanthus batrachopus	Tamalpais jewel-flower			1B.3	Chaparral Closed-cone coniferous forest Ultramafic	April - July	None - species of substrates and habitats not found in the Project Area.
Streptanthus glandulosus ssp. niger	Tiburon jewel-flower	Е	Е	1B.1	Ultramafic Valley & foothill grassland	May - June	None - species of substrates and habitats not found in the Project Area; known from only two locations on the Tiburon Peninsula
Streptanthus glandulosus ssp. pulchellus	Mount Tam bristly jewel- flower			1B.2	Chaparral Ultramafic Valley & foothill grassland	May - Aug	None - species of substrates and habitats not found in the Project Area.
Symphyotrichum lentum	Suisun Marsh aster				Brackish marsh Freshwater marsh Marsh & swamp Wetland	May - Nov	None - species of habitats not present in the Project Area

Family	Scientific Name	Nativity
Pteridophytes		<u> </u>
Blechnaceae	Woodwardia fimbriatum	Native
Dennstaedtiaceae	Pteridium aquilinum var. pubescens	Native
Dryopteridaceae	Dryopteris arguta	Native
Dryopteridaceae	Polystichum munitum	Native
Equisetaceae	Equisetum arvense	Native
Equisetaceae	Equisetum telmateia subsp. braunnii	Native
Polypodiaceae	Polypodium calirhiza	Native
Pteridaceae	Adiantum aleuticum	Native
Pteridaceae	Adiantum jordanii	Native
Pteridaceae	Pellaea andromedifolia	Native
Pteridaceae	Pentagramma triangularis subsp. triangularis	Native
Woodsiaceae	Athyrium filix-femina var. cyclosorum	Native
Gymnosperms		•
Cupressaceae	Sequoia sempervirens	Native
Pinaceae	Pseudotsuga menziesii var. menziesii	Native
Eudicots		
Adoxaceae	Sambucus racemosa var. racemosa	Native
Anacardiaceae	Toxicodendron diversilobum	Native
Apiaceae	Angelica tomentosa	Native
Apiaceae	Conium maculatum	Non-native
Apiaceae	Daucus pusillus	Native
Apiaceae	Foeniculum vulgare	Non-native
Apiaceae	Heracleum maximum	Native
Apiaceae	Lomatium cf. utriculatum	Native
Apiaceae	Lomatium dasycarpum	Native
Apiaceae	Osmorhiza berteroi	Native
Apiaceae	Perideridia kelloggi	Native
Apiaceae	Sanicula arctopoides	Native
Apiaceae	Sanicula bipinnata	Native
Apiaceae	Sanicula bipinnatifida	Native
Apiaceae	Sanicula crassicaulus	Native
Apiaceae	Scandix pecten-veneris	Non-native
Apiaceae	Torilis arvensis	Non-native
Apiaceae	Torilis nodosa	Non-native
Apocynaceae	Vinca major	Non-native
Araliaceae	Aralia californica	Native
Araliaceae	Hedera helix	Non-native
Asteraceae	Achillea millefolium	Native
Asteraceae	Adenocaulon bicolor	Native
Asteraceae	Adenostoma fasciculatum	Native
Asteraceae	Ageratina adenophora	Non-native
Asteraceae	Agoseris grandiflora var. grandiflora	Native
Asteraceae	Anaphalis margaritacea	Native
Asteraceae	Anisocarpus madioides	Native
Asteraceae	Arctotheca prostrata	Non-native

Family	Scientific Name	Nativity
Asteraceae	Artemisia californica	Native
Asteraceae	Artemisia douglasiana	Native
Asteraceae	Baccharis pilularis subsp. consanguinea	Native
Asteraceae	Carduus pycnocephalus	Non-native
Asteraceae	Centaurea melitensis	Non-native
Asteraceae	Cirsium brevistylum	Native
Asteraceae	Cirsium sp.	-
Asteraceae	Cirsium vulgare	Non-native
Asteraceae	Delairea odorata	Non-native
Asteraceae	Eriophyllum confertifolium	Native
Asteraceae	Eriophyllum staechadifolium	Native
Asteraceae	Gamochaeta ustulata	Native
Asteraceae	Grindelia camporum	Native
Asteraceae	Helenium puberulum	Native
Asteraceae	Helichrysum petiolare	Non-native
Asteraceae	Helminthotheca echioides	Non-native
Asteraceae	Hemizonia congesta subsp. lutescens	Native
Asteraceae	Heterotheca sessiliflora subsp. bolanderi	Native
Asteraceae	Hieracium albiflorum	Native
Asteraceae	Hypochaeris glabra	Non-native
Asteraceae	Hypochaeris radicata	Non-native
Asteraceae	Lactuca saligna	Non-native
Asteraceae	Lactuca serriola	Non-native
Asteraceae	Lapsana communis	Non-native
Asteraceae	Leucanthemum vulgare	Non-native
Asteraceae	Logfia gallica	Non-native
Asteraceae	Madia elegans	Native
Asteraceae	Madia gracilis	Native
Asteraceae	Madia sativa	Native
Asteraceae	Pseudognaphalium californicum	Native
Asteraceae	Pseudognaphalium ramosissimum	Native
Asteraceae	Senecio glomeratus	Non-native
Asteraceae	Senecio minimus	Non-native
Asteraceae	Senecio vulgare	Non-native
Asteraceae	Silybum marianum	Non-native
Asteraceae	Solidago velutina subsp. californica	Native
Asteraceae	Sonchus asper	Non-native
Asteraceae	Sonchus oleraceus	Non-native
Asteraceae	Symphyotrichum chilense	Native
Asteraceae	Wyethia angustifolia	Native
Ateraceae	Centaurea solstitialis	Non-native
Berberidaceae	Berberis pinnata subsp. pinnata	Native
Betulaceae	Alnus rubra	Native
Betulaceae	Corylus cornuta subsp. californica	Native
Boraginaceae	Cynoglossum grande	Native
Boraginaceae	Eriodictyon californicum	Native

Family	Scientific Name	Nativity
Boraginaceae	Myosotis latifolia	Non-native
Boraginaceae	Nemophila heterophylla	Native
Boraginaceae	Nemophila menziesii	Native
Boraginaceae	Phacelia californica	Native
Boraginaceae	Phacelia distans	Native
Boraginaceae	Pholistoma auritum	native
Boranginaceae	Nemophila parviflora var. parviflora	Native
Brassicaceae	Brassica nigra	Non-native
Brassicaceae	Cardamine californica	Native
Brassicaceae	Cardamine oligosperma	Native
Brassicaceae	Hirschfeldia incana	Non-native
Brassicaceae	Lunaria annua	Non-native
Brassicaceae	Nasturtium officinale	Native
Brassicaceae	Raphanus sativus	Non-native
Brassicaceae	Rorippa officinale	Non-native
Brassicaceae	Sisymbrium altissimum	Non-native
Caprifoliaceae	Lonicera hispidula	Native
Caprifoliaceae	Lonicera involucrata	Native
Caprifoliaceae	Symphoricarpos albus	Native
Caprifoliaceae	Symphoricarpos mollis	Native
Caryophyllaceae	Paronychia franciscana	Non-native
Caryophyllaceae	Silene gallica	Non-native
Caryophyllaceae	Stellaria media	Native
Caryophyllaceae	Stellaria nitens	Native
Convolvulaceae	Calystegia purpurata ssp. purpurata	Native
Convolvulaceae	Calystegia subacaulis	Native
Convolvulaceae	Convolvulus arvensis	Non-native
Convolvulaceae	Dichondra donneliana	Native
Cornaceae	Cornus sericea	Native
Crassulariaceae	Crassula connata	Native
Crassulariaceae	Dudleya cymosa ssp. cymosa	Native
Crassulariaceae	Dudleya farinosa	Native
Cucurbitaceae	Marah fabacea	Native
Cucurbitaceae	Marah oreganus	Native
Dipsacaceae	Dipsacus sativus	Non-native
Dipsacaceae	Scabiosa atropurpurea	Non-native
Ericaceae	Rhododendron occidentale	Native
Ericaceae	Vaccinium ovatum	Native
Euphorbiaceae	Euphorbia peplus	Non-native
Fabaceae	Acmispon americanus	Native
Fabaceae	Acmispon glaber	Native
Fabaceae	Acmispon micranthus	Native
Fabaceae	Acmispon wrangelianus	Native
Fabaceae	Cytisus scoparius	Non-native
Fabaceae	Genista monspessulana	Non-native
Fabaceae	Lathyrus latifolius	Non-native

Family	Scientific Name	Nativity
Fabaceae	Lathyrus vestitus var. vestitus	Native
Fabaceae	Lotus corniculatus	Non-native
Fabaceae	Lupinus	Native
Fabaceae	Lupinus adsurgens	Native
Fabaceae	Lupinus arboreus	Native
Fabaceae	Lupinus nanus	Native
Fabaceae	Medicago polymorpha	Non-native
Fabaceae	Melilotus indicus	Non-native
Fagaceae	Notholithocarpus densiflorus	Native
Fabaceae	Polygala californica	native
Fabaceae	Rupertia physodes	Native
Fabaceae	Thermopsis californica	Native
Fabaceae	Trifolium albopurpureum	Native
Fabaceae	Trifolium bifidum var. decipiens	Native
Fabaceae	Trifolium campestre	Non-native
Fabaceae	Trifolium dubium	Non-native
Fabaceae	Trifolium hirtum	Non-native
Fabaceae	Trifolium repens	Non-native
Fabaceae	Trifolium sp.	-
Fabaceae	Trifolium wildenovii	Native
Fabaceae	Vicia americana var. americana	Native
Fabaceae	Vicia benghalensis	Non-native
Fabaceae	Vicia gigantea	Native
Fabaceae	Vicia sativa var. nigra	Non-native
Fabaceae	Vicia villosa	Non-native
Fagaceae	Quercus agrifolia var. agrifolia	Native
Fagaceae	Quercus lobata	Native
Fagaceae	Quercus wislizenii	Native
Garryaceae	Garrya elliptica	Native
Gentianaceae	Zeltnera muehlenbergii	Native
Geraniaceae	Erodium botrys	Non-native
Geraniaceae	Erodium cicutarium	Non-native
Geraniaceae	Geranium dissectum	Non-native
Geraniaceae	Geranium molle	Non-native
Grossulariaceae	Ribes sanguineum var. glutinosum	Native
Hydrangeaceae	Whipplea modesta	Native
Lamiaceae	Clinopodium douglasii	Native
Lamiaceae	Lepechinia calycina	Native
Lamiaceae	Monardella villosa subsp. villosa	Native
Lamiaceae	Stachys albens	Native
Lamiaceae	Stachys chamissonis	Native
Lamiaceae	Stachys bullata	Native
Lamiaceae	Stachys rigida var. quercetorum	Native
Lauraceae	Umbellularia californica	Native
Linaceae	Linum bienne	Non-native
Malvaceae	Sidalcea malviflora	Native

Family	Scientific Name	Nativity
Montiaceae	Claytonia perfoliata	Native
Myricaceae	Morella californica	Native
Myrsinaceae	Anagallis arvensis	Non-native
Myrsinaceae	Trientalis latifolia	Native
Myrtaceae	Eucalyptus globulus	Non-native
Onagraceae	Clarkia rubicunda	Native
Onagraceae	Epilobium brachycarpum	Native
Onagraceae	Epilobium ciliatum subsp. ciliatum	Native
Onagraceae	Taraxia ovata	Native
Orobanchaceae	Castilleja affinis subsp. affinis	Native
Orobanchaceae	Castilleja cf. wightii	Native
Oxalidaceae	Oxalis oregana	Native
Oxalidaceae	Oxalis pes-caprae	Non-native
Oxalidaceae	Oxalis corniculata	Non-native
Papaveraceae	Eschscholzia californica	Native
Papaveraceae	Fumaria capreolata	Non-native
Phrymaceae	Mimulus aurantiacus	Native
Phrymaceae	Mimulus guttatus	Native
Polemoniaceae	Collinsia sparsiflora var. sparsiflora	Native
Polemoniaceae	Collomia heterophylla	Native
Plantaginaceae	Digitalis purpurea	Non-native
Plantaginaceae	Plantago coronopus	Non-native
Plantaginaceae	Plantago erecta	Native
Plantaginaceae	Plantago lanceolata	Non-native
Plantaginaceae	Plantago major	Non-native
Plantaginaceae	Veronica persica	Non-native
Polemoniaceae	Leptosiphon androsaceus	Native
Polemoniaceae	Leptosiphon bicolor	Native
Polemoniaceae	Navarretia squarrosa	Native
Polygonaceae	Eriogonum nudum var. nudum	Native
Polygonaceae	Pterostegia drymarioides	Native
Polygonaceae	Rumex acetosella	Non-native
Polygonaceae	Rumex cf. obtusifolius	Non-native
Polygonaceae	Rumex crispus	Non-native
Polygonaceae	Rumex pulcher	Non-native
Ranunculaceae	Actaea rubra	Native
Ranunculaceae	Anemone oregana	Native
Ranunculaceae	Aquilegia formosa	Native
Ranunculaceae	Clematis ligusticifolia	Native
Ranunculaceae	Delphinium cf. hesperium subsp. hesperium	Native
Ranunculaceae	Ranunculus californicus var. californicus	Native
Ranunculaceae	Ranunculus muricatus	Non-native
Ranunculaceae	Thalictrum fendleri var. polycarpum	Native
Rhamnaceae	Ceanothus thrysiflorus	Native
Rhamnaceae	Frangula californica subsp. californica	Native
Rosaceae	Acaena pinnatifida var. californica	Native

Family	Scientific Name	Nativity
Rosaceae	Cotoneaster franchetii	Non-native
Rosaceae	Cotoneaster lacteus	Non-native
Rosaceae	Cotoneaster pannosus	Non-native
Rosaceae	Drymocallis glandulosa var. glandulosa	Native
Rosaceae	Fragaria vesca	Native
Rosaceae	Heteromeles arbutifolia	Native
Rosaceae	Holodiscus discolor	Native
Rosaceae	Horkelia californica	Native
Rosaceae	Oemleria cerasiformis	Native
Rosaceae	Prunus cerasifera	Non-native
Rosaceae	Pyrus communis	Non-native
Rosaceae	Rosa gymnocarpa	Native
Rosaceae	Rosa sp.	Native
Rosaceae	Rosa sp.	Horticultural
Rosaceae	Rubus armeniacus	Non-native
Rosaceae	Rubus parviflorus	Native
Rosaceae	Rubus ursinus	Native
Rosaceae	Sanguisorba minor	Non-native
Rubiaceae	Galium aparine	Native
Rubiaceae	Galium parisiense	Non-native
Rubiaceae	Galium porrigens var. porrigens	Native
Rubiaceae	Sherardia arvensis	Non-native
Salicaceae	Salix lasiolepis	Native
Sapindaceae	Acer macrophyllum	Native
Sapindaceae	Aesculus californicus	Native
Saxifragaceae	Heuchera micrantha	Native
Saxifragaceae	Tellima grandiflora	Native
Scrophulariaceae	Scrophularia californica	Native
Solanaceae	Solanum americanum	Native
Solanaceae	Solanum furcatum	Native
Urticaceae	Hesperocnide tenella	native
Urticaceae	Urtica dioica	Native
Urticaceae	Urtica urens	Non-native
Violaceae	Viola adunca	Native
Violaceae	Viola glabella	Native
Violaceae	Viola sempervirens	Native
Monocots		
Agavaceae	Chlorogalum pomeridianum var. pomeridianum	Native
Araceae	Zantedeschia aethiopica	Non-native
Cyperaceae	Carex densa	Native
Cyperaceae	Carex globosa	Native
Cyperaceae	Carex sp.	Native
Cyperaceae	Cyperus eragrostis	Native
Cyperaceae	Schoenoplectus californicus	native
Cyperaceae	Scirpus microcarpus	native
Iridaceae	Chasmanthe floribunda	Non-native

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Iridaceae	Iris douglasiana	Native
Iridaceae	Iris macrosiphon	Native
Iridaceae	Sisyrinchium bellum	Native
Iridaceae	Watsonia meriana	Non-native
Junaceae	Juncus effusus	Native
Juncaceae	Juncus bufonius	Native
Juncaceae	Juncus occidentalis	Native
Juncaceae	Juncus patens	Native
Juncaceae	Juncus xiphioides	Native
Juncaceae	Luzula comosa	Native
Liliaceae	Calochortus umbellatus	Native
Liliaceae	Clintonia andrewsiana	Native
Liliaceae	Fritillaria affinis	Native
Liliaceae	Prosartes hookeri	Native
Liliaceae	Scoliopus bigelovii	Native
Melanthiaceae	Toxicoscordion fremontii	Native
Melanthiaceae	Trillium chloropetalum	Native
Melanthiaceae	Trillium ovatum	Native
Orchidaceae	Calypso bulbosa	Native
Orchidaceae	Corallorhiza maculata var. maculata	Native
Orchidaceae	Epipactis helleborine	Non-native
Orchidaceae	Piperia elegans	Native
Poaceae	Agrostis pallens	Non-native
Poaceae	Agrostis sp.	-
Poaceae	Aira caryophyllea	Non-native
Poaceae	Avena barbata	Non-native
Poaceae	Avena fatua	Non-native
Poaceae	Brachypodium distachyon	Non-native
Poaceae	Briza maxima	Non-native
Poaceae	Briza minor	Non-native
Poaceae	Bromus carinatus	Native
Poaceae	Bromus catharticus	Non-native
Poaceae	Bromus diandrus	Non-native
Poaceae	Bromus hordeaceus	Non-native
Poaceae	Bromus madritensis	non-native
Poaceae	Cortaderia jubata	Non-native
Poaceae	Cynosurus echinatus	non-native
Poaceae	Dactylis glomerata	Non-native
Poaceae	Danthonia californica	Native
Poaceae	Ehrharta erecta	Non-native
Poaceae	Elymus triticoides	Native
Poaceae	Elymus californicus	Native
Poaceae	Elymus caput-medusae	Non-native
Poaceae	Elymus glauca	Native
Poaceae	Elymus multisetus	Native
Poaceae	Festuca arundinacea	Non-native

Family	Scientific Name	Nativity
Poaceae	Festuca bromoides	Non-native
Poaceae	Festuca californica	Native
Poaceae	Festuca myuros	Non-native
Poaceae	Festuca perenne	Non-native
Poaceae	Festuca rubra	Native
Poaceae	Gastridium phleoides	Non-native
Poaceae	Holcus lanatus	Non-native
Poaceae	Hordeum brachyantherum	Native
Poaceae	Hordeum marinum subsp. gussoneanum	Non-native
Poaceae	Koeleria macrantha	Native
Poaceae	Melica californica	Native
Poaceae	Melica subulata	Native
Poaceae	Melica torreyana	Native
Poaceae	Pennisetum clandestinum	Non-native
Poaceae	Phalaris aquatica	Non-native
Poaceae	Poa annua	Non-native
Poaceae	Poa cf. pratensis	-
Poaceae	Poa secunda	Native
Poaceae	Polypogon monspeliensis	Non-native
Poaceae	Polypogon viridis	Non-native
Poaceae	Stipa pulchra	Native
Ruscaceae	Maianthemum racemosum	Native
Ruscaceae	Maianthemum stellatum	Native
Themidaceae	Brodiaea elegans subsp. elegans	Native
Themidaceae	Dichelostemma capitatum	Native
Themidaceae	Disporum hookeri	Native
Themidaceae	Triteleia laxa	Native