Appendix 9 **Biological Resources**

Appendix 9

California Natural Diversity Database (CNDDB) Query



Selected Elements by Common Name

California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria: Quad IS (San Francisco North (3712274))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
adobe sanicle	PDAPI1Z0D0	None	Rare	G2	S2	1B.1
Sanicula maritima						
alkali milk-vetch	PDFAB0F8R1	None	None	G2T2	S2	1B.2
Astragalus tener var. tener						
American badger	AMAJF04010	None	None	G5	S3	SSC
Taxidea taxus						
American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Falco peregrinus anatum						
Angel Island mole	AMABB02032	None	None	G5T1	S1	
Scapanus latimanus insularis						
bank swallow	ABPAU08010	None	Threatened	G5	S2	
Riparia riparia						
Bay checkerspot butterfly	IILEPK4055	Threatened	None	G5T1	S1	
Euphydryas editha bayensis						
beach layia	PDAST5N010	Endangered	Endangered	G2	S2	1B.1
Layia carnosa						
blue coast gilia	PDPLM040B3	None	None	G5T2	S2	1B.1
Gilia capitata ssp. chamissonis						
bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Carex comosa						
bumblebee scarab beetle	IICOL67020	None	None	G2	S2	
Lichnanthe ursina						
California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Laterallus jamaicensis coturniculus						
California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
Dicamptodon ensatus						
California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Rana draytonii						
callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
Speyeria callippe callippe						
Choris' popcornflower	PDBOR0V061	None	None	G3T2Q	S2	1B.2
Plagiobothrys chorisianus var. chorisianus						
coastal triquetrella	NBMUS7S010	None	None	G2	S2	1B.2
Triquetrella californica						
congested-headed hayfield tarplant	PDAST4R065	None	None	G5T1T2	S1S2	1B.2
Hemizonia congesta ssp. congesta						
dark-eyed gilia	PDPLM04130	None	None	G2	S2	1B.2
Gilia millefoliata	ADMEDICAGE			0.5	0.4	144
double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Phalacrocorax auritus						



Selected Elements by Common Name

California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Fritillaria liliacea				0 _	<u>-</u>	
Franciscan manzanita	PDERI040J3	Endangered	None	G1	S1	1B.1
Arctostaphylos franciscana		g				
Franciscan thistle	PDAST2E050	None	None	G3	S 3	1B.2
Cirsium andrewsii						
hairless popcornflower	PDBOR0V0B0	None	None	GH	SH	1A
Plagiobothrys glaber						
hoary bat	AMACC05030	None	None	G5	S4	
Lasiurus cinereus						
Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Horkelia cuneata var. sericea						
longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	SSC
Spirinchus thaleichthys						
Marin hesperian	IMGASA4140	None	None	G2	S2	
Vespericola marinensis						
Marin western flax	PDLIN01060	Threatened	Threatened	G1	S1	1B.1
Hesperolinon congestum						
marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
Microseris paludosa						
marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arenaria paludicola						
Mission blue butterfly	IILEPG801A	Endangered	None	G5T1	S1	
Plebejus icarioides missionensis						
monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
Danaus plexippus pop. 1						
Mt. Tamalpais thistle	PDAST2E1G2	None	None	G2T1	S1	1B.2
Cirsium hydrophilum var. vaseyi						
northern meadow sedge	PMCYP03B20	None	None	G5	S2	2B.2
Carex praticola						
obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus caliginosus						
Oregon polemonium	PDPLM0E050	None	None	G3G4	S2	2B.2
Polemonium carneum						
Point Reyes jumping mouse	AMAFH01031	None	None	G5T1T3Q	S1S3	SSC
Zapus trinotatus orarius						
Point Reyes salty bird's-beak	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
Chloropyron maritimum ssp. palustre						
Presidio clarkia	PDONA050H0	Endangered	Endangered	G1	S1	1B.1
Clarkia franciscana						
Presidio manzanita	PDERI040J2	Endangered	Endangered	G3T1	S1	1B.1
Arctostaphylos montana ssp. ravenii						



Selected Elements by Common Name

California Department of Fish and Wildlife California Natural Diversity Database



Charina	Flammer O. 1	Fadaual Otati	Ctata Ctata	Olahal Barri	Otata Davil	Rare Plant Rank/CDFW
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
rose leptosiphon Leptosiphon rosaceus	PDPLM09180	None	None	G1	S1	1B.1
round-headed Chinese-houses	PDSCR0H060	None	None	G1	S1	1B.2
Collinsia corymbosa	PDSCRUHU00	None	None	Gi	31	ID.Z
San Francisco Bay Area leaf-cutter bee	IIHYM80010	None	None	G1	S1	
Trachusa gummifera	IIITTIWOOOTO	None	NOTIC	O1	01	
San Francisco Bay spineflower	PDPGN04081	None	None	G2T1	S1	1B.2
Chorizanthe cuspidata var. cuspidata					-	
San Francisco campion	PDCAR0U213	None	None	G5T2	S2	1B.2
Silene verecunda ssp. verecunda						
San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
Collinsia multicolor						
San Francisco gumplant	PDAST470D3	None	None	G5T1Q	S1	3.2
Grindelia hirsutula var. maritima						
San Francisco lessingia	PDAST5S010	Endangered	Endangered	G1	S1	1B.1
Lessingia germanorum						
San Francisco owl's-clover	PDSCR2T010	None	None	G2?	S2?	1B.2
Triphysaria floribunda						
San Francisco popcornflower	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
Plagiobothrys diffusus						
San Pablo song sparrow	ABPBXA301W	None	None	G5T2?	S2?	SSC
Melospiza melodia samuelis						
sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela hirticollis gravida						
Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
Stebbinsoseris decipiens						
southern sea otter	AMAJF09012	Threatened	None	G4T2	S2	FP
Enhydra lutris nereis						
Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Corynorhinus townsendii						
water star-grass	PMPON03010	None	None	G5	S2	2B.2
Heteranthera dubia						
western bumble bee	IIHYM24250	None	None	G2G3	S1	
Bombus occidentalis						
western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Emys marmorata	4144.000====			0.5	00	000
western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus blossevillii	DD A OTOVOCO	Fadan	Fades 2	04	0.4	45.4
white-rayed pentachaeta	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
Pentachaeta bellidiflora						

Appendix 9

U.S. Fish and Wildlife Service (USFWS) Species List Database

2/13/2017 IPaC: Explore Location

IPaC U.S. Fish & Wildlife Service

IPaC resource list

Location

San Francisco County, California



DESCRIPTION

..evelop. The project will be located at the Seawall Lot and will be constructed as development of businesses.

Local offices

Sacramento Fish And Wildlife Office

(916) 414-6600

(916) 414-6713

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

San Francisco Bay-delta Fish And Wildlife

(916) 930-5603

(916) 930-5654

650 Capitol Mall Suite 8-300 Sacramento, CA 95814

http://kim_squires@fws.gov

Endangered species

This resource list is for informational purposes only and should not be used for planning or analyzing project level impacts.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Review section in IPaC or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by creating a project and making a request from the Regulatory Review

Listed species are managed by the Endangered Species Program of the U.S. Fish and Wildlife Service.

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.

The following species are potentially affected by activities in this location:

Amphibians

NAME **STATUS** California Red-legged Frog Rana draytonii Threatened There is a final <u>critical habitat</u> designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/2891 **Birds** NAME **STATUS** California Clapper Rail Rallus longirostris obsoletus Endangered No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/4240 consult Endangered California Least Tern Sterna antillarum browni No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/8104 Short-tailed Albatross Phoebastria (=Diomedea) albatrus Endangered No critical habitat has been designated for this species. http://ecos.fws.gov/ecp/species/433 Threatened Western Snowy Plover Charadrius alexandrinus nivosus There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/8035 **Fishes** NAME **STATUS** Delta Smelt Hypomesus transpacificus Threatened There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/321 Threatened Steelhead Oncorhynchus (=Salmo) mykiss There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/1007 Tidewater Goby Eucyclogobius newberryi Endangered There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/57 Flowering Plants **STATUS** Franciscan Manzanita Arctostaphylos franciscana Endangered There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. http://ecos.fws.gov/ecp/species/5350 Marin Dwarf-flax Hesperolinon congestum **Threatened** No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/5363

Marsh Sandwort Arenaria paludicola

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/2229

Presidio Clarkia Clarkia franciscana

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/3890

Presidio Manzanita Arctostaphylos hookeri var. ravenii

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/7216

San Francisco Lessingia Lessingia germanorum (=L.g. var. germanorum)

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/8174

Sonoma Sunshine Blennosperma bakeri

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/1260

White-rayed Pentachaeta Pentachaeta bellidiflora

http://ecos.fws.gov/ecp/species/7782

Endangered

Endangered

Endangered

Endangered

Endangered

No critical habitat has been designated for this species.

Insects

Endangered NAME

Bay Checkerspot Butterfly Euphydryas editha bayensis

There is a final critical habitat designated for this species. Your location is outside the designated

critical habitat.

http://ecos.fws.gov/ecp/species/2320

Callippe Silverspot Butterfly Speyeria callippe callippe

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/3779

Mission Blue Butterfly Icaricia icarioides missionensis

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/6928

San Bruno Elfin Butterfly Callophrys mossii bayensis

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/3394

Threatened

Endangered

Endangered

Endangered

Mammals

NAME **STATUS**

Salt Marsh Harvest Mouse Reithrodontomys raviventris

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/613

Endangered

Threatened

Southern Sea Otter Enhydra lutris nereis

No critical habitat has been designated for this species.

http://ecos.fws.gov/ecp/species/8560

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Birds are protected under the Migratory Bird Treaty Act 1 and the Bald and Golden Eagle Protection Act 2 .

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. <u>Birds of Conservation Concern</u>) that may be potentially affected by activities in this location, not a list of every bird species you may find in this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the <u>AKN Histogram Tools</u> and <u>Other Bird Data Resources</u>.

NAME	SEASON(S)
Bald Eagle Haliaeetus leucocephalus http://ecos.fws.gov/ecp/species/1626	Year-round
Bell's Sparrow Amphispiza belli http://ecos.fws.gov/ecp/species/9303	Year-round
Black Oystercatcher Haematopus bachmani http://ecos.fws.gov/ecp/species/9591	Year-round
Black Rail Laterallus jamaicensis http://ecos.fws.gov/ecp/species/7717	Breeding
Black Skimmer Rynchops niger http://ecos.fws.gov/ecp/species/5234	Breeding
Black-vented Shearwater Puffinus opisthomelas	Wintering
Burrowing Owl Athene cunicularia http://ecos.fws.gov/ecp/species/9737	Year-round
Costa's Hummingbird Calypte costae http://ecos.fws.gov/ecp/species/9470	Breeding
Fox Sparrow Passerella iliaca	Wintering
Lawrence's Goldfinch Carduelis lawrencei http://ecos.fws.gov/ecp/species/9464	Breeding
Lesser Yellowlegs Tringa flavipes http://ecos.fws.gov/ecp/species/9679	Wintering

IPaC: Explore Location

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Lewis's Woodpecker Melanerpes lewis http://ecos.fws.gov/ecp/species/9408

Long-billed Curlew Numenius americanus http://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa http://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii http://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus http://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi http://ecos.fws.gov/ecp/species/3914

Peregrine Falcon Falco peregrinus http://ecos.fws.gov/ecp/species/8831

Pink-footed Shearwater Puffinus creatopus

Red Knot Calidris canutus ssp. roselaari http://ecos.fws.gov/ecp/species/8880

Short-billed Dowitcher Limnodromus griseus http://ecos.fws.gov/ecp/species/9480

Short-eared Owl Asio flammeus http://ecos.fws.gov/ecp/species/9295

Snowy Plover Charadrius alexandrinus

Western Grebe aechmophorus occidentalis http://ecos.fws.gov/ecp/species/6743

Whimbrel Numenius phaeopus http://ecos.fws.gov/ecp/species/9483

Yellow Rail Coturnicops noveboracensis http://ecos.fws.gov/ecp/species/9476

Yellow Warbler dendroica petechia ssp. brewsteri http://ecos.fws.gov/ecp/species/3230

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date.

Wintering

Wintering

Wintering

Year-round

Year-round

Breeding

Year-round

Year-round

Wintering

Wintering

Wintering

Breeding

Wintering

Wintering

Wintering

Breeding

NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds

The <u>Avian Knowledge Network (AKN)</u> provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest, survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the <u>Migratory Bird Programs AKN Histogram Tools</u> webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on <u>National Wildlife Refuge</u> lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

2/13/2017 IPaC: Explore Location

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER

E1UBL

ESTUARINE AND MARINE WETLAND

E2USN

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix 9

California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants for the San Francisco North 7.5-minute U.S. Geological Survey (USGS) quadrangle



Plant List

6 matches found. Click on scientific name for details

Search Criteria

Rare Plant Rank is one of [1A, 1B, 2A, 2B], FESA is one of [Endangered, Threatened, Species of Concern], CESA is one of [Endangered, Threatened, Rare], Found in Quad 37122G4

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Arctostaphylos montana ssp. ravenii	Presidio manzanita	Ericaceae	perennial evergreen shrub	1B.1	S1	G3T1
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	1B.1	S1	G1
Clarkia franciscana	Presidio clarkia	Onagraceae	annual herb	1B.1	S1	G1
Hesperolinon congestum	Marin western flax	Linaceae	annual herb	1B.1	S1	G1
Layia carnosa	beach layia	Asteraceae	annual herb	1B.1	S2	G2
Lessingia germanorum	San Francisco lessingia	Asteraceae	annual herb	1B.1	S1	G1

Suggested Citation

CNPS, Rare Plant Program. 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed 13 February 2017].

Search the Inventory	Information
Simple Search	About the Inventory
Advanced Search	About the Rare Plant Program
Glossary	CNPS Home Page
	About CNPS
	Join CNPS

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Contributors

The Calflora Database
The California Lichen Society