Appendix F

Special-status Species Tables

APPENDIX F - SPECIAL-STATUS SPECIES TABLES

The following tables were presented in the biological analysis prepared for the Regional Groundwater Storage and Recovery Project. (Ward 2012). A table of the Special-status Plant and Wildlife Species reported or with potential to occur near Lake Merced is also included. The tables contain federal, State and California Native Plant Society special-status plant and wildlife species recorded for the San Francisco North, San Francisco South, Montara Mountain, and San Mateo U.S. Geological Survey (USGS) 7.5 minute quadrangles. An explanation of all rarity status codes is provided.



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Scientific Name Common Name	Status		tat Affinities and orted Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Alliaceae - Onion Family					
Allium peninsulare var. franciscanum	Federal: none	Occu	irs in cismontane woodland, valley and foothill grassland.	May-Jun	None:
Franciscan onion	State: none		trate: clay, often serpentinite. orded from San Mateo, Santa Clara, Sonoma.	Perennial Herb	no suitable habitat
	CNPS: 1B.2		raca nom our wates, canta ciara, conoma.	(bulbiferous)	present.
	Other: DFG:	SP			
Apiaceae - Carrot Family					
Sanicula maritima	Federal: none	Occu	irs in chaparral, coastal prairie, meadows, valley and foothill	Feb-May	None:
adobe sanicle	State: SR	•	grassland Substrate: serpentine, Habitats Note: clay. Recorded from Alameda, Monterey, San Francisco, San Luis Obispo.	Perennial Herb	no suitable habitat present. Would have been detectable during present survey.
	CNPS: 1B.1	Reco			
	Other: DFG: Plant	Special			
Asteraceae - Sunflower Family					
Centromadia parryi ssp. congdonii	Federal: none		rs in valley and foothill grassland.	May-Nov	None:
Congdon's tarplant	State: none		trate: alkaline. orded from Alameda, Contra Costa, Monterey, San Luis	Allitual Fleib	no suitable habitat present.
	CNPS: 1B.2		oo, Santa Clara, Santa Cruz, Solano.		procent.
	Other: DFG:	SP			
Centromadia parryi ssp. parryi	Federal: none		irs in coastal prairie, meadows, seeps, coastal salt marsh,	May-Nov	None:
pappose tarplant	State: none		y and foothill grassland. ture: vernally mesic,Substrate: often alkaline,	Annual Herb	no suitable habitat
	CNPS: 1B.2	Reco	orded from Butte, Colusa, Glenn, Lake, Napa, San Mateo,		present.
	Other:	Solar	no, Sonoma.		



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Cirsium andrewsii Franciscan thistle	Federal: none State: none CNPS: 1B.2 Other: DFG: Special Plant	Occurs in broadleafed upland forest, coastal bluff scrub, coastal prairie, coastal scrub, mixed evergreen forest, northern coastal scrub Substrate: serpentine. Recorded from Contra Costa, Marin, San Francisco, San Mateo Sonoma.	Perennial Herb	None: no suitable habitat present. Would have been detectable during present survey.
Cirsium fontinale var. fontinale fountain thistle	Federal: FE State: SE CNPS: 1B.1 Other: DFG: Special Plant	Occurs in chaparral, valley and foothill grassland Substrate: serpentine. Recorded from San Mateo.	Jun-Oct Perennial Herb	None: no suitable habitat present. Would have been detectable during present survey.
Cirsium occidentale var. compactum compact cobwebby thistle	Federal: none State: none CNPS: 1B.2 Other: DFG: Special Plant	Occurs in chaparral, coastal dunes, coastal prairie, coastal sage scrub, coastal scrub, coastal strand, northern coastal scrub. Recorded from Monterey, San Francisco, San Luis Obispo.	Apr-Jun Perennial Herb	None: no suitable habitat present. Would have been detectable during present survey.
Eriophyllum latilobum San Mateo woolly sunflower	Federal: FE State: SE CNPS: 1B.1 Other: DFG: Special Plant	Occurs in cismontane woodland, foothill woodland Substrate: often on serpentine, roadcuts. Recorded from San Mateo.	May-Jun Perennial Herb	None: no suitable habitat present. Would have been detectable during present survey.
Grindelia hirsutula var. maritima San Francisco gumplant	Federal: none State: none CNPS: 1B.2 Other: DFG: Special Plant	Occurs in coastal bluff scrub, coastal sage scrub, coastal scrub, northern coastal scrub, valley and foothill grassland Substrate: serpentine, Habitats Note: sandy. Recorded from Marin, Monterey, San Francisco, San Luis Obispo, San Mateo, Santa Cruz.	Aug-Sep Perennial Herb	None: marginally suitable habitat present. Would have been detectable during present survey.



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Helianthella castanea	Federal: none	Occurs in broadleafed upland forest, chaparral, cismontane	Apr-Jun	None:
Diablo helianthella	State: none	woodland, coastal scrub, foothill woodland, northern coastal scrub, riparian woodland, valley and foothill grassland.	Perennial Herb	marginally suitable habitat present.
	CNPS: 1B.2	Recorded from Alameda, Contra Costa, Marin, San Francisco, San Mateo.		Would have been
	Other: DFG: Specia Plant			detectable during present survey.
Hemizonia congesta ssp. congesta	Federal: none	Occurs in northern coastal scrub, valley and foothill grassland.	Apr-Nov	None:
pale yellow hayfield tarweed	State: none	Recorded from Mendocino, Marin, San Francisco, San Mateo, Sonoma.	Annual Herb	marginally suitable habitat present.
	CNPS: 1B.2			Would have been
	Other:			detectable during present survey.
Hesperevax sparsiflora var. brevifolia	Federal: none	Occurs in coastal bluff scrub, coastal dunes, coastal strand,	Mar-Jun	None:
short-leaved evax	State: none	northern coastal scrub. Recorded from Humboldt, Marin, Mendocino, San Francisco, Santa Cruz, Sonoma.Also recorded from Oregon.	Annual Herb	marginally suitable habitat present.
	CNPS: 1B.2			Would have been
	Other: DFG: Specia Plant			detectable during present survey.
Layia carnosa	Federal: FE	Occurs in coastal dunes, coastal scrub, coastal strand.	Mar-Jul	None: no suitable habitat present.
beach layia	State: SE	Recorded from Humboldt, Marin, Monterey, San Francisco, Santa Barbara.	Annual Herb	
	CNPS: 1B.1			Would have been
	Other: DFG: Specia Plant	I		detectable during presen survey.
Lessingia arachnoidea	Federal: none	Occurs in cismontane woodland, coastal scrub, foothill	Jul-Oct	None:
Crystal Springs lessingia	State: none	woodland, northern coastal scrub, valley and foothill grassland. Substrate: serpentinite.	Annual Herb	no suitable habitat present.
	CNPS: 1B.2	Recorded from San Mateo, Sonoma.		
	Other: DFG: Specia Plant	I		



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Lessingia germanorum San Francisco lessingia	Federal: FE State: SE CNPS: 1B.1 Other: DFG: Special Plant	Occurs in coastal scrub, northern coastal scrub. Habitats Note: on remnant dunes. Recorded from San Francisco, San Mateo.	Jun-Nov Annual Herb	None: no suitable habitat present.
Lessingia hololeuca woolly-headed lessingia	Federal: none State: none CNPS: 3 Other: DFG: Special Plant	Occurs in broadleafed upland forest, coastal scrub, lower montane coniferous forest, northern coastal scrub, valley and foothill grassland, yellow pine forest. Substrate: serpentinite, clay. Recorded from Alameda, Marin, Monterey, Napa, San Mateo, Santa Clara, Solano, Sonoma, Yolo.	Jun-Oct Annual Herb	None: no suitable habitat present.
Microseris paludosa marsh microseris	Federal: none State: none CNPS: 1B.2 Other: DFG: Special Plant	Occurs in cismontane woodland, closed-cone coniferous forest, coastal scrub, valley and foothill grassland. Recorded from Marin, Mendocino, Monterey, San Benito, San Francisco, San Luis Obispo, San Mateo, Santa Cruz, Sonoma.	Apr-Jul Perennial Herb	None: no suitable habitat present. Would have been detectable during present survey.
Monolopia gracilens woodland woollythreads	Federal: none State: none CNPS: 1B.2 Other:	Occurs in chaparral, broadleafed upland forest, cismontane woodland, North Coast coniferous forest, valley and foothill grassland. Substrate: serpentinite in grasslands, Habitats Note: forest openings. Recorded from Contra Costa, Monterey, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz.	Mar-Jul Annual Herb	None: no suitable habitat present.
Pentachaeta bellidiflora white-rayed pentachaeta	Federal: FE State: SE CNPS: 1B.1 Other: DFG: Special Plant	Occurs in valley and foothill grassland. Substrate: serpentinite. Recorded from Marin, San Mateo, Santa Cruz.	Mar-May Annual Herb	None: no suitable habitat present. Would have been detectable during present survey.



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Stebbinsoseris decipiens	Federal: none	Occurs in broadleafed upland forest, chaparral, closed-cone	Apr-May	None:
Santa Cruz microseris	State: none	coniferous forest, closed-cone pine forest, coastal prairie, coastal scrub, mixed evergreen forest, northern coastal scrub,	Annual Herb	no suitable habitat present.
Santa Gruz microsens	CNPS: 1B.2	valley and foothill grassland.		procent.
	Other: DFG: Specia Plant	Substrate: serpentinite. Recorded from Marin, Monterey, Santa Cruz.		Would have been detectable during present survey.
Boraginaceae - Borage Family				
Amsinckia lunaris	Federal: none	Occurs in cismontane woodland, coastal bluff scrub, foothill	Mar-Jun	None:
bent-flowered fiddleneck	State: none	woodland, valley and foothill grassland. Recorded from Alameda, Colusa, Contra Costa, Lake, Marin,	Annual Herb	marginally suitable habitat present.
	CNPS: 1B.2	Napa, San Benito, San Mateo, Santa Clara, Santa Cruz, Yolo.		Would have been detectable during present survey.
	Other: DFG: Specia Plant			
Plagiobothrys chorisianus var.	Federal: none	Occurs in chaparral, coastal prairie, coastal scrub, northern	Mar-Jun	None:
chorisianus	State: none	coastal scrub Moisture: moist.	Annual Herb	no suitable habitat
Choris's popcorn-flower	CNPS: 1B.2	Recorded from Alameda, San Francisco, San Mateo, Santa		present. Would have been
	Other: DFG: Specia	Cruz. al		detectable during present survey.
Plagiobothrys diffusus	Federal: none	Occurs in coastal prairie, valley and foothill grassland.	Mar-Jun	None:
San Francisco popcorn-flower	State: SE	Recorded from Alameda, San Francisco, Santa Cruz.	Annual Herb	no suitable habitat present.
	CNPS: 1B.1			Would have been
	Other: DFG: Special Plant	al		detectable during present survey.



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Plagiobothrys glaber hairless popcorn-flower	Federal: none State: none CNPS: 1A * Other: DFG: Specia	Occurs in coastal salt marsh, meadows. Substrate: alkaline. Recorded from Alameda, Marin, Merced, San Benito, Santa Clara.	Mar-May Annual Herb	None: no suitable habitat present. Would have been detectable during present survey.
Caryophyllaceae - Pink Family			_	
Arenaria paludicola marsh sandwort	Federal: FE State: SE CNPS: 1B.1 Other: DFG: Special	Occurs in bogs and fens, freshwater marsh, marshes and swamps. Recorded from Los Angeles, Mendocino, San Bernardino, San Francisco, San Luis Obispo, Santa Cruz.Also recorded from Washington.	May-Aug Perennial Herb (stoloniferous)	None: no suitable habitat present.
Silene verecunda ssp. verecunda	Federal: none	Occurs in chaparral, coastal bluff scrub, coastal prairie, coastal	Mar-Aug	None:
San Francisco campion	State: none CNPS: 1B.2 Other: DFG: Specia	scrub, northern coastal scrub, valley and foothill grassland. Recorded from San Francisco, San Mateo, Santa Cruz.	Perennial Herb	no suitable habitat present. Would have been detectable during present survey.
Cyperaceae - Sedge Family				
Carex comosa	Federal: none	Occurs in coastal prairie, freshwater marsh, marshes and	May-Sep	None:
bristly sedge	State: none CNPS: 2.1	swamps, valley and foothill grassland. Recorded from Contra Costa, Lake, Mendocino, San Bernardino, San Francisco, San Joaquin, Santa Cruz, Shasta,	Perennial Herb (rhizomatous)	no suitable habitat present.
	Other: DFG: Specia	Sonoma. Also recorded from Idaho, Oregon, Washington.		



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Equisetaceae - Horsetail Family	7			
Equisetum palustre	Federal: none	Occurs in freshwater marsh, marshes and swamps.	Unknown	None:
marsh horsetail	State: none	Recorded from Lake, Napa, San Francisco, San Mateo. Also recorded from Idaho, Oregon, Washington.	Perennial Herb	no suitable habitat
	CNPS: 3	recorded from Idane, eregon, washington.	(rhizomatous)	present. Would have been
	Other: DFG: Special Plant			detectable during present survey.
Ericaceae - Heath Family				
Arctostaphylos andersonii	Federal: none	avarage forget North Coast coniferance forget radiused forget	Nov-Apr	None:
Anderson's manzanita	State: none		Shrub (evergreen)	no suitable habitat present.
	CNPS: 1B.2			Would have been
	Other: DFG: SP			detectable during present survey.
Arctostaphylos franciscana	Federal: none	Occurs in coastal scrub, northern coastal scrub	Feb-Apr	None:
Franciscan manzanita	State: none	Substrate: serpentine. Recorded from San Francisco.	Shrub (evergreen)	no suitable habitat present.
	CNPS: 1B.1			Would have been
	Other: DFG: SP			detectable during present survey.
Arctostaphylos imbricata	Federal: none	Occurs in chaparral, coastal scrub.	Feb-May	None:
San Bruno Mountain manzanita	State: SE	Recorded from San Mateo.	Shrub (evergreen)	no suitable habitat present.
	CNPS: 1B.1			Would have been
	Other: DFG: Special Plant			detectable during present survey.



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Arctostaphylos montana ssp. ravenii	Federal: FE	Occurs in chaparral, coastal prairie, coastal scrub, northern coastal scrub	Feb-Mar	None:
Presidio manzanita	State: SE	Substrate: serpentine.	Shrub (evergreen)	no suitable habitat present.
	CNPS: 1B.1	Recorded from San Francisco.		
	Other: DFG: SP			Would have been detectable during present survey.
Arctostaphylos montaraensis	Federal: none	Occurs in chaparral, coastal scrub, northern coastal scrub.	Jan-Mar	None:
Montara manzanita	State: none	Recorded from San Mateo.	Shrub (evergreen)	no suitable habitat present.
	CNPS: 1B.2			Would have been
	Other: DFG: Special Plant			detectable during present survey.
Arctostaphylos pacifica	Federal: none	Occurs in chaparral, coastal scrub.	Feb-Apr	None:
Pacific manzanita	State: SE	Recorded from San Mateo. Additional distribution: known only from San Bruno Mt.	Evergreen Shrub	no suitable habitat present.
	CNPS: 1B.2			Would have been
	Other:			detectable during present survey.
Arctostaphylos regismontana	Federal: none	Occurs in broadleafed upland forest, chaparral, mixed	Jan-Apr	None:
Kings Mountain manzanita	State: none	evergreen forest, North Coast coniferous forest. Substrate: granitic sedimentary sandstone.	Shrub (evergreen)	no suitable habitat present.
	CNPS: 1B.2	Recorded from San Mateo, Santa Clara, Santa Cruz.		Would have been
	Other: DFG: Special Plant			detectable during present survey.



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Fabaceae - Legume Family Astragalus nuttallii var. nuttallii Nuttall's milk-vetch	Federal: none State: none CNPS: 4.2 Other: DFG: SP	Occurs in coastal bluff scrub, coastal dunes. Recorded from Alameda, Monterey, San Francisco, San Luis Obispo, San Mateo, Santa Barbara.	Jan-Nov Perennial Herb	None: no suitable habitat present.
Astragalus pycnostachyus var. pycnostachyus coastal marsh milk-vetch	Federal: none State: none CNPS: 1B.2 Other: DFG: Specia	Occurs in coastal dunes, marshes and swamps. Moisture: mesic, Habitats Note: coastal salt marshes, streamsides. Recorded from Humboldt, Marin, San Mateo.	Apr-Oct Perennial Herb	None: no suitable habitat present. Would have been detectable during present survey.
Astragalus tener var. tener alkali milk-vetch	Federal: none State: none CNPS: 1B.2 Other: DFG: Specia	Occurs in alkali sink, playas, valley and foothill grassland, verna pools. Substrate: adobe clay, alkaline. Recorded from Alameda, Contra Costa, Merced, Monterey, Napa, San Benito, San Francisco, San Joaquin, Santa Clara, Solano, Sonoma, Stanislaus, Yolo.	Mar-Jun Annual Herb	None: no suitable habitat present. Would have been detectable during present survey.
Lupinus arboreus var. eximius San Mateo tree lupine	Federal: none State: none CNPS: 3.2 Other:	Occurs in chaparral, coastal scrub. Recorded from San Mateo, Sonoma (?).	Apr-Jul Evergreen Shrub	None: marginally suitable habitat present. Would have been detectable during present survey.
Trifolium hydrophilum saline clover	Federal: none State: none CNPS: 1B.2 Other: DFG: SP	Occurs in marshes and swamps, valley and foothill grassland, vernal pools. Moisture: mesic,Substrate: alkaline, Recorded from Alameda, Colusa, Monterey, Napa, San Benito, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma.	Apr-Jun Annual Herb	None: no suitable habitat present.



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Geraniaceae - Geranium Family California macrophylla round-leaved filaree	Federal: none State: none CNPS: 1B.1 Other: DFG: SP	Occurs in cismontane woodland, foothill woodland, valley and foothill grassland. Substrate: clay. Recorded from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kern, Kings, Lake, Lassen, Los Angeles, Merced, Monterey, Napa, Riverside, San Benito, San Diego, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Solano, Sonoma, Stanislaus, Tehama, Ventura, Yolo.Santa Cruz Island.Also recorded from Baja California, Oregon, Utah.	Mar-May Annual Herb	None: no suitable habitat present.
Iridaceae - Iris Family Iris longipetala long-petaled iris	Federal: none State: none CNPS: 4.2 Other:	Occurs in coastal prairie, mixed evergreen forest. Moisture: mesic. Recorded from Alameda, Contra Costa, Humboldt, Marin, Mendocino, Monterey, San Francisco, San Mateo, Santa Clara, Santa Cruz, Sonoma.	Mar-May Perennial Herb (rhizomatous)	None: no suitable habitat present. Would have been detectable during present survey.
Lamiaceae - Mint Family Acanthomintha duttonii San Mateo thorn-mint	Federal: FE State: SE CNPS: 1B.1 Other: DFG: Specia	Occurs in valley and foothill grassland, chaparral. Substrate: serpentinite. Recorded from San Mateo.	Apr-Jun Annual Herb	None: no suitable habitat present. Would have been detectable during present survey.
Monardella villosa ssp. globosa robust monardella	Federal: none State: none CNPS: 1B.2 Other: DFG: SP	Occurs in broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, foothill woodland, valley and foothill grassland. Recorded from Alameda, Contra Costa, Humboldt, Lake, Marin, Mendocino, Napa, San Mateo, Santa Clara, Santa Cruz, Sonoma.	Jun-Jul Perennial Herb (rhizomatous)	None: no suitable habitat present.



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Liliaceae - Lily Family				
Calochortus umbellatus	Federal: none	Occurs in broadleafed upland forest, chaparral, cismontane	Mar-May	None:
	woodland, lower montane coniferous forest, mixed evergreen forest, valley and foothill grassland, yellow pine forest.	Perennial Herb (bulbiferous)	no suitable habitat present.	
	CNPS: 4.2	Substrate: often serpentinite.	(buiblierous)	p. 666
	Other: DFG: SP	Recorded from Alameda, Contra Costa, Marin, San Mateo, Santa Clara, Santa Cruz, Stanislaus.		
Fritillaria biflora var. ineziana	Federal: none	Occurs in cismontane woodland, foothill woodland, valley and	Mar-Apr	None:
Hillsborough chocolate lily	State: none	foothill grassland Substrate: serpentine.	Perennial Herb	no suitable habitat present.
	CNPS: 1B.1	Recorded from San Mateo.	(bulbiferous)	Would have been
	Other: DFG: Special Plant			detectable during present survey.
Fritillaria lanceolata var. tristulis	Federal: none	Occurs in coastal bluff scrub, coastal prairie, coastal scrub.	Feb-Apr	None: no suitable habitat present.
Marin checker lily	State: none	Recorded from Marin. Not recorded from San Mateo County	Perennial Herb (bulbiferous)	
	CNPS: 1B.1		(buildingload)	Would have been
	Other: DFG: Special Plant			detectable during present survey.
Fritillaria liliacea	Federal: none	Occurs in cismontane woodland, coastal prairie, coastal scrub,	Feb-Apr	None:
fragrant fritillary	State: none	northern coastal scrub, valley and foothill grassland. Substrate: often serpentinite.	Perennial Herb	marginally suitable habitat present.
	CNPS: 1B.2	Recorded from Alameda, Contra Costa, Marin, Monterey, San	(bulbiferous)	Would have been
Other: DFG: Special Sonoma. Plant	Benito, San Francisco, San Mateo, Santa Clara, Solano, Sonoma.		detectable during present survey.	
Lilium maritimum	Federal: none	Occurs in broadleafed upland forest, closed-cone coniferous	May-Jul	None:
coast lily	State: none	forest, closed-cone pine forest, coastal prairie, coastal scrub, marshes and swamps, mixed evergreen forest, North Coast	Perennial neighbor in saltasis itasita	no suitable habitat present.
	CNPS: 1B.1	coniferous forest, northern coastal scrub.	(Saisiicious)	•
	Other: DFG: Special Plant	Recorded from Marin, Mendocino, San Francisco, San Mateo, Sonoma.		



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Linaceae - Flax Family				
Hesperolinon congestum	Federal: FT	Occurs in chaparral, valley and foothill grassland.	Apr-Jul	None:
Marin western flax	State: ST	Substrate: serpentinite. Recorded from Marin, San Francisco, San Mateo.	Annual Herb	no suitable habitat present.
	CNPS: 1B.1			Would have been
	Other: DFG: Special Plant			detectable during present survey.
Malvaceae - Mallow Family				_
Malacothamnus aboriginum	Federal: none	Occurs in chaparral, cismontane woodland, foothill woodland Habitats Note: rocky. Recorded from Fresno, Monterey, San Benito.	Apr-Oct	None:
Indian Valley bush mallow	State: none		Siliub (deciduous)	no suitable habitat present.
	CNPS: 1B.2			Would have been
	Other: DFG: Special Plant			detectable during present survey.
Malacothamnus arcuatus	Federal: none	Occurs in chaparral.	Apr-Sep	None:
arcuate bush mallow	State: none	Siliub (Evelyleeli)	no suitable habitat present.	
	CNPS: 1B.2			Would have been
	Other: DFG: Special Plant			detectable during present survey.
Malacothamnus davidsonii	Federal: none	Occurs in chaparral, cismontane woodland, coastal sage scrub,	Jun-Jan	None:
Davidson's bush mallow	State: none	coastal scrub, northern coastal scrub, riparian woodland. Recorded from Los Angeles, Monterey, San Luis Obispo, San	Shrub (deciduous)	no suitable habitat present.
	CNPS: 1B.2	Mateo, Santa Clara.		Would have been
	Other: DFG: Special Plant			detectable during present survey.



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Malacothamnus hallii Hall's bush mallow	Federal: none State: none	Occurs in chaparral, coastal scrub. Recorded from Alameda, Contra Costa, Mendocino, Merced, , Santa Clara, Stanislaus.	May-Sep Shrub (evergreen)	None: no suitable habitat present.
	CNPS: 1B.2 Other: DFG: Specia Plant	ı		Would have been detectable during present survey.
Onagraceae - Evening Primr	ose Family			
Clarkia franciscana	Federal: FE	Occurs in coastal scrub, northern coastal scrub, valley and	May-Jul	None:
Presidio clarkia	State: SE	foothill grassland Substrate: serpentine. Recorded from Alameda, San Francisco.	Annual Herb no suitable present.	no suitable habitat present.
	CNPS: 1B.1			
	Other: DFG: Specia Plant			
Plantaginaceae - Plantain Fa	mily			
Collinsia corymbosa	Federal: none	Occurs in coastal dunes, coastal strand.	Apr-Jun	None: marginally suitable habitat present.
round-headed Chinese houses	State: none	Recorded from Humboldt, Marin, Mendocino, San Francisco, Sonoma. Annual Herb	Annual Herb	
	CNPS: 1B.2			Would have been
	Other: DFG: Specia Plant	I		detectable during present survey.
Collinsia multicolor	Federal: none	Occurs in closed-cone coniferous forest, closed-cone pine	Mar-May	None:
San Francisco collinsia	State: none	forest, coastal scrub, northern coastal scrub. Substrate: sometimes serpentinite.	Annual Herb	marginally suitable habitat present.
	CNPS: 1B.2	Recorded from Monterey, San Francisco, San Mateo, Santa Clara, Santa Cruz.		Would have been
	Other: DFG: Specia Plant	I		detectable during present survey.



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Poaceae - Grass Family				
Elymus californicus	Federal: none	Occurs in broadleafed upland forest, cismontane woodland,	May-Nov	None:
California bottle-brush grass	State: none	closed-cone pine forest, Douglas-fir forest, foothill woodland, mixed evergreen forest, North Coast coniferous forest, redwood	Perennial Herb	no suitable habitat
	CNPS: 4.3	forest, riparian woodland.		present.
	Other: DFG: SP	Recorded from Marin, Monterey, San Mateo, Santa Cruz, Sonoma.		
Polemoniaceae - Phlox Family				
Gilia capitata ssp. chamissonis	Federal: none	Occurs in coastal dunes, coastal scrub.	Apr-Jul	None:
blue coast gilia	State: none	Recorded from Marin, San Francisco, Sonoma.	Annual Herb	no suitable habitat present.
	CNPS: 1B.1			present.
	Other: DFG: SP			
Gilia millefoliata	Federal: none	Occurs in coastal dunes, coastal strand.	Apr-Jul	None:
dark-eyed gilia	State: none	Recorded from Del Norte, Humboldt, Marin, Mendocino, San Francisco, Sonoma. Also recorded from Oregon.	Annual Herb	no suitable habitat
	CNPS: 1B.2	Transisso, Conoma, too recorded from Cregon.		present. Would have been
	Other: DFG: Spec Plant	ial		detectable during presen survey.
Leptosiphon croceus	Federal: none	Occurs in coastal bluff scrub, coastal prairie.	Apr-May	None:
coast yellow linanthus	State: none	Recorded from Marin, Monterey, San Mateo. Additional distribution: presumed extirpated in Marin County.	Annual Herb	no suitable habitat present.
	CNPS: 1B.1	diodisation. procumou oxarpatou in maini ocumy.		Would have been
	Other: DFG: Spec Plant	ial		detectable during presen survey.
Leptosiphon rosaceus	Federal: none	Occurs in coastal bluff scrub.	Apr-Jul	None:
rose leptosiphon	State: none	Recorded from Marin, San Francisco, San Mateo, Sonoma. Additional distribution: presumed extirpated from San Francisco	Annual Herb	no suitable habitat present.
	CNPS: 1B.1	and Sonoma.		Would have been
	Other: DFG: Spec Plant	ial		detectable during present survey.
Pagianal Croundwater Starage and	Degayyany Project Droft El	P Appendix F-15		April 2013



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site
Polemonium carneum	Federal: none	Occurs in coastal prairie, northern coastal scrub, lower montane	Apr-Sep	None:
Oregon polemonium	State: none	coniferous forest. Recorded from Alameda, Del Norte, Humboldt, Marin, San	Perennial Herb	no suitable habitat present.
	CNPS: 2.2	Francisco, San Mateo, Siskiyou, Sonoma.		Would have been
	Other:			detectable during present survey.
Polygonaceae - Buckwheat Fan	nily			
Chorizanthe cuspidata var. cuspidata	Federal: none	Occurs in coastal bluff scrub, coastal dunes, coastal prairie,	Apr-Aug	None:
San Francisco Bay spineflower	State: none	coastal scrub, coastal strand, northern coastal scrub. Substrate: sandy. Recorded from Alameda, Marin, San Francisco, San Mateo, Santa Clara, Sonoma.	Annual Herb	no suitable habitat present.
	CNPS: 1B.2			Would have been
	Other: DFG: Speci Plant			detectable during present survey.
Chorizanthe robusta var. robusta	Federal: FE	Occurs in cismontane woodland, coastal dunes, coastal scrub,	Apr-Sep	None:
robust spineflower	State: none	coastal strand, foothill woodland, northern coastal scrub. Substrate: sandy, gravelly.	Annual Herb	no suitable habitat present.
	CNPS: 1B.1	Recorded from Alameda, Monterey, San Mateo, Santa Clara, Santa Cruz.		Would have been
	Other: DFG: Speci Plant	al		detectable during present survey.
Pottiaceae				
Triquetrella californica	Federal: none	Occurs in coastal bluff scrub, coastal scrub.	n/a	None:
coastal triquetrella	State: none	Recorded from Contra Costa, Mendocino, San Diego, San Francisco counties. Also recorded from Oregon.	IVIUSS	no suitable habitat present.
	CNPS: 1B.2			
	Other: DFG: Speci Plant	al		



Special-status Plants Evaluated for the Regional Groundwater Storage and Recovery Project

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site	
Rosaceae - Rose Family					
Horkelia cuneata ssp. sericea	Federal: none	Occurs in closed-cone coniferous forest, closed-cone pine	Apr-Sep	None:	
Kellogg's horkelia	State: none	forest, coastal sage scrub, coastal scrub, northern coastal scrub.	Perennial Herb	no suitable habitat present.	
	CNPS: 1B.1	Recorded from Alameda, Marin, Monterey, San Francisco, San		Would have been	
	Other: DFG: Specia Plant	Luis Obispo, San Mateo, Santa Barbara, Santa Cruz.		detectable during present survey.	
Horkelia marinensis	Federal: none	Occurs in coastal dunes, coastal prairie, coastal scrub, coastal	May-Sep	None:	
Point Reyes horkelia	State: none	strand, northern coastal scrub. Recorded from Marin, Mendocino, San Mateo, Santa Cruz.	Perennial	Perennial Herb	no suitable habitat present.
	CNPS: 1B.2	, , , ,		procent.	
	Other: DFG: Specia Plant	al			
Potentilla hickmanii	Federal: FE	Occurs in closed-cone coniferous forest, closed-cone pine	Apr-Aug	None:	
Hickman's cinquefoil	State: SE	forest, coastal bluff scrub, freshwater marsh, marshes and swamps, meadows, northern coastal scrub.	Perennial Herb	no suitable habitat present.	
	CNPS: 1B.1	Recorded from Monterey, San Mateo, Sonoma.		Would have been	
	Other: DFG: Specia Plant			detectable during present survey.	
Scrophulariaceae - Figwort Fa	mily				
Cordylanthus maritimus ssp. palustris	Federal: none	Occurs in coastal salt marsh, marshes and swamps.	Jun-Oct	None:	
Point Reyes bird's-beak	State: none	Habitats Note: coastal salt marsh. Recorded from Alameda, Humboldt, Marin, San Mateo, Santa	Annual Herb, Hemiparasitic	no suitable habitat present.	
	CNPS: 1B.2	Clara, Sonoma. Also recorded from Oregon.	Temparasitie	•	
	Other: DFG: Specia Plant	al			





Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Blooming Time Life Form	Potential for Occurrence on Site	
Triphysaria floribunda	Federal: none State: none	Occurs in coastal prairie, coastal scrub, valley and foothill grassland Substrate: serpentine.	Apr-Jun Annual Herb	None: no suitable habitat	
San Francisco owl's-clover	CNPS: 1B.2	Recorded from Marin, San Francisco, San Mateo.		present.	
	Other: DFG: Special Plant			Would have been detectable during present survey.	
Thymelaeaceae - Mezereum	Family				
Dirca occidentalis	Federal: none	Occurs in broadleafed upland forest, chaparral, cismontane	Jan-Apr	None:	
western leatherwood	State: none	woodland, closed-cone coniferous forest, closed-cone pine forest, foothill woodland, mixed evergreen forest, north coast coniferous forest, riparian forest, riparian woodland.		Shrub (deciduous)	s) no suitable habitat present.
	CNPS: 1B.2			Would have been	
	Other: DFG: Special Plant	Moisture: moist. Recorded from Alameda, Contra Costa, Marin, San Mateo, Santa Clara, Sonoma.		detectable during present survey.	



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Gastropoda - Snails And Slugs			
Vespericola marinensis	Federal none	Occurs in moist spots in coastal brush and chaparral. Recorded from	None:
Marin hesperian	State none	beneath cow-parsnip, in springs and seeps, in leaf mold along streams, in alder woods and mixed evergreen forests.	no suitable habitat present.
	Other DFG: Special Animal	Recorded from Marin County. Additional distribution: Point Reyes Peninsula and surrounding region. Type locality: Point Reyes, Bear Valley Trail, Marin County.	
Arachnida - Arachnids			
Banksula incredula	Federal none	Collected on Franciscan sandstone talus slope at 1100 ft.	None:
incredible harvestman	State none	Recorded from San Mateo County. Additional distribution: San Bruno Mt.	no suitable habitat present.
	Other DFG: Special Animal		
Calicina minor	Federal none	Found on the underside of moist serpentine rocks near permanent springs. Recorded from San Mateo, Santa Clara counties.	None:
Edgewood blind harvestman	State none		no suitable habitat present.
	Other DFG: Special Animal		
Malacostraca			
Caecidotea tomalensis	Federal none	Inhabits localized fresh-water ponds or streams with still or near-still water in	None:
Tomales isopod	State none	several bay area counties. Recorded from Marin, San Francisco, San Mateo, Sonoma counties.	no suitable habitat present.
	Other DFG: Special Animal		
Insecta - Insects			
Callophrys mossii bayensis	Federal FE	Inhabits coastal, mountainous areas with grassy ground cover.	None:
San Bruno elfin butterfly	State none	Colonies are located on steep, north-facing slopes within the fog belt. Larval host plant is Sedum spathulifolium.	no suitable habitat present.
	Other DFG: Special Animal	Recorded from San Mateo County. Additional distribution: primary populations are located in the vicinity of San Bruno Mountain.	



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Cicindela hirticollis gravida	Federal none	Inhabits clean, dry, light-colored sand in the upper tidal zone. Subterranean	None:
sandy beach tiger beetle	State none	larvae prefer moist sand not affected by wave action. Occurs in areas adjacent to non-brackish water.	no suitable habitat present.
Sandy beach liger beene	Other DFG: Special Animal	Recorded from Los Angeles, San Diego, Santa Barbara, Ventura counties. Additional distribution: occurs along the coast of California from San Francisco Bay to northern Mexico.	
Danaus plexippus	Federal none	Listing refers to wintering sites only. Roosts located in wind-protected tree	Possible:
monarch butterfly	State none	groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	suitable winter roosting habitat present.
	Other DFG: Special Animal (wintering)	Recorded from Alameda, Contra Costa, Inyo, Kern, Los Angeles, Marin, Mendocino, Monterey, Orange, San Diego, San Francisco, San Luis Obispo, San Mateo, Santa Barbara, Santa Cruz, Solano, Sonoma, Ventura counties. Additional distribution: winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	See text for discussion.
Dufourea stagei	Federal none	Ground nesting bee known from a single collection made in 1962.	None:
Stage's doufourine bee	State none	Recorded from San Mateo County. Additional distribution: Recorded from San Bruno Mt	no suitable habitat present.
	Other DFG: Special Animal		
Euphydryas editha bayensis	Federal FT	Inhabits native grasslands on outcrops of serpentine soil. The primary host	None:
bay checkerspot butterfly	State none	plant is Plantago erecta. Secondary host plants include Orthocarpus densiflorus and O. purpurscens.	no suitable habitat present.
	Other DFG: Special Animal	Recorded from Alameda, San Francisco, San Mateo, Santa Clara counties. Additional distribution: occurs in the vicinity of the San Francisco Bay.	
Hydrochara rickseckeri	Federal none	Inhabits slow moving freshwater ponds, streams, marshes and lakes.	None:
Ricksecker's water scavenger beetle	State none	Recorded from Alameda, Contra Costa, Marin, San Mateo, Solano, Sonoma counties. Additional distribution: known from the San Francisco Bay area.	no suitable habitat present.
	Other DFG: Special Animal	and the second of the second o	



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Hydroporus leechi Leech's skyline diving beetle	Federal none State none Other DFG: Special Animal	Little information is available about the species' life history, habitat requirements and distribution. Initially known from a single location near Pacifica, San Mateo County; recent study has found species to be more widespread. Inhabits freshwater ponds. Recorded from San Mateo County.	None: no suitable habitat present.
Ischnura gemina San Francisco forktail damselfly	Federal none State none Other	Inhabits marshes, ponds and ditches with emergent and/or floating vegetation. Recorded from Marin, San Francisco, San Mateo counties.	None: no suitable habitat present.
Lichnanthe ursina bumblebee scarab beetle	Federal none State none Other DFG: Special Animal	Inhabits coastal sand dunes. Usually flies close to sand surface near the crest of the dunes. Recorded from Marin, San Francisco, San Mateo, Sonoma counties.	None: no suitable habitat present.
Plebejus icarioides missionensis mission blue butterfly	Federal FE State none Other DFG: SA	Inhabits grasslands. Three larval host plants: Lupinus albifrons, L. variicolor, and L. formosus, of which L. albifrons is favored. Primary nectar plants for adults are Eriogonum latifolium, Chrysopsis villosa, Brodiaea pulchella and Brodiaea laxa Recorded from Marin, San Francisco, San Mateo counties. Additional distribution: restricted to the San Francisco Peninsula and Marin headlands.	None: no suitable habitat present.
Speyeria callippe callippe callippe silverspot butterfly	Federal FE State none Other DFG: Special Animal	Inhabits northern coastal scrub. Hostplant is Viola pedunculata. Most adults found on east-facing slopes. Males congregate on hilltops in search of females. Recorded from Alameda, San Mateo, Solano, Sonoma counties.	None: no suitable habitat present.
Speyeria zerene myrtleae Myrtles silverspot	Federal FE State none Other DFG: Special Animal	Restricted to the foggy, coastal dunes and hills Larval foodplant thought to be Viola adunca. Recorded from Marin, San Mateo, Sonoma counties. Additional distribution: Point Reyes Peninsula. Extirpated from coastal San Mateo County.	None: no suitable habitat present.
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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Trachusa gummifera no common name-a leaf cutting bee	Federal none State none Other DFG: Special	Known from two collections made in 1957 and 1962. No specific habitat information is available. Leafcutting bees use cut leaves to construct nests in cavities (mostly in rotting wood). They create multiple cells in the nest, each with a single larva	None: no suitable habitat present.
	Animal	and pollen stored for the larvae to eat. Leafcutting bees are important pollinators of wildflowers, fruits, vegetables and other crops. Recorded from Marin, San Francisco, San Mateo counties.	
Actinopterygii - Ray-finned Fish	es		
Mylopharodon conocephalus	Federal none	Inhabits deep pools with sand-gravel-boulder bottoms and slow-moving	None:
hardhead	State none	water. Not found where exotic centrarchids predominate. Freshwater. Occurs in low to mid-elevation streams in the Sacramento-San Joaquin drainage.	no suitable habitat present.
	Other DFG: SSC FS: S	Recorded from Fresno, Merced, Modoc, Shasta counties.	
Oncorhynchus mykiss irideus	Federal FT	Occurs from the Russian River south to Soquel Creek and to, but not	None:
steelhead - central Calif. coast ESU	State none	including the Pajarro River. Also occurs in the San Francisco and San Pablo basins.	no suitable habitat present.
	Other DFG: Special Animal	Recorded from Alameda, Marin, Napa, San Mateo, Santa Cruz, Sonoma counties.	
Amphibia - Amphibians			
Rana draytonii	Federal FT	Inhabits lowlands and foothills in or near permanent sources of deep water	None:
California red-legged frog	State none	with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation	no suitable habitat present.
	Other DFG: CSC	habitat. Recorded from Alameda, Amador, Butte, Calaveras, Contra Costa, El Dorado, Fresno, Glenn, Lake, Los Angeles, Marin, Mariposa, Mendocino, Merced, Monterey, Napa, Nevada, Placer, Plumas, Riverside, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Shasta, Solano, Sonoma, Stanislaus, Tehama, Tuolumne, Ventura, Yuba counties.	



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Scientific Name Common Name	01-1	Habitat Affinities and	Potential for
Common Name	Status	Reported Distribution	Occurrence on Site
Reptilia - Reptiles			
Actinemys marmorata western pond turtle	Federal none State none Other DFG: CSC	A thoroughly aquatic turtle inhabiting ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Needs basking sites and sandy banks or grassy open fields in upland areas for egg-laying. Recorded from Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kern, Kings, Lake, Lassen, Los Angeles, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Monterey, Napa, Nevada, Orange, Placer, Plumas, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Solano, Sonoma, Stanislaus, Tehama, Trinity, Tulare, Tuolumne, Ventura, Yolo, Yuba counties.	None: no suitable habitat present.
Thamnophis sirtalis tetrataenia San Francisco gartersnake	Federal FE State SE Other DFG: Fully protected	Occurs in the vicinity of freshwater marshes, ponds and slow moving streams. Prefers dense cover and water depths of at least one foot. Upland areas near water are also very important. Recorded from San Mateo, Santa Cruz counties.	None: no suitable habitat present.
Aves - Birds			
Athene cunicularia burrowing owl	Federal none State none Other BLM: Sensitive DFG: CSC (burrow sites) FWS: BCC; MBTA	Inhabits open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Nests underground in mammal burrows, especially those of California ground squirrel. Recorded from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Imperial, Inyo, Kern, Kings, Lassen, Los Angeles, Madera, Marin, Merced, Monterey, Napa, Orange, Placer, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Clara, Santa Cruz, Solano, Sonoma, Stanislaus, Sutter, Tehama, Tulare, Ventura, Yolo counties.	None: no suitable habitat present.



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site	
Baeolophus inornatus oak titmouse	Federal none State none Other Audubon: Watch List (Yellow) DFG: Special Animal (nesting) USBC: Watch List	The oak titmouse is a common resident in a variety of habitats, but is primarily associated with oaks. Occurs in montane hardwood-conifer, montane hardwood, blue, valley, and coastal oak woodlands, and montane and valley foothill riparian habitats. Range encircles San Joaquin Valley, extending east from the coast through Kern Co. onto the western slope of the Sierra Nevada north to Shasta Co. General distribution:Occurs in cismontane California, from the Mexican border to Humboldt County.	Possible: marginally suitable nesting habitat present. See text for discussion.	
Charadrius alexandrinus nivosus western snowy plover	Federal FT State none Other Audubon: Watch List (full species) DFG: CSC (nesting, coastal population) FWS: BCC (full species) FWS: MBTA USBC: Watch List (full species)	Inhabits sandy beaches, salt pond levees and shores of large alkali lakes. Requires sandy, gravelly or friable soils for nesting. Federal listing applies only to the Pacific coastal population. Recorded from Alameda, Del Norte, Humboldt, Inyo, Kern, Kings, Los Angeles, Marin, Mendocino, Modoc, Monterey, Napa, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Siskiyou, Sonoma, Ventura, Yolo counties.	None: no suitable habitat present.	
Elanus leucurus white-tailed kite	Federal none State none Other DFG: fully protected FWS: MNBMC, MBTA	Inhabits rolling foothills andvalley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands. Utilizes open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. Recorded from Alameda, Colusa, Contra Costa, Del Norte, Marin, Napa, Placer, Riverside, Sacramento, San Diego, San Luis Obispo, San Mateo, Santa Clara, Solano, Sonoma, Tehama, Ventura, Yolo counties.	Possible: suitable nesting and foraging habitat present. See text for discussion.	
Regional Groundwater Storage and R		Appendix F-24	April 20	



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Falco columbarius merlin	Federal none State none Other DFG: SA FWS: MBTA	Winters on the seacoast, in tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country. DFG listing covers non-breeding wintering individuals only.	None: no suitable habitat present.
Falco peregrinus anatum American peregrine falcon	Federal Delisted State Delisted Other CDF: S DFG: FP FS: S FWS: BCC, MBTA	Nests near wetlands, lakes, rivers, or other water bodies, on cliffs, banks, dunes, mounds, and human-made structures. Nests consist of a scrape on a depression or ledge in an open site. DFG listing covers nesting individuals only. Recorded from Alameda, Humboldt, Napa, Shasta, Siskiyou, Tehama counties.	None: no suitable habitat present.
Geothlypis trichas sinuosa saltmarsh common yellowthroat	Federal none State none Other DFG: CSC FWS: BCC	Inhabits freshwater and salt marshes. Requires thick, continuous cover down to water surface for foraging. Nests in tall grasses, tule patches and willows. Resident of the San Francisco Bay region. Recorded from Alameda, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma counties.	None: no suitable habitat present.
Lanius ludovicianus loggerhead shrike	Federal none State none Other DFG: CSC (nesting) FWS: BCC; MBTA	A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Recorded from Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Imperial, Inyo, Kern, Kings, Lake, Lassen, Los Angeles, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Mono, Monterey, Napa, Nevada, Orange, Placer, Plumas, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Clara, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Ventura, Yolo, Yuba counties.	Possible: marginally suitable nesting habitat present. See text for discussion.



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Laterallus jamaicensis coturniculus	Federal none State ST	Mainly inhabits salt-marshes bordering larger bays. Occurs in tidal salt marsh densely vegetated with pickleweed. Also found in freshwater and brackish	None: no suitable habitat present.
California black rail	Other Audubon: Watch list (full species) DFG: Fully protected FWS: MBTA FWS: MNBMC (full species) USBC: Watch list (full species)	marshes, near sea level. Recorded from Alameda, Butte, Contra Costa, Imperial, Los Angeles, Marin, Napa, Nevada, Orange, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Cruz, Solano, Sonoma, Yuba counties.	
Melospiza melodia pusillula	Federal none	Inhabits pickleweed marshes. Nests low in Grindelia bushes (high enough to	None:
Alameda song sparrow	State none	escape high tides) and in pickleweed. Resident of salt marshes bordering the southern arm of San Francisco Bay.	no suitable habitat present
	Other DFG: CSC FWS: BCC; MBTA		
Melospiza melodia samuelis	Federal none	Inhabits tidal sloughs in pickleweed marshes. Nests in Grindelia bushes	None:
San Pablo song sparrow	State none	bordering slough channels. Resident of salt marshes along the north side of San Francisco and San Pablo bays.	no suitable habitat present
	Other DFG: CSC FWS: BCC; MBTA	Recorded from Solano County.	
Phalacrocorax auritus	Federal none	Nests colonially on coastal cliffs, offshore islands, and along lake margins in	None:
double-crested cormorant	State none	the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	no suitable habitat present.
	Other DFG: CSC (rookery site) FWS: MBTA	Recorded from Alameda, Contra Costa, Del Norte, Humboldt, Lake, Lassen, Mariposa, Monterey, Sacramento, San Diego, San Francisco, Santa Barbara, Sonoma, Ventura counties.	
Regional Groundwater Storage and Re	covery Project Draft EIR	Appendix F-26	April 20



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Phalacrocorax auritus	Federal none State none	Nests colonially on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on	None: no suitable habitat present.
double-crested cormorant	Other DFG: SA FWS: MBTA	ground with sloping surface, or in tall trees along lake margins. DFG listing covers rookeries only. Recorded from Alameda, Contra Costa, Del Norte, Humboldt, Lake, Lassen, Mariposa, Monterey, Sacramento, San Diego, San Francisco, Santa Barbara, Sonoma, Ventura counties.	
Rallus longirostris obsoletus	Federal FE	Inhabits salt-water and brackish marshes traversed by tidal sloughs in the	None:
California clapper rail	State SE	vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed	no suitable habitat present.
	Other DFG: Fully protected FWS: MBTA USBC: Watch list (full species)	Recorded from Alameda, Contra Costa, Humboldt, Marin, Monterey, Napa, San Luis Obispo, San Mateo, Santa Clara, Solano, Sonoma counties.	
Riparia riparia	Federal none	Nests colonially, primarily in riparian and other lowland habitats west of the	None:
bank swallow	State ST	desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	no suitable habitat present.
	Other DFG: Special Animal (nesting) FWS: MBTA	Recorded from Alameda, Butte, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Inyo, Lassen, Modoc, Mono, Monterey, Plumas, Sacramento, San Benito, San Diego, San Francisco, San Luis Obispo, San Mateo, Santa Barbara, Shasta, Siskiyou, Sonoma, Sutter, Tehama, Ventura, Yolo counties.	



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Selasphorus sasin Allen's hummingbird Other Audubon: Watch List (Yellow) DFG: Special Animal (nesting) FWS: MBTA USBC: Watch List		Breeds most commonly in coastal scrub, valley foothill hardwood, and valley foothill riparian habitats, but also are common in closed-cone pine-cypress, urban, and redwood habitats. Occurs in a variety of woodland and scrub habitats as a migrant.	Possible: suitable nesting and foraging habitat present. See text for discussion.
Toxostoma redivivum California thrasher	Federal none State none Other Audubon: Watch List (Yellow) DFG: Special Animal FWS: MBTA USBC: Watch List	A common resident of foothills and lowlands in cismontane California. Occupies moderate to dense chaparral habitats and, less commonly, extensive thickets in young or open valley foothill riparian habitat. In southern California, occurs in montane chaparral up to 1500-2000 m (5000-6600 ft). Avoids dense tree canopy. General distribution:Occurs from the Mexican border north to Shasta, Trinity, and southern Humboldt counties., and into the Shasta Valley of Siskiyou County.	Possible: marginally suitable nesting habitat present. See text for discussion.
Mammalia - Mammals Antrozous pallidus pallid bat	Federal none State none Other BLM: Sensitive DFG: CSC FS: Sensitive WBWG: High priority	Inhabits deserts, grasslands, shrublands, woodlands and forests. Most commonly found in open, dry habitats with rocky areas for roosting. Roosts must provide protection from high temperatures. Species is very sensitive to disturbances to roosting sites. Recorded from Calaveras, Imperial, Inyo, Kern, Lake, Marin, Mariposa, Mono, Napa, Orange, Riverside, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Siskiyou, Sonoma, Tuolumne counties. Also from Arizona, Nevada, New Mexico, Oregon, Washington.	Possible: marginally suitable roosting habitat present. See text for discussion.



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Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Corynorhinus townsendii	Federal none State none	Most abundant in mesic habitats. Found in all but subalpine and alpine habitats, and may be found at any season throughout its range. Once	Not expected: no suitable habitat present.
Townsend's big-eared bat	Other BLM: S DFG: SSC FS: S WBWG: H	considered common, Townsend's big-eared bat now is considered uncommon in California.	
Dipodomys venustus venustus	Federal none	Inhabits silverleaf manzanita mixed chaparral in the Zayante Hills ecosystem of the Santa Cruz mountains.	None:
Santa Cruz kangaroo rat	State none	Needs soft, well-drained sand.	no suitable habitat present.
	Other DFG: Special Animal	Recorded from San Mateo, Santa Clara, Santa Cruz counties.	
Lasiurus blossevillii	Federal none	The red bat is locally common in some areas of California, occurring from Shasta Co. to the Mexican border, west of the Sierra Nevada/Cascade crest	Possible:
western red bat	State none	and deserts. The winter range includes western lowlands and coastal regions	suitable roosting and foraging habitat
	Other DFG: CSC FS: Sensitive WBWG: High priority	outh of San Francisco Bay. There is migration between summer and winter anges, and migrants may be found outside the normal range. Roosting abitat includes forests and woodlands from sea level up through mixed onifer forests. Feeds over a wide variety of habitats including grasslands, hrublands, open woodlands and forests, and croplands. Not found in desert reas. During warm months, sexes occupy different portions of the range Williams and Findley 1979).	present. See text for discussion.
Lasiurus cinereus	Federal none	The hoary bat is the most widespread North American bat. May be found at	Possible:
hoary bat	State none	any location in California, although distribution patchy in southeastern deserts. This common, solitary species winters along the coast and in	suitable roosting and foraging habitat
	Other DFG: Special	southern California, breeding inland and north of the winter range. During	present.
	Animal	migration, may be found at locations far from the normal range, such as the Channel Islands (Brown 1980) and the Farallon Islands (Tenaza 1966). Habitats suitable for bearing young include all woodlands and forests with medium to large-size trees and dense foliage.	See text for discussion.



Mar 24, 2011

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Myotis thysanodes	Federal none	Occurs in a wide variety of habitats. Optimal habitats include pinyon-juniper,	None:
	State none	valley foothill hardwood and hardwood-conifer woodlands. Forms maternity colonies and roosts in caves, mines, buildings and crevices.	no suitable habitat present.
fringed myotis	Other BLM: Sensitive DFG: Special Animal WBWG: High priority	General distribution:occurs throughout California.	
Neotoma fuscipes annectens	Federal none	Inhabits forested areas with a moderate canopy and a moderate to dense understory. Also occurs chaparral habitats. Constructs nests of shredded	None:
San Francisco dusky-footed woodrat	State none	grass, leaves and other materials. Population may be limited by availability o	no suitable habitat present.
	Other DFG: CSC	nest-building materials. Recorded from Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara counties.	
Nyctinomops macrotis	Federal none	Prefers rugged, rocky terrain. Found to 2500 m (8000 ft). Feeds principally	Not expected:
big free-tailed bat	State none	on large moths but also takes a variety of other flying insects. Roosts in buildings, caves, and occasionally in holes in trees. Also roosts in crevices in	marginally suitable roosting habitat present.
	Other DFG: CSC WBWG: medhigh priority	buildings, caves, and occasionally in holes in trees. Also roosts in crevices in high cliffs or rock outcrops. Recorded from Alameda, Contra Costa, San Diego counties. Additional distribution: rare in California, as fall and winter vagrants. Probably does not breed in California. Alameda and Contra Costa records are suspect. Also from Arizona, New Mexico, Texas.	nabitat present.
Reithrodontomys raviventris	Federal FE	Pickleweed (Salicornia) is the primary habitat. Builds loosely organized nests	None:
salt-marsh harvest mouse	State SE	and does not burrow into the ground. Requires higher areas to escape flooding. Restricted to saline emergent wetlands.	no suitable habitat present.
	Other DFG: Fully protected	Recorded from Contra Costa, Marin, Napa, San Mateo, Santa Clara, Solano, Sonoma counties. Additional distribution: San Francisco Bay and its tributaries.	
Scapanus latimanus insularis	Federal none	Needs friable soils for burrowing.	None:
Angel Island mole	State none	Recorded from Marin County. Angel Island.	no suitable habitat present.
Regional Groundwater Storage and Reco	Other DFG: Special Animal	Appendix F-30	April 20



Mar 24, 2011

Scientific Name Common Name	Status	Habitat Affinities and Reported Distribution	Potential for Occurrence on Site
Taxidea taxus American badger	Federal none State none Other DFG: CSC	Most abundant in dry, open stages of most shrub, forest, and herbaceous habitats. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Excavates its own burrows. General distribution: recorded from every California county except Del Norte.	None: no suitable habitat present.
Zapus trinotatus orarius Point Reyes jumping mouse	Federal none State none Other DFG: CSC	Inhabits bunch grass marshes in areas protected from continuous inundation. Eats mainly grass seeds with some insects and fruit taken. Builds grassy nests on ground under vegetation, burrows in winter. Recorded from Marin County. Additional distribution: Point Reyes.	None: no suitable habitat present.

EXPLANATION OF RARITY STATUS CODES

ENDANGERED SPECIES ACT (ESA) LISTING CODES

FE = federally listed as Endangered

FT = federally listed as Threatened

FPE = federally proposed for listing as Endangered

FPT = federally proposed for listing as Threatened

FPD = federally proposed for delisting

FC = federal candidate; former Category 1 candidates

FSC = federal species of concern; receives no legal protection. Use of the term does not necessarily mean that a species will eventually be proposed for listing.

CALIFORNIA ENDANGERED SPECIES ACT (CESA) LISTING CODES

S E = State-listed as Endangered

ST = State-listed as Threatened

SR = State-listed as Rare

SCE = State candidate for listing as Endangered

SCT = State candidate for listing as Threatened

CALIFORNIA NATIVE PLANT SOCIETY DESIGNATIONS (CNPS)

List 1: Plants of highest priority

List 1A: Plants presumed extinct in California

List 1B: Plants rare and endangered in California and elsewhere

List 2: Plants rare and endangered in California but more common elsewhere

List 3: Plants about which additional data are needed

List 4: Plants of limited distribution

CNPS Threat Code Extensions (replaces the RED code)

.1 - Seriously endangered in California

.2 – Fairly endangered in California

.3 - Not very endangered in California

OTHER CODES

<u>AFS</u>: American Fisheries Society categories of risk for marine, estuarine and diadromous fish stocks.

<u>Audubon: Watch List</u>: Bird species facing population declines and/or threats such as loss of breeding and wintering grounds, or species with limited geographic ranges.

BLM: Sensitive: Bureau of Land Management. Includes species under review by FWS or NMFS, species whose numbers are declining so rapidly that federal listing may become necessary, species with small and widely dispersed populations, or species inhabiting refugia or other unique habitats.

CDF: Sensitive: California Department of Forestry and Fire Protection. Includes species that warrant special protection during timber operations.

<u>DFG: CSC</u>: California species of Special Concern.

<u>DFG: Special Animal</u>: Species included by the Department of Fish and Game in their special species lists.

<u>DFG: WL (Watch List):</u> taxa that were previously SSCs but no longer merit CSC status or which do not meet CSC criteria but for which there is concern and a need for additional information to clarify status.

<u>DFG: Fully Protected</u>: Species protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code.

FS: Sensitive: USDA Forest Service. Species identified by a regional forester for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density, or in habitat capability that would reduce a species' existing distribution.

<u>FWS: BCC:</u> Birds of Conservation Concern: migratory and non-migratory bird species (beyond listed species) that represent the FWS's highest conservation priorities.

FWS: BEPA: Bald Eagle Protection Act

FWS: MBTA: International Migratory Bird Treat Act

FWS: MNBMC: US Fish and Wildlife Service: Migratory Nongame Birds of Management Concern. Species considered to be of concern in the U.S. due to documented or apparent population declines, small or restricted populations, or dependence on restricted or vulnerable habitats.

NMFS: SC: National Marine Fisheries Service: Species of Concern.

USMC Watch List: US Bird Conservation Watch List.

WBWG: Priority: The Western Bat Working Group. Species imperiled or at high, medium, or low risk of imperilment based on available information on distribution, status, ecology, and known threats.

Common Name Scientific Name	Listing Status USFWS/ CDFW/CNPS	Habitat	Potential to Occur ^(a)	Flowering Period
SPECIES LISTED OR PROPOSEI	FOR LISTING			
Plants				
San Bruno Mountain manzanita Arctostaphylos imbricada	-/CE/1B.1	Chaparral and coastal scrub, usually on sandstone outcrops.	Low potential. No suitable habitat present.	February– May
Presidio manzanita Arctostaphylos montana ssp. Ravenii	FE/CE/1B.1	Open, rocky, serpentine slopes in chaparral, coastal scrub, and coastal prairie.	Low potential. No suitable habitat present.	February– April
Pacific manzanita Arctostaphylos pacifica	-/CE/1B.1	Coastal scrub and chaparral.	Low potential. No suitable habitat present.	February– April
Marsh sandwort Arenaria paludicola	FE/CE/1B.1	Freshwater or brackish marshes and swamps.	Low potential. Potentially suitable habitat present at Lake Merced, but species not observed there (May and Associates 2009; Nomad Ecology 2011; San Francisco Planning Department 2011); species presumed extirpated in San Francisco.	May– August
Robust spineflower Chorizanthe robusta var. robusta	FE/-/1B.1	Sandy or gravelly coastal dunes, coastal scrub, cismontane woodland and maritime chaparral.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (San Francisco Planning Department 2011; May and Associates 2009; Nomad Ecology2011); species presumed extirpated in San Francisco.	April– September
Presidio clarkia Clarkia franciscana	FE/CE/1B.1	Serpentine outcrops in coastal scrub, and valley and foothill grassland.	Low potential. No suitable habitat present.	May–July
Marin western flax Hesperolinon congestum	FT/CT/1B.1	Chaparral and grassland, usually on serpentine barrens	Low potential. No suitable habitat present.	April–July
Beach layia Layia carnosa	FE/CE/1B.1	Sparsely vegetated, semi- stabilized coastal dunes and scrub.	Low potential. No suitable habitat present; presumed extirpated in San Francisco.	March–July
San Francisco lessingia Lessingia germanorum	FE/CE/1B.1	Open, sandy, coastal dunes and scrub.	Low potential. No suitable habitat present.	July– November
White-rayed pentachaeta Pentachaeta bellidiflora	FE/CE/1B.1	Open, dry, rocky slopes and grassy areas, usually on serpentine.	Low potential. No suitable habitat present.	March– May
San Francisco popcorn-flower Plagiobothrys diffusus	-/CE/1B.1	Coastal prairie, and valley and foothill grasslands.	Low potential. No suitable habitat present.	March– June

Common Name Scientific Name	Listing Status USFWS/ CDFW/CNPS	Habitat	Potential to Occur ^(a)	Flowering Period
FEDERAL SPECIES OF CONCER	RN OR STATE SP	ECIES OF SPECIAL CONCERN	•	'
Bent-flowered fiddleneck Amsinckia lunaris	-/-/1B.2	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland.	Low potential. No suitable habitat present.	March– June
Franciscan manzanita Arctostaphylos franciscana	-/-/1B.1	Open, rocky, serpentine outcrops in chaparral.	Low potential. No suitable habitat present. This species was believed to be extinct in the wild (although still extant through cultivation), but was rediscovered in Presidio National Park in late 2009.	February– April
Montara manzanita Arctostaphylos montaraensis	-/-/1B.2	Slopes and ridges in chaparral and coastal scrub.	Low potential. No suitable habitat present.	January– March
Alkali milk-vetch Astragualus tener var. tener	-/-/1B.2	Alkali flats, flooded grassland, playas and vernal pools.	Low potential. No suitable habitat present; species presumed extirpated in San Francisco.	March– June
Bristly sedge Carex comosa	-/-/2.1	Lake margins, marshes, swamps, coastal prairie, and valley and foothill grasslands.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (San Francisco Planning Department 2011; May and Associates 2009; Nomad Ecology 2011)	May- September
Pappose tarplant Centromadia parryi ssp. parryi	-/-/1B.2	Chaparral, coastal prairie, meadows, seeps, coastal salt marshes and swamps, and vernally mesic, often alkaline, valley and foothill grasslands.	Low potential. No suitable habitat present.	May- November
San Francisco spineflower Chorizanthe cuspidata var. cuspidata	-/-/1B.2	Coastal bluff scrub, dunes, prairie, and coastal scrub; sandy soils on terraces and slopes.	High potential. Species is known to occur at Lake Merced (May & Associates 2009; Nomad Ecology 2011).	April– August
Franciscan thistle Cirsium andrewsii	-/-/1B.2	Coastal bluff scrub, coastal prairie, coastal mesic scrub, and broadleaf upland forest; sometimes on serpentine.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (San Francisco Planning Department 2011; May and Associates 2009; Nomad Ecology 2011)	March–July
Compact cobwebby thistle Cirsium occidentale var. compactum	-/-/1B.2	On dunes or clay in chaparral, coastal dunes, coastal prairie, coastal scrub, and grasslands.	Low potential. Suitable habitat present at Lake Merced but species not documented to occur there (May & Associates 2009; Nomad Ecology 2011).	April–June

Common Name Scientific Name	Listing Status USFWS/ CDFW/CNPS	Habitat	Potential to Occur ^(a)	Flowering Period
Round-headed Chinese-houses Collinsia corymbosa	-/-/1B.2	Coastal dunes and coastal prairie.	Low potential. No suitable habitat present; species has not been seen in San Francisco for more than 100 years.	April–June
San Francisco collinsia Collinsia multicolor	-/-/1B.2	On humus-covered soil derived from mudstone in closed-cone coniferous forest and coastal scrub.	Low potential. Potentially suitable habitat present in coastal scrub at Lake Merced but species not documented to occur there (May & Associates 2009; Nomad Ecology 2011).	March– May
Pont Reyes bird's-beak Cordylanthus maritimus ssp. palustris	-/-/1B.2	Coastal salt marshes and swamps.	Low potential. No suitable habitat present.	June– October
Fragrant fritillaria Fritillaria liliacea	-/-/1B.2	On clay, often serpentine derived soils in coastal scrub, grassland, and coastal prairie.	Low potential. No suitable habitat present.	February– April
Blue coast gilia Gilia capitata ssp. chamissonis	-/-/1B.1	Coastal scrub and coastal dunes.	High potential. Species is known to occur in dune scrub habitat at Lake Merced (May & Associates 2009; Nomad Ecology 2011).	April–July
Dark-eyed gilia Gilia millefoliata	-/-/1B.2	Coastal dunes.	Low potential. No suitable habitat present; species potentially extirpated in San Francisco.	April–July
San Francisco gumplant Grindelia hirsutula var. maritima	-/-/1B.2	On sandy or serpentine slopes of sea bluffs in coastal scrub, or valley and foothill grasslands.	Low potential. Potentially suitable habitat present at Lake Merced but species not documented to occur there (San Francisco Planning Department 2011; May and Associates 2009; Nomad Ecology 2011).	June– September
Diablo helianthella Helianthella castanea	-/-/1B.2	On rocky soils in broadleaf upland forest, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland.	Low potential. No suitable habitat present.	March– June
Seaside tarplant Hemizonia congesta ssp. congesta	-/-/1B.2	Grassy valleys and hills, often on fallow fields in coastal scrub.	Low potential. No suitable habitat present.	April– November
Short-leaved evax Hesperevax sparsiflora var. brevifolia	-/-/1B.2	Sandy bluffs and flats in coastal scrub and coastal dunes.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (May and Associates 2009; Nomad Ecology 2011; San Francisco Planning Department 2011).	March– June

Common Name Scientific Name	Listing Status USFWS/ CDFW/CNPS	Habitat	Potential to Occur ^(a)	Flowering Period
Kellogg's horkelia Horkelia cuneata ssp.sericea	-/-/1B.1	Openings in old dunes coastal and sandhill in closed-cone coniferous forest, coastal scrub, and chaparral.	Low potential. No suitable habitat present.	April– September
Rose leptosiphon Leptosiphon rosaceus	-/-/1B.1	Coastal bluff scrub.	Low potential. No suitable habitat present.	April–July
Arcuate bush mallow Malacothamnus arcuatus	-/-/1B.2	Gravelly alluvium in chaparral and cismontane woodland.	Low potential. No suitable habitat present.	April- September
Marsh microseris Microserus paludosa	-/-/1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (May and Associates 2009; Nomad Ecology 2011; San Francisco Planning Department 2011).	April-June (July)
Choris's popcorn-flower Plagiobothrys chorisianus var. chorisianus	-/-/1B.2	Mesic sites in chaparral, coastal scrub, and coastal prairie.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (May and Associates 2009; Nomad Ecology 2011; San Francisco Planning Department 2011).	March– June
Hairless popcorn-flower Plagiobothrys glaber	-/-/1A	Coastal salt marshes and alkaline meadows.	Low potential. No suitable habitat present.	March– May
Oregon polemonium Polemonium carneum	-/-/1B.1	Coastal prairie, coastal scrub, lower montane coniferous forest.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (May and Associates 2009; Nomad Ecology 2011; San Francisco Planning Department 2011).	April– September
Adobe sanicle Sanicula maritima	-/Rare/1B.1	Moist clay or ultramafic soil in chaparral, coastal prairie, meadows, seeps, and valley and foothill grassland.	Low potential. No suitable habitat present.	February– March
San Francisco campion Silene verecunda ssp. verecunda	-/-/1B.2	Mudstone, shale, or serpentine substrates in coastal scrub, coastal prairie, chaparral and valley and foothill grassland.	Low potential. No suitable habitat present.	March- August
Santa Cruz microseris Stebbinsoseris decipiens	-/-/1B.2	On sandstone, shale or serpentine derived seaward facing slopes in broadleaf upland forest, closed-cone coniferous forest, chaparral, coastal prairie, and coastal scrub.	Low potential. No suitable habitat present.	April-May

Common Name Scientific Name	Listing Status USFWS/ CDFW/CNPS	Habitat	Potential to Occur ^(a)	Flowering Period
San Francisco owl's-clover Triphysaria floribunda	-/-/1B.2	Coastal prairie, and valley and foothill grasslands; occasionally on serpentine.	Low potential. No suitable habitat present.	April–June
Coastal triquetrella Triquetrella californica	-/-/1B.2	On soil in coastal bluff and coastal scrub.	Low potential. Potentially suitable habitat present at Lake Merced but species not observed there (May and Associates 2009; Nomad Ecology 2011; San Francisco Planning Department 2011).	N/A

Sources: May and Associates 2009; Nomad Ecology 2011; San Francisco Planning Department 2011; CDFG 2011; CNPS 2011; USFWS 2011 (San Francisco North and San Francisco South quadrangles)

Notes:

(a) High Potential = Species is expected to occur and habitat meets special requirements.
 Moderate Potential = Habitat is only marginally suitable or is suitable but not within species geographic range.
 Low Potential = Habitat does not meet species requirements as currently understood in the scientific community. Project site is outside species geographic range.

Federal Categories (USFWS)

FE = Listed as endangered by the federal government

FT = Listed as threatened by the federal government

FPE = Proposed for listing as endangered

FPT = Proposed for listing as threatened

FC = Candidate for federal listing

FSC = Former federal species of concern. Species designated as such in this EIR were listed by the Sacramento USFWS office until 2006, when they stopped maintaining their list. These species are still considered to be at-risk species by other federal and State agencies, as well as various organizations with recognized expertise such as the Audubon Society.

State Categories (CDFW)

CE = Listed as endangered by the State of California

CT = Listed as threatened by the State of California

CR = Listed as rare by the State of California

CNPS

Rare Plant Rank 1A = Plants presumed extinct in California.

Rare Plant Rank 1B = Plants rare, threatened, or endangered in California and elsewhere.

Rare Plant Rank 2 = Plants rare, threatened, or endangered in California, but more common elsewhere.

Rare Plant Rank 3 = Plants about which more information is needed.

Rare Plant Rank 4 = Plants of limited distribution.

Common Name Scientific Name	Listing Status USFWS/CDFW	Habitat	Potential to Occur ^(a)	
SPECIES LISTED OR PROPOSED	FOR LISTING		<u> </u>	
Invertebrates				
San Bruno elfin butterfly Callophrys mossii bayensis	FE/-	Coastal scrub on rocky outcrops with broadleaf stonecrop (Sedum spathulifolium)	Low potential. No suitable habitat present.	
Bay checkerspot butterfly Euphydryas editha bayensis	FT/–	Serpentine grasslands.	Low potential. No suitable habitat present.	
Mission blue butterfly Plebejus icarioides missionensis	FE/-	Grassland with <i>Lupinus</i> albifrons, <i>L. formosa</i> , and <i>L. varicolor</i> .	Low potential. No suitable habitat present.	
Callippe silverspot butterfly Speyeria callippe callippe	FE/-	Found in native grasslands with <i>Viola pedunculata</i> as larval food plant.	Low potential. No suitable habitat present.	
Amphibians				
California red-legged frog Rana draytonii	FT/CSC	Freshwater ponds and slow streams with emergent vegetation for egg attachment.	Low potential. Historically present at Lake Merced (SFRPD 2006) but currently presumed extirpated from this area (Jones and Stokes 2007; San Francisco Planning Department 2011).	
Reptiles				
San Francisco garter snake Thamnophis sirtalis tetrataenia	FE/CE	Freshwater ponds and slow streams with emergent vegetation.	Low potential. Potentially suitable habitat present at Lake Merced, but species not documented at this area.	
Birds	1		1	
Western snowy plover Charadrius alexandrinus nivosus	FT/CSC	Nests and forages on sandy beaches on marine and estuarine shores; requires sandy, gravely, or friable soils for nesting.	Low potential. No suitable habitat present.	
California black rail Laterallus jamaicensis coturniculus	-/CT	Tidally influenced, heavily vegetated, high-elevation marshlands.	Low potential. No suitable habitat present.	
California brown pelican Pelecanus occidentalis californicus	Delisted/3511	Nests on coastal islands of small to moderate size that affords protection from predators.	Low potential. No suitable habitat present.	
California clapper rail Rallus longirostris obsoletus	FE/CE	Salt marsh wetlands along the San Francisco Bay.	Low potential. No suitable habitat present.	
Bank swallow Riparia riparia	-/CT	Colony nester on sandy cliffs near water, marshes, lakes, streams, the ocean. Forages in fields.	Low potential. No suitable nesting habitat present, although this species nests nearby and occasionally forages at Lake Merced.	

Common Name Scientific Name	Listing Status USFWS/CDFW	Habitat	Potential to Occur ^(a)
California least tern Sterna antillarum browni	FE/CE	Colonial breeder on bare or sparsely vegetated flat substrates including sand beaches, alkali flats, landfills, or paved areas.	Low potential. No suitable habitat present.
Mammals	•		
Salt marsh harvest mouse Reithrodontomys raviventris	FE/CE	Salt marshes along the San Francisco Bay.	Low potential. No suitable habitat present.
FEDERAL SPECIES OF CONCER	RN OR STATE SPECI	ES OF SPECIAL CONCERN	
Invertebrates			
Incredible harvestman Banksula incredula	-/*	Franciscan sandstone talus slope.	Low potential. No suitable habitat present.
Tomales isopod Caecidotea tomalensis	FSC/*	Shallow freshwater ponds or streams with still or very slow water. Known only to occur in several Bay Area counties.	Low potential. Species was collected in 1971 (one individual) and 1984 (three individuals) from Lake Merced but not more recently (SFRPD 2006).
Sandy beach tiger beetle Cicindela hirticollis gravida	FSC/*	Sandy areas around water; larva live in burrows in sand along sea beaches, creeks, seepages, and lake shores.	Low potential. Potentially suitable habitat present at Lake Merced, but species not documented to occur there; known population of this species in the project area has been extirpated.
Monarch butterfly Danaus plexippus	-/*	Eucalyptus groves (winter sites).	Moderate potential.
Stage's dufourine bee Dufourea stagei	-/*	Ground-nesting bee in coastal scrub habitat.	Low potential. Potentially suitable habitat present at Lake Merced; known species range is south of the project area.
Leech's skyline diving beetle Hydroporus leechi	FSC/-	Found in freshwater ponds, shallow water of streams marshes and lakes.	Low potential. Potentially suitable habitat at Lake Merced, but there are no known populations of this species in project vicinity.
Bumblebee scarab beetle Lichnanthe ursina	FSC/-	Inhabits coastal sand dunes.	Low potential. Suitable habitat is not present within the project area; CNDDB records indicate historical presence of this species along Ocean Beach.
A leaf-cutter bee Trachusa gummifera	-/*	Unknown	Low potential. Known from two historical collections in Marin and San Francisco Counties; no records of this species in the project area.
Marin hesperian Vespericola marinensis	-/-	Moist areas in coastal brushfield and chaparral vegetation, in Marin County.	Low potential. Known species range is north of the proposed project area.
Reptiles	·		
Western pond turtle Actinemys marmorata	-/CSC	Freshwater ponds and slow streams edged with sandy soils for laying eggs.	High potential. Species is known to occur at Lake Merced (SFRPD 2006; San Francisco Planning Department 2011).

Common Name Scientific Name	Listing Status USFWS/CDFW	Habitat	Potential to Occur ^(a)
Birds	<u>I</u>		
Cooper's hawk Accipiter cooperi	/3503.5	Typically nests in riparian growths of deciduous trees and live oak woodlands. Becoming more common as an urban breeder.	Moderate potential. Large trees in the project area, including eucalyptus and Monterey cypress, could support nests for this species.
Great horned owl Bubo virginianus	/3503.5	Often uses abandoned nests of corvids or squirrels; nests in large oaks, conifers, eucalyptus.	Moderate potential. Large trees in the project area, including eucalyptus and Monterey cypress, could support nests for this species.
Red-tailed hawk Buteo jamaicensis	/3503.5	Almost any open habitat, including grassland and urbanized areas.	Moderate potential. Large trees in the project area, including eucalyptus and Monterey cypress, could support nests for this species.
Red-shouldered hawk Buteo lineatus	/3503.5	Forages along edges of marshes and grasslands; nests in mature trees in a variety of habitats.	Moderate potential. Large trees in the project area, including eucalyptus and Monterey cypress, could support nests for this species.
American kestrel Falco sparverius	/3503.5	Frequents generally open grasslands, pastures, and fields; primarily a cavity nester.	Moderate potential. Large trees in the project area, including eucalyptus and Monterey cypress, could support nests for this species.
Salt-marsh common yellowthroat Geothlypis trichas sinuosa	FSC/CSC	Inhabits tidal salt and brackish marshes in winter, but breeds in freshwater brackish marshes and riparian woodlands during spring to early summer.	High potential. This species is known to breed in the freshwater marshes at Lake Merced.
Alameda song sparrow Melospiza melodia pusillula	-/CSC	Salt marshes of eastern and south San Francisco Bay.	Low potential. No suitable habitat is present for this species in the project area.
San Pablo song sparrow Melospiza melodia samuelis	-/CSC	Salt marshes of eastern and north San Francisco Bay.	Low potential. No suitable habitat is present for this species in the project area.
Double-crested cormorant Phalacrocorax auritus	-/-	Nests along coast on isolated islands or in trees along lake margins.	High potential. There is a colony of double-crested cormorants at Lake Merced (SF Field Ornithologists, 2003).
Mammals			
Pallid bat Antrozous pallidus	-/CSC	Roosts in caves, old buildings, and under bark. Forages in open lowland areas, and forms large maternity colonies in the spring.	Low potential. Potential roosting habitat is available in buildings and large-diameter trees in Lake Merced, but this species was not detected during recent surveys in San Francisco parks (Krauel 2009). Not expected to breed here but may be present on a transient basis.
Townsend's big-eared bat Corynorhinus townsendii	FSC/CSC	Roosts in caves, buildings, bridges, rock crevices, and hollow trees.	Low potential. While roosting habitat is available in buildings in Lake Merced, the species was not detected during recent surveys in San Francisco parks (Krauel 2009).

Common Name Scientific Name	Listing Status USFWS/CDFW	Habitat	Potential to Occur ^(a)	
Western red bat Lasiurus blossevillii	-/CSC	Roosts in tree/shrub foliage, particularly in riparian areas.	Moderate potential. Roosting habitat is available in tree/shrub foliage at Lake Merced. In recent surveys, this species was one of the most commonly encountered bat species in San Francisco (Krauel 2009) and was found in parks containing water bodies.	
Hoary bat Lasiurus cinereus	-/*	Roosts in tree/shrub foliage.	Low potential. Potential roosting habitat is available in large-diameter trees at Lake Merced, but this species was not detected during recent surveys in San Francisco parks (Krauel 2009). May be present on a transient basis.	
Yuma myotis Myotis yumanensis	/*	Open forests and woodlands with sources of water over which to feed.	Moderate potential. Roosting habitat is available in tree/shrub foliage at Lake Merced. In recent surveys, this species was one of the most commonly encountered bat species in San Francisco (Krauel 2009), especially in parks with water bodies such as lakes.	
American badger Taxidea taxus	-/CSC	Open grasslands with loose, friable soils.	Low potential. Suitable habitat for this species is no longer present in the project vicinity.	
Point Reyes jumping mouse Zapus trinotatus orarius	-/CSC	Upland areas of bunch grass marshes in Point Reyes.	Low potential. Project area is south of the known range for this species.	

Sources: CDFG 2011; USFWS 2011 (San Francisco North and San Francisco South quadrangles); Krauel 2009; SFRPD 2006; SF Field Ornithologists 2003; Nomad Ecology 2011; Jones and Stokes 2007; SF Planning Dept. 2011

Notes:

(a) High Potential = Species is expected to occur and habitat meets species requirements.
 Moderate Potential = Habitat is only marginally suitable or is suitable but not within species geographic range.
 Low Potential = Habitat does not meet species requirements as currently understood in the scientific community.

Federal Categories (USFWS)

FE = Listed as endangered by the federal government

FT = Listed as threatened by the federal government

FPE = Proposed for listing as endangered

FPT = Proposed for listing as threatened

FC = Candidate for federal listing

FSC = Former federal species of concern. Species designated as such in this EIR were listed by the Sacramento USFWS office until 2006, when they stopped maintaining their list. These species are still considered to be at-risk species by other federal and State agencies, as well as various organizations with recognized expertise such as the Audubon Society.

State Categories (CDFW)

CE = Listed as endangered by the State of California

CT = Listed as threatened by the State of California

CSC = California species of special concern

* = California special animal

3511 = A Fully Protected Species

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