

Appendix F
Biological Resources
Supplemental Information





Selected Elements by Scientific Name

California Department of Fish and Game

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S3	WL
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	SSC
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	PDBOR01070	None	None	G2?	S2?	1B.2
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Archoplites interruptus</i> Sacramento perch	AFCQB07010	None	None	G3	S1	SSC
<i>Arctostaphylos pallida</i> pallid manzanita	PDERI04110	Threatened	Endangered	G1	S1	1B.1
<i>Astragalus tener var. tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T2	S2	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S2	SSC
<i>Atriplex joaquinana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Branta hutchinsii leucopareia</i> cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T4	S2	
<i>California macrophylla</i> round-leaved filaree	PDGER01070	None	None	G2	S2	1B.1
<i>Calochortus pulchellus</i> Mt. Diablo fairy-lantern	PMLIL0D160	None	None	G2	S2	1B.2
<i>Calystegia purpurata ssp. saxicola</i> coastal bluff morning-glory	PDCON040D2	None	None	G4T2	S2.2	1B.2
<i>Carex comosa</i> bristly sedge	PMCYP032Y0	None	None	G5	S2	2.1
<i>Chloropyron maritimum ssp. palustre</i> Point Reyes bird's-beak	PDSCR0J0C3	None	None	G4?T2	S2.2	1B.2
<i>Chorizanthe cuspidata var. cuspidata</i> San Francisco Bay spineflower	PDPGN04081	None	None	G2T2	S2.2	1B.2
<i>Chorizanthe robusta var. robusta</i> robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle	IICOL02101	None	None	G5T2	S1	
<i>Cicuta maculata var. bolanderi</i> Bolander's water-hemlock	PDAPI0M051	None	None	G5T3T4	S2	2.1
<i>Circus cyaneus</i> northern harrier	ABNKC11010	None	None	G5	S3	SSC



Selected Elements by Scientific Name

California Department of Fish and Game

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Cirsium andrewsii</i> Franciscan thistle	PDAST2E050	None	None	G2	S2.2	1B.2
<i>Clarkia concinna ssp. automixa</i> Santa Clara red ribbons	PDONA050A1	None	None	G5?T3	S3.3	4.3
<i>Clarkia franciscana</i> Presidio clarkia	PDONA050H0	Endangered	Endangered	G1	S1	1B.1
<i>Danaus plexippus</i> monarch butterfly	IILEPP2010	None	None	G5	S3	
<i>Dipodomys heermanni berkeleyensis</i> Berkeley kangaroo rat	AMAFD03061	None	None	G3G4T1	S1	
<i>Dirca occidentalis</i> western leatherwood	PDTHY03010	None	None	G2G3	S2S3	1B.2
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eriogonum luteolum var. caninum</i> Tiburon buckwheat	PDPGN083S1	None	None	G5T2	S2	1B.2
<i>Eucyclogobius newberryi</i> tidewater goby	AFCQN04010	Endangered	None	G3	S2S3	SSC
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	IILEPK4055	Threatened	None	G5T1	S1	
<i>Fritillaria liliacea</i> fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T2	S2	SSC
<i>Gilia capitata ssp. chamissonis</i> blue coast gilia	PDPLM040B3	None	None	G5T2	S2.1	1B.1
<i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Delisted	Endangered	G5	S2	FP
<i>Helianthella castanea</i> Diablo helianthella	PDAST4M020	None	None	G2	S2	1B.2
<i>Helminthoglypta nickliniana bridgesi</i> Bridges' coast range shoulderband	IMGASC2362	None	None	G2T1	S1	
<i>Hemizonia congesta ssp. congesta</i> white seaside tarplant	PDAST4R065	None	None	G5T2T3	S2S3	1B.2
<i>Hoita strobilina</i> Loma Prieta hoita	PDFAB5Z030	None	None	G2	S2	1B.1
<i>Holocarpha macradenia</i> Santa Cruz tarplant	PDAST4X020	Threatened	Endangered	G1	S1	1B.1



Selected Elements by Scientific Name
 California Department of Fish and Game
 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia	PDROS0W043	None	None	G4T2	S2?	1B.1
<i>Hydroprogne caspia</i> Caspian tern	ABNNM08020	None	None	G5	S4	
<i>Isocoma arguta</i> Carquinez goldenbush	PDAST57050	None	None	G1	S1	1B.1
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4?	
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G4T1	S1	FP
<i>Layia carnosa</i> beach layia	PDAST5N010	Endangered	Endangered	G2	S2	1B.1
<i>Leptosiphon rosaceus</i> rose leptosiphon	PDPLM09180	None	None	G1	S1	1B.1
<i>Masticophis lateralis euryxanthus</i> Alameda whipsnake	ARADB21031	Threatened	Threatened	G4T2	S2	
<i>Meconella oregana</i> Oregon meconella	PDPAP0G030	None	None	G2G3	S1	1B.1
<i>Melospiza melodia maxillaris</i> Suisun song sparrow	ABPBXA301K	None	None	G5T2	S2	SSC
<i>Melospiza melodia pusillula</i> Alameda song sparrow	ABPBXA301S	None	None	G5T2?	S2?	SSC
<i>Melospiza melodia samuelis</i> San Pablo song sparrow	ABPBXA301W	None	None	G5T2?	S2?	SSC
<i>Microcina leei</i> Lee's micro-blind harvestman	ILARA47040	None	None	G1	S1	
<i>Microtus californicus sanpabloensis</i> San Pablo vole	AMAFF11034	None	None	G5T1T2	S1S2	SSC
<i>Monolopia gracilens</i> woodland woollythreads	PDAST6G010	None	None	G2G3	S2S3	1B.2
<i>Northern Coastal Salt Marsh</i> Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
<i>Northern Maritime Chaparral</i> Northern Maritime Chaparral	CTT37C10CA	None	None	G1	S1.2	
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S3	
<i>Nyctinomops macrotis</i> big free-tailed bat	AMACD04020	None	None	G5	S2	SSC
<i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020	None	None	G5	S3	WL



Selected Elements by Scientific Name

California Department of Fish and Game

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris' popcornflower	PDBOR0V061	None	None	G3T2Q	S2.2	1B.2
<i>Plagiobothrys diffusus</i> San Francisco popcornflower	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
<i>Rallus longirostris obsoletus</i> California clapper rail	ABNME05016	Endangered	Endangered	G5T1	S1	FP
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	None	G3	S2S3	SSC
<i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened	None	G4T2T3	S2S3	SSC
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S1S2	FP
<i>Sanicula maritima</i> adobe sanicle	PDAP11Z0D0	None	Rare	G2	S2.2	1B.1
<i>Scapanus latimanus parvus</i> Alameda Island mole	AMABB02031	None	None	G5T1Q	S1	SSC
<i>Serpentine Bunchgrass</i> Serpentine Bunchgrass	CTT42130CA	None	None	G2	S2.2	
<i>Sorex vagrans halicoetes</i> salt-marsh wandering shrew	AMABA01071	None	None	G5T1	S1	SSC
<i>Sternula antillarum browni</i> California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2S3	FP
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i> most beautiful jewel-flower	PDBRA2G012	None	None	G2T2	S2.2	1B.2
<i>Stuckenia filiformis</i> slender-leaved pondweed	PMPOT03090	None	None	G5	S1S2	2.2
<i>Suaeda californica</i> California seablite	PDCHE0P020	Endangered	None	G1	S1	1B.1
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S4	SSC
<i>Trachusa gummifera</i> San Francisco Bay Area leaf-cutter bee	IIHYM80010	None	None	G1	S1	
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2G3	S2S3	
<i>Valley Needlegrass Grassland</i> Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
<i>Viburnum ellipticum</i> oval-leaved viburnum	PDCPR07080	None	None	G5	S2.3	2.3
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	ABPBXB3010	None	None	G5	S3S4	SSC

Record Count: 84

CNPS Inventory of Rare and Endangered Plants

Status: Plant Press Manager window with 34 items - Fri, Jan. 11, 2013 20:11 c

Standard List - with Plant Press controls

ECOLOGICAL REPORT

scientific	family	life form	blooming	communities	elevation	CNPS
<u>Amsinckia lunaris</u>	Boraginaceae	annual herb	Mar-Jun	<ul style="list-style-type: none"> •Coastal bluff scrub (CBScr) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrs) 	3 - 500 meters	List 1B.2
<u>Arctostaphylos pallida</u>	Ericaceae	perennial evergreen shrub	Dec-Mar	<ul style="list-style-type: none"> •Broadleafed upland forest (BUFRs) •Closed-cone coniferous forest (CCFRs) •Chaparral (Chprl) •Cismontane woodland (CmWld) •Coastal scrub (CoScr)/siliceous shale, sandy or gravelly 	185 - 465 meters	List 1B.1
<u>Astragalus tener</u> var. <u>tener</u>	Fabaceae	annual herb	Mar-Jun	<ul style="list-style-type: none"> •Playas (Plyas) •Valley and foothill grassland (VFGrs)(adobe clay) •Vernal pools (VnPls)/alkaline 	1 - 60 meters	List 1B.2
<u>Atriplex joaquinana</u>	Chenopodiaceae	annual herb	Apr-Oct	<ul style="list-style-type: none"> •Chenopod scrub (ChScr) •Meadows and seeps (Medws) •Playas (Plyas) •Valley and foothill grassland (VFGrs)/alkaline 	1 - 835 meters	List 1B.2
<u>Balsamorhiza macrolepis</u>	Asteraceae	perennial herb	Mar-Jun	<ul style="list-style-type: none"> •Chaparral (Chprl) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrs)/sometimes serpentinite 	90 - 1555 meters	List 1B.2
<u>California macrophylla</u>	Geraniaceae	annual herb	Mar-May	<ul style="list-style-type: none"> •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrs)/clay 	15 - 1200 meters	List 1B.1
<u>Calochortus pulchellus</u>	Liliaceae	perennial bulbiferous herb	Apr-Jun	<ul style="list-style-type: none"> •Chaparral (Chprl) •Cismontane woodland (CmWld) •Riparian woodland (RpWld) •Valley and foothill 	30 - 840 meters	List 1B.2

<u>Calystegia purpurata</u> ssp. <u>saxicola</u>	Convolvulaceae	perennial herb	Apr-Sep	grassland (VFGrs) •Coastal bluff scrub (CBScr) •Coastal dunes (CoDns) •Coastal scrub (CoScr) •North Coast coniferous forest (NCFrs)	10 - 105 meters	List 1B.2
<u>Chloropyron maritimum</u> ssp. <u>palustre</u>	Orobanchaceae	annual herb hemiparasitic	Jun-Oct	•Marshes and swamps (MshSw)(coastal salt)	0 - 10 meters	List 1B.2
<u>Chorizanthe cuspidata</u> var. <u>cuspidata</u>	Polygonaceae	annual herb	Apr-Jul(Aug), Months in parentheses are uncommon.	•Coastal bluff scrub (CBScr) •Coastal dunes (CoDns) •Coastal prairie (CoPrr) •Coastal scrub (CoScr)/sandy	3 - 215 meters	List 1B.2
<u>Chorizanthe robusta</u> var. <u>robusta</u>	Polygonaceae	annual herb	Apr-Sep	•Chaparral (Chprl)(maritime) •Cismontane woodland (CmWld)(openings) •Coastal dunes (CoDns) •Coastal scrub (CoScr)/sandy or gravelly	3 - 300 meters	List 1B.1
<u>Cirsium andrewsii</u>	Asteraceae	perennial herb	Mar-Jul	•Broadleafed upland forest (BUFrs) •Coastal bluff scrub (CBScr) •Coastal prairie (CoPrr) •Coastal scrub (CoScr)/mesic, sometimes serpentinite	0 - 150 meters	List 1B.2
<u>Clarkia franciscana</u>	Onagraceae	annual herb	May-Jul	•Coastal scrub (CoScr) •Valley and foothill grassland (VFGrs)(serpentinite)	25 - 335 meters	List 1B.1
<u>Dirca occidentalis</u>	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr), Months in parentheses are uncommon.	•Broadleafed upland forest (BUFrs) •Closed-cone coniferous forest (CCFr) •Chaparral (Chprl) •Cismontane woodland (CmWld) •North Coast coniferous forest (NCFrs) •Riparian forest	25 - 425 meters	List 1B.2

					(RpFrS) •Riparian woodland (RpWld)/mesic		
<u>Eriogonum luteolum</u> var. <u>caninum</u>	Polygonaceae	annual herb	May-Sep		•Chaparral (Chprl) •Cismontane woodland (CmWld) •Coastal prairie (CoPrr) •Valley and foothill grassland (VFGrs)/serpentinite, sandy to gravelly	0 - 700 meters	List 1B.2
<u>Fritillaria liliacea</u>	Liliaceae	perennial bulbiferous herb	Feb-Apr		•Cismontane woodland (CmWld) •Coastal prairie (CoPrr) •Coastal scrub (CoScr) •Valley and foothill grassland (VFGrs)/Often serpentinite	3 - 410 meters	List 1B.2
<u>Gilia capitata</u> ssp. <u>chamissonis</u>	Polemoniaceae	annual herb	Apr-Jul		•Coastal dunes (CoDns) •Coastal scrub (CoScr)	2 - 200 meters	List 1B.1
<u>Helianthella castanea</u>	Asteraceae	perennial herb	Mar-Jun		•Broadleafed upland forest (BUFrS) •Chaparral (Chprl) •Cismontane woodland (CmWld) •Coastal scrub (CoScr) •Riparian woodland (RpWld) •Valley and foothill grassland (VFGrs)	60 - 1300 meters	List 1B.2
<u>Hoita strobilina</u>	Fabaceae	perennial herb	May-Jul(Aug),(Oct), Months in parentheses are uncommon.		•Chaparral (Chprl) •Cismontane woodland (CmWld) •Riparian woodland (RpWld)/usually serpentinite, mesic	30 - 860 meters	List 1B.1
<u>Holocarpha macradenia</u>	Asteraceae	annual herb	Jun-Oct		•Coastal prairie (CoPrr) •Coastal scrub (CoScr) •Valley and foothill grassland (VFGrs)/often clay, sandy	10 - 220 meters	List 1B.1
<u>Horkelia cuneata</u> var. <u>sericea</u>	Rosaceae	perennial herb	Apr-Sep		•Closed-cone coniferous forest (CCFrS) •Chaparral (Chprl)(maritime) •Coastal dunes (CoDns) •Coastal scrub	10 - 200 meters	List 1B.1

				(CoScr)/sandy or gravelly, openings		
<u>Lathyrus jepsonii</u> var. <u>jepsonii</u>	Fabaceae	perennial herb	May-Jul(Sep), Months in parentheses are uncommon.	•Marshes and swamps (MshSw)(freshwater and brackish)	0 - 4 meters	List 1B.2
<u>Meconella oregana</u>	Papaveraceae	annual herb	Mar-Apr	•Coastal prairie (CoPrr) •Coastal scrub (CoScr)	250 - 620 meters	List 1B.1
<u>Micropus amphibolus</u>	Asteraceae	annual herb	Mar-May	•Broadleafed upland forest (BUFr) •Chaparral (Chprl) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrs)/rocky	45 - 825 meters	List 3.2
<u>Monardella antonina</u> ssp. <u>antonina</u>	Lamiaceae	perennial rhizomatous herb	Jun-Aug	•Chaparral (Chprl) •Cismontane woodland (CmWld)	500 - 1000 meters	List 3
<u>Monolopia gracilens</u>	Asteraceae	annual herb	(Feb),Mar-Jul Months in parentheses are uncommon.	•Broadleafed upland forest (BUFr)(openings) •Chaparral (Chprl)(openings) •Cismontane woodland (CmWld) •North Coast coniferous forest (NCFrs)(openings) •Valley and foothill grassland (VFGrs)/Serpentine	100 - 1200 meters	List 1B.2
<u>Plagiobothrys chorisianus</u> var. <u>chorisianus</u>	Boraginaceae	annual herb	Mar-Jun	•Chaparral (Chprl) •Coastal prairie (CoPrr) •Coastal scrub (CoScr)/mesic	15 - 160 meters	List 1B.2
<u>Plagiobothrys diffusus</u>	Boraginaceae	annual herb	Mar-Jun	•Coastal prairie (CoPrr) •Valley and foothill grassland (VFGrs)	60 - 360 meters	List 1B.1
<u>Sanicula maritima</u>	Apiaceae	perennial herb	Feb-May	•Chaparral (Chprl) •Coastal prairie (CoPrr) •Meadows and seeps (Medws) •Valley and foothill grassland (VFGrs)/clay, serpentinite	30 - 240 meters	List 1B.1
<u>Streptanthus albidus</u> ssp. <u>peramoenus</u>	Brassicaceae	annual herb	(Mar),Apr-Sep(Oct), Months in parentheses are uncommon.	•Chaparral (Chprl) •Cismontane woodland (CmWld) •Valley and foothill grassland (VFGrs)/serpentinite	94 - 1000 meters	List 1B.2
				•Marshes and		

<u>Stuckenia</u> <u>filiformis</u>	Potamogetonaceae	perennial rhizomatous herb aquatic	May-Jul	swamps (MshSw)(assorted shallow freshwater)	300 - 2150 meters	List 2.2
<u>Suaeda</u> <u>californica</u>	Chenopodiaceae	perennial evergreen shrub	Jul-Oct	•Marshes and swamps (MshSw)(coastal salt)	0 - 15 meters	List 1B.1
<u>Trifolium</u> <u>hydrophilum</u>	Fabaceae	annual herb	Apr-Jun	•Marshes and swamps (MshSw) •Valley and foothill grassland (VFGrs)(mesic, alkaline) •Vernal pools (VnPIs)	0 - 300 meters	List 1B.2
<u>Viburnum</u> <u>ellipticum</u>	Adoxaceae	perennial deciduous shrub	May-Jun	•Chaparral (Chprl) •Cismontane woodland (CmWld) •Lower montane coniferous forest (LCFRs)	215 - 1400 meters	List 2.3

Group	Name	Population	Status	Lead Office	Recovery Plan Name	Recovery Plan Stage
Amphibians	California tiger Salamander	U.S.A. (CA - Sonoma County)	Endangered	Sacramento Fish And Wildlife		
Amphibians	California red-legged frog (Rana)	Entire	Threatened	Sacramento Fish And Wildlife	Recovery Plan for the California	Final
Birds	Western snowy plover	Pacific coastal pop.	Threatened	Arcata Fish And Wildlife Office	Final Recovery Plan for the	Final
Crustaceans	Conservancy fairy shrimp		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Vernal Pool	Final
Crustaceans	Longhorn fairy shrimp		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Vernal Pool	Final
Crustaceans	Vernal pool tadpole shrimp		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Vernal Pool	Final
Fishes	Delta smelt (Hypomesus)		Threatened	San Francisco Bay - Delta Fish	Recovery Plan for the	Final
Flowering Plants	Pallid manzanita		Threatened	Sacramento Fish And Wildlife	Draft Recovery Plan for	Draft
Flowering Plants	Presidio clarkia (Clarkia)		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Serpentine	Final
Flowering Plants	Palmate-bracted bird's beak		Endangered	Sacramento Fish And Wildlife	Recovery Plan for Upland	Final
Insects	Mission blue butterfly (Icaricia)		Endangered	Sacramento Fish And Wildlife	Recovery Plan for San Bruno	Final
Insects	Callippe silverspot butterfly		Endangered	Sacramento Fish And Wildlife		
Mammals	San Joaquin kit fox (Vulpes)	U.S.A.(CA)	Endangered	Sacramento Fish And Wildlife	Recovery Plan for Upland	Final
Mammals	Salt marsh harvest mouse	U.S.A.(CA)	Endangered	Sacramento Fish And Wildlife	Draft Recovery Plan for the	Draft
Mammals	Salt marsh harvest mouse	U.S.A.(CA)	Endangered	Sacramento Fish And Wildlife	Salt Marsh Harvest Mouse and	Final
Reptiles	Alameda whipsnake (=striped)	Entire	Threatened	Sacramento Fish And Wildlife	Draft Recovery Plan for	Draft
Reptiles	Giant garter snake (Thamnophis)	Entire	Threatened	Sacramento Fish And Wildlife	Draft Recovery Plan for the	Draft