

March 27, 2020

Coby Friedman, CF Contracting, Inc., 96 Forrest Ave, Fairfax, CA 94930

Re: Biological Resources Assessment for vacant lots 59 and 60 (APN #012-141-59 and APN# 012-141-60), and Ross Street Terrace, San Rafael, Marin County, CA

Dear Mr. Friedman,

The purpose of this letter report is to provide you with the results of the Biological Resources Assessment (BRA) conducted at the site of a proposed residential construction project for two new single-family homes on two vacant parcels (Lot 59 and Lot 60; APNs #012-141-59 and 102-141-60) located in the City of San Rafael, Marin County, California (Project Area). The BRA site visit was conducted on February 27, 2020. The Project Area consists of approximately 0.7 acres of vacant land including two parcels and a "paper street" known as Ross Street Terrace located between 1 Clayton Street, and 127 Ross Street, approximately 0.25 air miles north of Gerstle Park. The Project Area is surrounded on all sides by residential development. This report was prepared in direct response to the City of San Rafael's requirement for a Biological Resources report to be included with the Application for a Design Review Permit and Lot Line Adjustment associated with the Project.

The purpose of this assessment is to gather information necessary to complete a review of potential biological resources under the California Environmental Quality Act (CEQA) jurisdiction. This report describes the results of the site visit for which the Project Area was assessed concerning: (1) the potential to support special-status plant and wildlife species; (2) the potential presence of sensitive biological communities such as wetlands or riparian habitats subject to regulatory agency jurisdiction; and (3) the potential presence of other sensitive biological resources protected by local, state, and federal laws and regulations.

A BRA provides general information on the potential presence of sensitive species and habitats. This assessment is based on information available at the time of the study and on-site conditions that were observed on the date of the site visit.

PROJECT DESCRIPTION

The Project proposes to construct two single-family residences on two vacant hillside parcels (Lot 59 and Lot 60), implement a Lot Line Adjustment, and develop a new access road, Ross Street Terrace, with associated retaining walls. The proposed publicly accessible road, Ross Street Terrace, would be accessible from Ross Street, to the south, and would consist of approximately 0.1 mile of retention wall on both sides of the new road. The Project will remove approximately 58 trees over 6 inches in diameter, including 20 native and 38 non-native trees.

REGULATORY BACKGROUND

The following natural resources are protected under one or more of several Federal, State and/or local regulations, and were considered when analyzing the Project.

<u>Waters of the U.S.</u>: protected under the Clean Water Act (CWA), administered by the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (Corps):

• Includes wetlands, streams, rivers, and other aquatic habitats meeting the guidance issued by the Corps

<u>Waters of the State</u>: protected under the Porter-Cologne Act, administered by the Regional Water Quality Control Board (RWQCB):

• Includes surface water or groundwater, including saline waters, within the boundaries of the state, and are generally delineated following the guidance issued by the Corps.

<u>Streams, Lakes, and Riparian Habitat</u>: protected under the California Fish and Game Code (CFGC), administered by the California Department of Fish and Wildlife (CDFW):

• Includes creeks and rivers (bodies where water flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life), and vegetation adjacent to associated with such (riparian habitat).

Sensitive Vegetation Communities: protected under the CFGC, administered by the CDFW:

• Includes terrestrial vegetation or plant communities that are ranked by NatureServe and considered "threatened" or "endangered" by the CDFW, lists of such are included in *List of Vegetation Alliances and Associations* (CDFG 2010).

Special-status Plant and Wildlife Species including Critical Habitat: protected under one or more of the Federal Endangered Species Act (ESA), California Endangered Species Act (CESA), and California Environmental Quality Act (CEQA), administered by the U.S. Fish and Wildlife Service (USFWS), and/or CDFW:

- Includes plant listed under the ESA and/or CESA, or those plants ranked by the California Native Plant Society (CNPS) as Rank 1, 2, and (occasionally) 3, and 4.
- Includes wildlife listed under the ESA and/or CESA, and wildlife listed by CDFW as Species of Special Concern or Fully Protected Species, as well as bats listed as Medium or High Priority by the Western Bat Working Group (WBWG).
- In addition to regulations for special-status species, most birds in the United States, including non-status species, have baseline legal protections under both the federal Migratory Bird Treaty Act of 1918 (MBTA) and the CFGC. Under these laws/codes, the unauthorized and deliberate "take" (essentially, injury/harm or collection) of covered species is illegal; this protection includes active nests (those with eggs or young).

<u>City of San Rafael Municipal Code:</u> Chapter 11.12, "Trees" of the San Rafael Municipal Code regulates the planting, cutting, pruning, or removal of trees on City-owned properties and/or in the City right-of-way per; administered by the Department of Public Works. Chapter 14.12, "Hillside

Overlay District", and Chapter 14.25, Environmental and Design Review and Permits require tree replacement for the removal of "significant trees" associated with development projects on hillside properties:

- Pursuant to Chapter 11.12 of the Municipal Code, the City of San Rafael regulates the planting, cutting, pruning, breaking, injuring, removing, or spraying of trees along any public street, sidewalk or walkway in the city.
- A permit from the Department of Public Works is required for any of the aforementioned impacts to trees in the city right-of-way.
- Pursuant to Chapter 14.12, and 14.24 of the Municipal Code outline development standards within the Hillside Overlay District. Tree replacement is typically required for removal of "significant trees" defined as "oaks (*Quercus* spp.) that measure six-inches in diameter or greater, and other trees that measure 12 inches in diameter or greater at four and one-half feet above the root crown (diameter at breast height [DBH]).
- Three replacement trees are typically required per each significant tree to be removed. This requirement is administered by the City of San Rafael, Planning Division, Community Development Department.

BIOLOGICAL RESOURCES ASSESSMENT METHODS

Prior to the site visit, background literature was reviewed to determine potential presence of sensitive vegetation communities, aquatic communities, and special-status plant and wildlife species. Resources reviewed for sensitive vegetation communities and aquatic features include aerial photography (Google Earth 2020), the San Rafael USGS 7.5-minute quadrangle (USGS 1956), Online Soil Survey (California Soil Resources Lab [CSRL] 2020), the USFWS Information for Planning and Conservation (IPaC) database (USFWS 2020a), CDFW's (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2020), the CNPS's (CNPS) Electronic Inventory (2020), A Manual of California Vegetation, Online Edition (CNPS 2020), Consortium of California Herbaria (CCH 2020), Marin Flora (Howell et al. 2007), and USFWS National Wetland Inventory (NWI) (USFWS 2020b) map.

Following the background literature review, WRA biologists conducted a site visit on February 27, 2020. The Project Area was examined for indicators of wetlands, streams, and areas with an Ordinary High Water Mark (OHWM) potentially under the jurisdiction of the Corps, RWQCB, and CDFW. The Project Area was also assessed for the potential to support special-status plants and wildlife species, and for other potentially sensitive vegetation communities and other regulated biological resources.

All plant and wildlife species observed within the Project Area were documented (Attachment A). All plant species were identified to a taxonomic level sufficient to determine rare status (CNPS 2020) and/or invasive status (Cal-IPC 2020). Database search reports for all special-status plant and wildlife species documented in the vicinity of the Project Area, defined here as the San Rafael 7.5-minute USGS quadrangle map, are provided in Attachment B. Representative photographs are provided in Attachment C.

ASSESSMENT, SURVEY, AND DELINEATION RESULTS

Topography and Soils

The Project Area is composed of a relatively steep, terraced, east facing slope. Elevations range from approximately 120 feet above mean sea level (amsl) along the northwestern border to approximately 70 feet amsl at the southern border, along Ross Street. The Project Area contains one native soil mapping unit: Tocaluma-McMullin-Urban land complex, 15 to 30 percent slopes. Tocaloma and McMullin series soils consist of moderately deep to shallow, well drained soils that formed in material weathered from shale, sandstone, and basic igneous and metamorphic rocks. These soils are found on upland hillslopes. Native vegetation types typically occurring on Tocaloma and McMullin series soils include Idaho fescue (*Festuca idahoensis*), and needlegrass grasslands (*Stipa* spp.), as well as broadleaf upland forest, manzanita (*Arctostaphylos* spp.) and ceanothus (*Ceanothus* spp.) (CSRL 2019). The Tocaluma-McMullin-Urban land complex, 15 to 30 percent slopes is not considered a hydric soil (NRCS 2020).

Biological Communities

Non-sensitive Biological Communities

Mixed Ornamental Woodland

The Project Area is a vacant, unimproved parcel composed of a mixture of non-native ornamental and native trees which could be characterized as mixed ornamental woodland which is not considered a sensitive biological community. Dominant trees present within the Project Area include silver wattle (*Acacia* dealbata), red gum (*Eucalyptus camaldulensis*), coast live oak (*Quercus agrifolia*), cherry plum (*Prunus cerasifera*), and California bay (*Umbellularia californica*). The Project Area's relatively steep slopes contain sparse to dense understory shrub layer dominated by non-native invasive French broom (*Genista monspessulana*). The herbaceous layer is also dominated by non-native, invasive forbs and grasses, including Bermuda buttercup (*Oxalis pes-caprae*), white flowered onion (*Allium triquetrum*), upright veldt grass (*Ehrharta erecta*) and Dogtail grass (*Cynosaurus echinatus*).

Sensitive Biological Communities

The Project Area was investigated for indicators of potential wetlands and waters of the U.S., and no wetlands, streams, or other sensitive vegetation communities are present within the Project Area.

Significant and City Trees

An arborist survey and has been prepared for the Project (WRA 2020) which identified 58 trees within the Project Area, including 15 significant trees, 38 potential City trees located in the Ross Street Terrace right-of-way, and five (5) non-protected trees located in the private parcels but not large enough to be considered significant trees per the Municipal Code.

The Project has been designed to retain five native coast live oak and California bay trees, and the Project will potentially remove 14 significant trees, 34 potential City trees, and five non-protected invasive silver wattle trees. Permits from the City of San Rafael will be required for the

removal of significant and street trees. Conditions of approval may require tree replacement for significant trees.

Special-status Plant Species

Based upon a search of the databases listed above, 33 special-status plant species have documented occurrences within the vicinity of the Project Area, defined to include the entirety of the San Rafael 7.5' USGS quadrangle. Terrestrial habitat in the City of San Rafael is generally considered low-quality habitat for most special-status species due to human disturbance, urban development, and habitat fragmentation. Therefore, there is little potential for sensitive, terrestrial plants to occur in the Project Area. Of the 33 special-status species documented, all of these species are either unlikely or have no potential to occur within the Project Area for one or more of the following reasons:

- The Project Area does not contain hydrologic conditions (e.g., freshwater, brackish, or salt marsh) necessary to support the special-status plant(s);
- The Project Area does not contain edaphic (soil) conditions (e.g., serpentine-derived soils) necessary to support the special-status plant(s);
- The Project Area does not contain vegetation communities (e.g., chaparral, coastal scrub, valley and foothill grasslands) associated with the special-status plant(s);
- Competition from non-native invasive weeds such as French broom, Bermuda buttercup, white flowered onion, and upright veldt grass; these species, in particular, are likely what precludes the ability for special- status plants to persist within the Project Area;
- The Project Area is surrounded on all sides by urbanization, therefore, the site is not connected to a nearby expanse of suitable habitat for terrestrial special-status plant species.

Special-status Wildlife Species

A list of special-status wildlife species known to occur in the vicinity of the Study Area was compiled based on available information from CNDDB (CDFW 2020), eBird (2020), Shuford (1993), and other sources. A total of 22 special-status wildlife species have been documented within the greater vicinity of the Study Area, all of which are unlikely or have no potential to occur within the Study Area due to one or more of the following reasons:

- The setting of the Study Area is thoroughly urban, and the Study Area itself is surrounded by development including roads, houses, and landscaping, making it unsuitable for many special-status species;
- Aquatic habitats (e.g., lakes, estuaries, streams) necessary to support the special-status wildlife species are not present in the Study Area;
- Vegetation types (e.g., open grassland, marsh, old growth forest) that provide nesting and/or foraging resources necessary support the special-status wildlife species are not present in the Study Area;
- Physical structures and vegetation (e.g., mines, cliffs, tree cavities, riparian vegetation)
 necessary to provide nesting, cover, roosting, and/or foraging habitat to support the
 special-status wildlife species are not present in the Study Area;
- The Study Area is outside of the special-status wildlife species' documented local range (including the nesting/breeding range for birds);

While no special-status species were determined to have a high or moderate potential to occur, non-status nesting birds with legal protections may be present in the Study Area as discussed below.

<u>Nesting birds (non-status)</u>, <u>High Potential (Present)</u>. The Study Area contains vegetation (trees, shrubbery, etc.) that may be used as nesting habitat by bird species with legal baseline protections under the CFGC and MBTA. These laws/codes apply to a wide variety of native birds, including species that are non-migratory and/or commonly found in Marin County.

SUMMARY & HABITAT/SPECIES-SPECIFIC SUMMARY

Vegetation Communities, Wetlands and Waters of the U.S., and Riparian Habitat

The Project Area does not contain sensitive vegetation communities. No potentially jurisdictional wetlands, waters, or riparian areas are present within the Project Area, and impacts to these communities will not occur.

Significant and City Trees

The Project has been designed to retain five native coast live oak and California bay trees, and the Project will potentially remove 14 significant trees, 34 potential City trees, and five non-protected invasive silver wattle trees. Permits from the City of San Rafael will be required for the removal of significant and street trees. Conditions of approval may require tree replacement for significant trees. Adherence to the San Rafael Municipal Code permit process and conditions of approval for tree removal, and tree protection measures recommended per the arborist report will ensure that impacts to significant and City trees are less-than-significant.

Special-status Plant Species

No special-status plant species were determined to have a moderate or high potential to occur within the Study Area. No special-status plants were observed in the Study Area during the site visits. Therefore, no impacts to special-status plants will result by constructing the Project.

Special-status and Non-status Wildlife Species

Nesting birds

Native bird species whose nesting activities are protected by federal (MBTA) and state regulations (CFGC) have the potential to nest within the Study Area. Regulatory agencies (e.g., CDFW) typically treat February 1 through August 31 as the general nesting bird season. In order to avoid impacts to nesting birds, initial tree and other vegetation removal within the Study Area will be conducted from September 1 to January 31, outside of the nesting bird season, to the extent feasible. Work initiated between February 1 and August 31 will avoid impacts to nesting birds by implementing the following measures: (1) a qualified biologist will conduct a nesting bird survey no sooner than 14 days prior to the start of work, and if no active nests are found, work may begin and no impacts to birds will result, (2) if active nests are found during the survey, the biologist will establish a protective buffer zone around the nest within which no work will be allowed, and once

the young have fledged the nest or the nest becomes inactive (e.g., due to predation), then work may continue within the buffer zone area without restriction and no impacts to birds will result, (3) if work ceases for longer than 14 days, then measures 1 and 2 will be repeated.

Summary

Based on the site visit and review of information pertinent to the Project Area, the construction of the Project will not result in significant impacts to special-status plant and wildlife species or to any sensitive vegetation communities or aquatic resources. With the aforementioned avoidance measures for nesting birds, the project would have no impact to special-status and non-status nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code. Removal of significant and City trees will require approval from the City of San Rafael Community Development Department, and Public Works Department, and replacement plantings may be required as conditions of approval.

Based on the evidence collected and analyzed, the Project would not substantially reduce the number or restrict the range of any special-status plant or animal. The project would not cause a fish or wildlife population to drop below self-sustaining levels. The project would not adversely affect riparian habitat, wetlands, marshes, or other significant wildlife habitats. **The project is not anticipated to result in any potentially significant adverse biological impacts to the environment.**

Please feel free to contact me if you have any questions or concerns.

Sincerely,

Scott Yarger, Associate Biologist

WRA, Inc.

ATTACHMENTS

Attachment A – Observed Plant and Wildlife Species within the Project Area

Attachment B – Special-Status Plant and Wildlife Species Database Search Results for

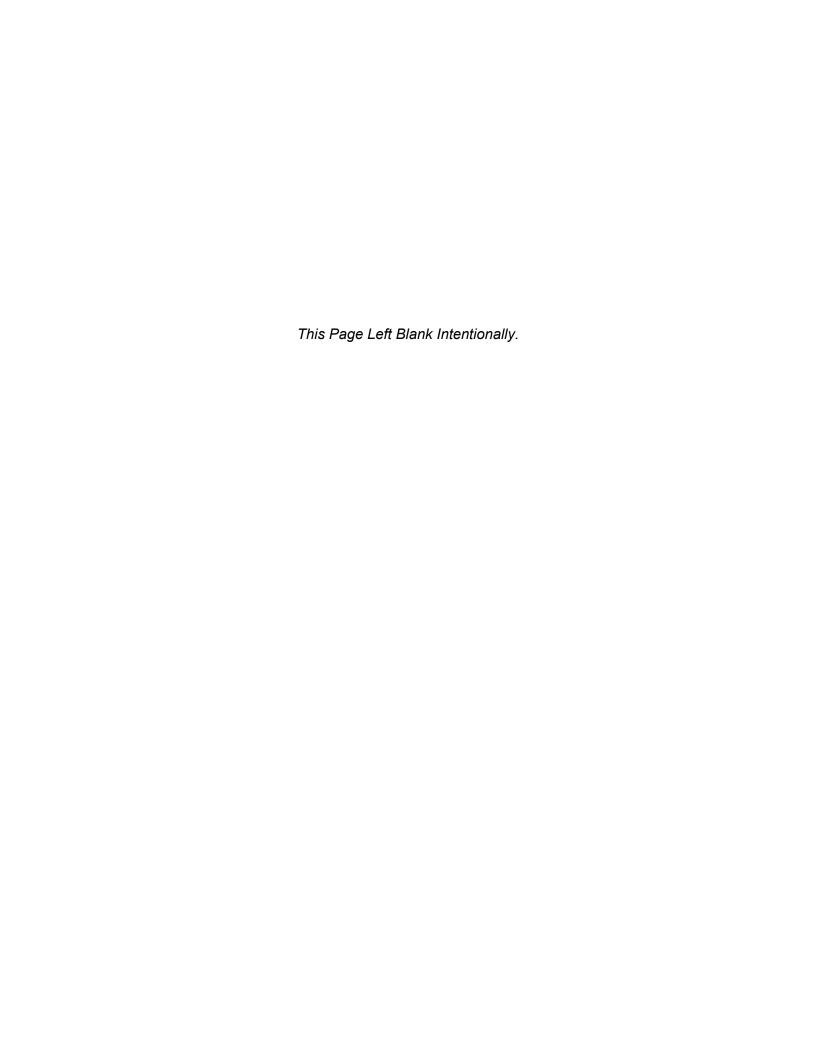
the Project Area

Attachment C – Site Photographs

References

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- [USGS] U.S. Geological Survey. 1954. 7.5-minute Quadrangle Series: San Rafael, California. Photorevised: 1980.
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- [WRA] WRA, Inc. 2020. Arborist Report for vacant lots 59 and 60 (APN #012-141-59 and APN# 012-141-60), and Ross Street Terrace, San Rafael, Marin County, CA



Attachment A -

Observed Plant and Wildlife Species within the Project Area

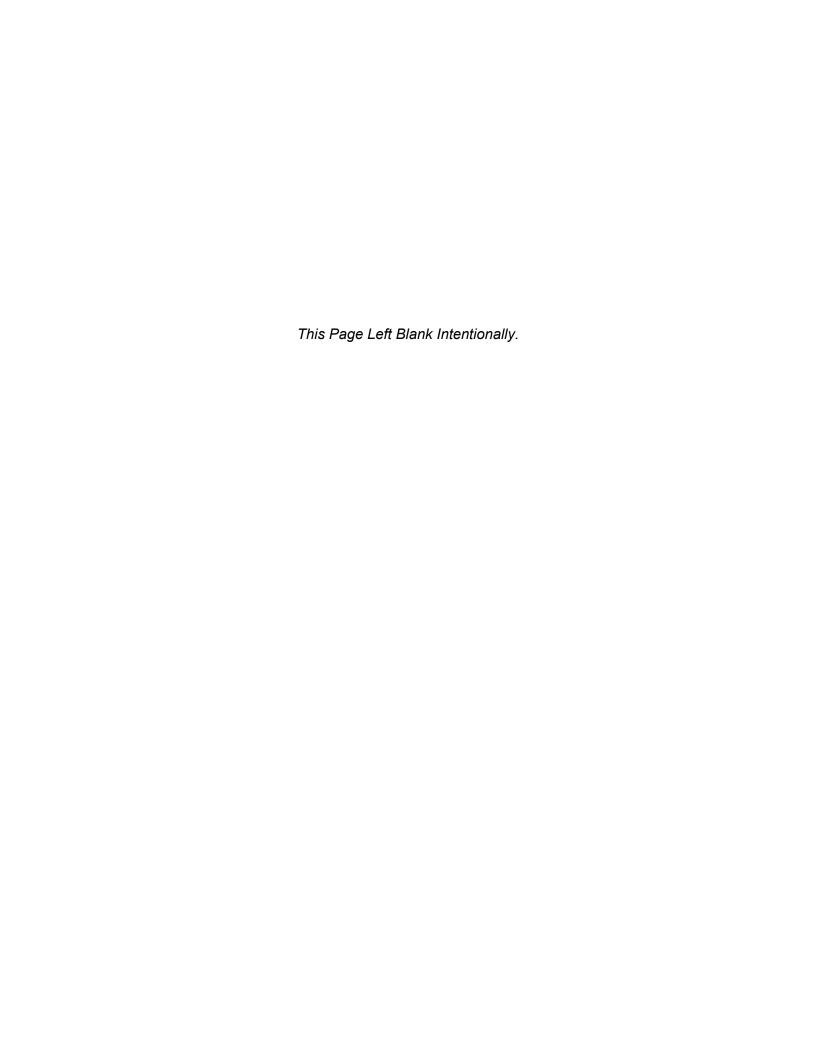


Table A-1. Plant species observed in the Project Area, March 2, 2020

bic A-1. Thank species ob		·				Wetland Status
Scientific Name	Common Name	Origin	Form	Rarity Status	CAL-IPC Status	(AW 2016)
		non-native				
Acacia dealbata	Silver wattle	(invasive)	tree, shrub	-	Moderate	-
		non-native				
Acacia melanoxylon	Blackwood acacia	(invasive)	tree	-	Limited	-
Aesculus californica	Buckeye	native	tree	-	-	-
	White flowered		perennial herb			
Allium triquetrum	onion	non-native	(bulb)	-	-	-
			perennial herb,			
Aloe sp.	Aloe	non-native	succulent	-	-	-
Apium sp.	Celery	Non-native	biennial herb	-	-	-
		non-native	annual,			
Avena barbata	Slim oat	(invasive)	perennial grass	-	Moderate	-
Carduus pycnocephalus ssp.		non-native				
pycnocephalus	Italian thistle	(invasive)	annual herb	-	Moderate	-
Chlorogalum pomeridianum	Amole	native	perennial herb	-	-	-
Claytonia perfoliata	Miner's lettuce	native	annual herb	-	-	FAC
		non-native				
Cotoneaster pannosus	Woolly cotoneaster	(invasive)	shrub	-	Moderate	-
		non-native				
Cynosurus echinatus	Dogtail grass	(invasive)	annual grass	-	Moderate	-
		non-native				
Ehrharta erecta	Upright veldt grass	(invasive)	perennial grass	-	Moderate	-
		non-native				
Eucalyptus camaldulensis	Red gum	(invasive)	tree	-	Limited	FAC
		non-native	annual,			
Festuca perennis	Italian rye grass	(invasive)	perennial grass	-	Moderate	FAC
Galium aparine	Cleavers	native	annual herb	-	-	FACU
		non-native				
Genista monspessulana	French broom	(invasive)	shrub	-	High	-
	Crane's bill		annual,			
Geranium molle	geranium	non-native	perennial herb	-	-	-
Grevillea robusta	Silkoak	non-native	tree	-	Watch	UPL

						Wetland Status
Scientific Name	Common Name	Origin	Form	Rarity Status	CAL-IPC Status	(AW 2016)
			perennial			
Juncus patens	Common rush	native	grasslike herb	-	-	FACW
		non-native				
Ligustrum lucidum	Glossy privet	(invasive)	tree, shrub	-	Limited	-
			perennial herb,			
Marah fabacea	California man-root	native	vine	-	-	-
		non-native				
Olea europaea	Olive	(invasive)	tree, shrub	-	Limited	-
		non-native				
Oxalis pes-caprae	Bermuda buttercup	(invasive)	perennial herb	-	Moderate	-
Pentagramma triangularis	Gold back fern	native	fern	-	-	-
Polypodium sp.	Rockcap fern	native	perennial herb	-	-	-
		non-native				
Prunus cerasifera	Cherry plum	(invasive)	tree	-	Limited	-
Quercus agrifolia	Coast live oak	native	tree	-	-	-
Rumex pulcher	Fiddleleaf dock	non-native	perennial herb	-	-	FAC
Sanicula crassicaulis	Pacific sanicle	native	perennial herb	-	-	-
Stellaria littoralis	Shore chickweed	native	perennial herb	Rank 4.2	-	OBL
Toxicodendron diversilobum	Poison oak	native	vine, shrub	-	-	FACU
Trifolium sp.	Clover	non-native	annual herb	-	-	-
Umbellularia californica	California bay	native	tree	-	-	FAC
		non-native				
Vinca major	Vinca	(invasive)	perennial herb	-	Moderate	-

All species identified using the *Jepson Manual*, 2nd Edition (Baldwin et al. 2012) and A Flora of Sonoma County (Best et al. 1996); nomenclature follows The Jepson Flora Project (eFlora 2018) unless otherwise noted

Sp.: "species", intended to indicate that the observer was confident in the identity of the genus but uncertain which species Cf.: intended to indicate a species appeared to the observer to be specific, but was not identified based on diagnostic characters

¹Rare Status: The CNPS Inventory of Rare and Endangered Plants (CNPS 2018)

FE: Federal Endangered
FT: Federal Threatened
SE: State Endangered
ST: State Threatened

SR: State Rare

Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere

Rank 1B: Plants rare, threatened, or endangered in California and elsewhere Rank 2A: Plants presumed extirpated in California, but more common elsewhere

Rank 2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Rank 3: Plants about which we need more information – a review list

Rank 4: Plants of limited distribution – a watch list

²Invasive Status: California Invasive Plant Inventory (Cal-IPC 2006)

High: Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.

Moderate: Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance;

limited- moderate distribution ecologically

Limited: Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically

Assessed: Assessed by Cal-IPC and determined to not be an existing current threat

³Wetland Status: National List of Plant Species that Occur in Wetlands, Arid West Region (Lichvar et al. 2016)

OBL: Almost always a hydrophyte, rarely in uplands

FACW: Usually a hydrophyte, but occasionally found in uplands FAC: Commonly either a hydrophyte or non-hydrophyte FACU: Occasionally a hydrophyte, but usually found in uplands

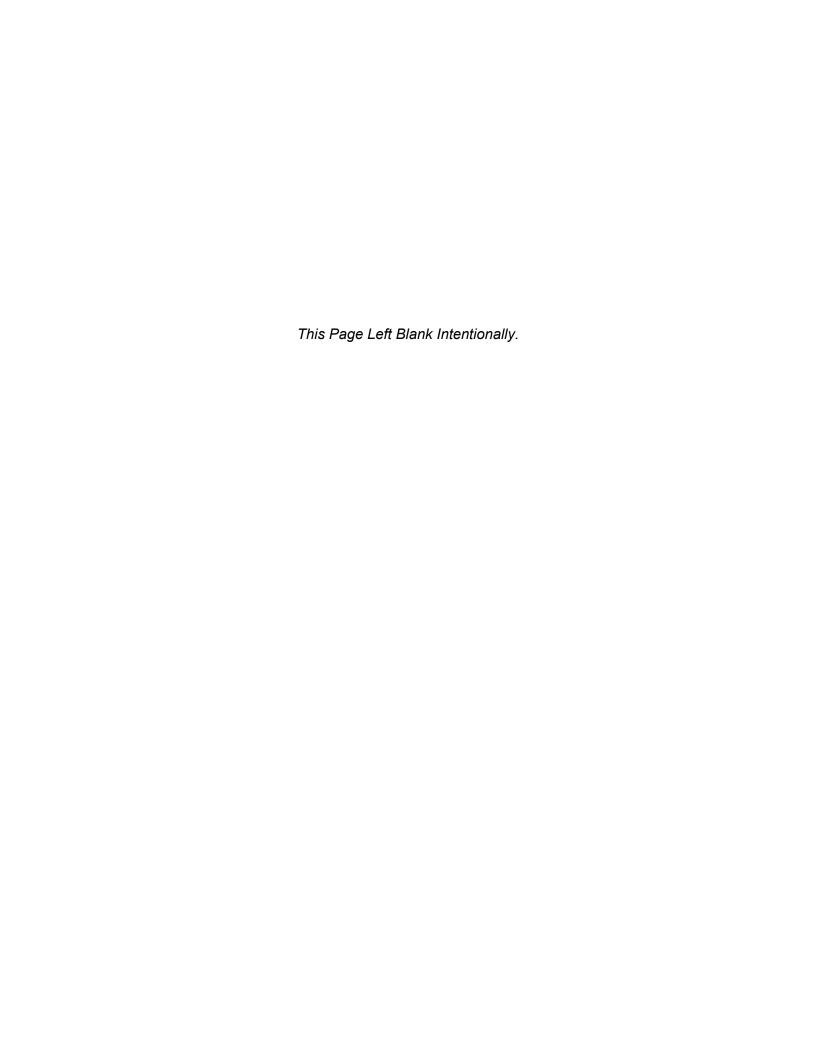
UPL: Rarely a hydrophyte, almost always in uplands NL: Rarely a hydrophyte, almost always in uplands

NI: No information; not factored during wetland delineation

Table A-2. Wildlife species observed in the Study Area, March 2, 2020

scientific name	common name		
Baeolophus inornatus	oak titmouse		
Calypte anna	Anna's hummingbird		
Corvus brachyrhynchos	American crow		
Corvus corax	common raven		
Junco hyemalis	dark-eyed junco		
Odocoileus hemionus	mule deer		
Psaltriparus minimus	American bushtit		
Troglodytes aedon	house wren		
Zenaida macroura	mourning dove		





IPaC

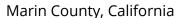
U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location





Local office

Sacramento Fish And Wildlife Office

4 (916) 414-6600

(916) 414-6713

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

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

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 from either the Regulatory Review section in IPaC (see directions below) 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 doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 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.
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Mammals

NAME STATUS

Salt Marsh Harvest Mouse Reithrodontomys raviventris No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/613

Endangered

Birds

NAME **STATUS** California Clapper Rail Rallus longirostris obsoletus **Endangered** No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4240 California Least Tern Sterna antillarum browni **Endangered** No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104 Marbled Murrelet Brachyramphus marmoratus **Threatened** There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4467 Northern Spotted Owl Strix occidentalis caurina Threatened There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1123 Short-tailed Albatross Phoebastria (=Diomedea) albatrus Endangered No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/433 Western Snowy Plover Charadrius nivosus nivosus **Threatened** There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8035

Reptiles

NAME	STATUS	
Green Sea Turtle Chelonia mydas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened	
Amphibians		
NAME	STATUS	

3/5/2020

California Red-legged Frog Rana draytonii

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

https://ecos.fws.gov/ecp/species/2891

Threatened

Fishes

NAME STATUS

Delta Smelt Hypomesus transpacificus

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

https://ecos.fws.gov/ecp/species/321

Threatened

Tidewater Goby Eucyclogobius newberryi

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

https://ecos.fws.gov/ecp/species/57

Endangered

Insects

NAME STATUS

Mission Blue Butterfly Icaricia icarioides missionensis

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

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

Endangered

Myrtle's Silverspot Butterfly Speyeria zerene myrtleae

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6929

Endangered

San Bruno Elfin Butterfly Callophrys mossii bayensis

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

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

Endangered

Flowering Plants

NAME STATUS

Marin Dwarf-flax Hesperolinon congestum

No critical habitat has been designated for this species.

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

Threatened

Santa Cruz Tarplant Holocarpha macradenia

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

the chical habitat

https://ecos.fws.gov/ecp/species/6832

Threatened

Showy Indian Clover Trifolium amoenum

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6459

Endangered

White-rayed Pentachaeta Pentachaeta bellidiflora No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7782 Endangered

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

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

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
- Measures for avoiding and minimizing impacts to birds
 http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird

species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED
FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE
WHICH THE BIRD BREEDS
ACROSS ITS ENTIRE RANGE.
"BREEDS ELSEWHERE" INDICATES
THAT THE BIRD DOES NOT LIKELY
BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird Selasphorus sasin

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9637

Breeds Feb 1 to Jul 15

Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1626

Breeds Jan 1 to Aug 31

Black Oystercatcher Haematopus bachmani

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9591

Breeds Apr 15 to Oct 31

Black Rail Laterallus jamaicensis

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/7717

Breeds Mar 1 to Sep 15

Black Turnstone Arenaria melanocephala

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Burrowing Owl Athene cunicularia

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737

Breeds Mar 15 to Aug 31

California Spotted Owl Strix occidentalis occidentalis

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/7266

Breeds Mar 10 to Jun 15

Clark's Grebe Aechmophorus clarkii

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Dec 31

Common Yellowthroat Geothlypis trichas sinuosa

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084

Breeds May 20 to Jul 31

Golden Eagle Aquila chrysaetos

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Jan 1 to Aug 31

https://ecos.fws.gov/ecp/species/1680

Long-billed Curlew Numenius americanus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511

Breeds elsewhere

Marbled Godwit Limosa fedoa

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9481

Breeds elsewhere

Nuttall's Woodpecker Picoides nuttallii

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410

Breeds Apr 1 to Jul 20

Oak Titmouse Baeolophus inornatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9656

Breeds Mar 15 to Jul 15

Rufous Hummingbird selasphorus rufus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/8002

Breeds elsewhere

Short-billed Dowitcher Limnodromus griseus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9480

Breeds elsewhere

Song Sparrow Melospiza melodia

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243

Breeds Apr 15 to Jul 20

Breeds Feb 20 to Sep 5

Tricolored Blackbird Agelaius tricolor

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/3910

Breeds Mar 15 to Aug 10

Whimbrel Numenius phaeopus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/9483

Breeds elsewhere

Willet Tringa semipalmata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Wrentit Chamaea fasciata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (=)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (1)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

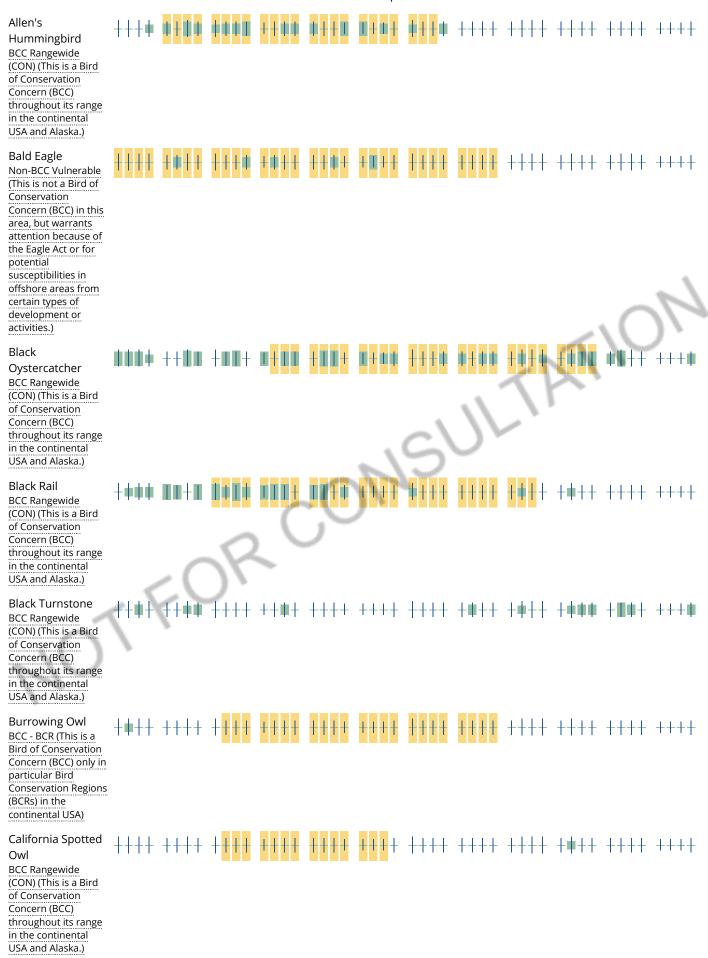
No Data (-)

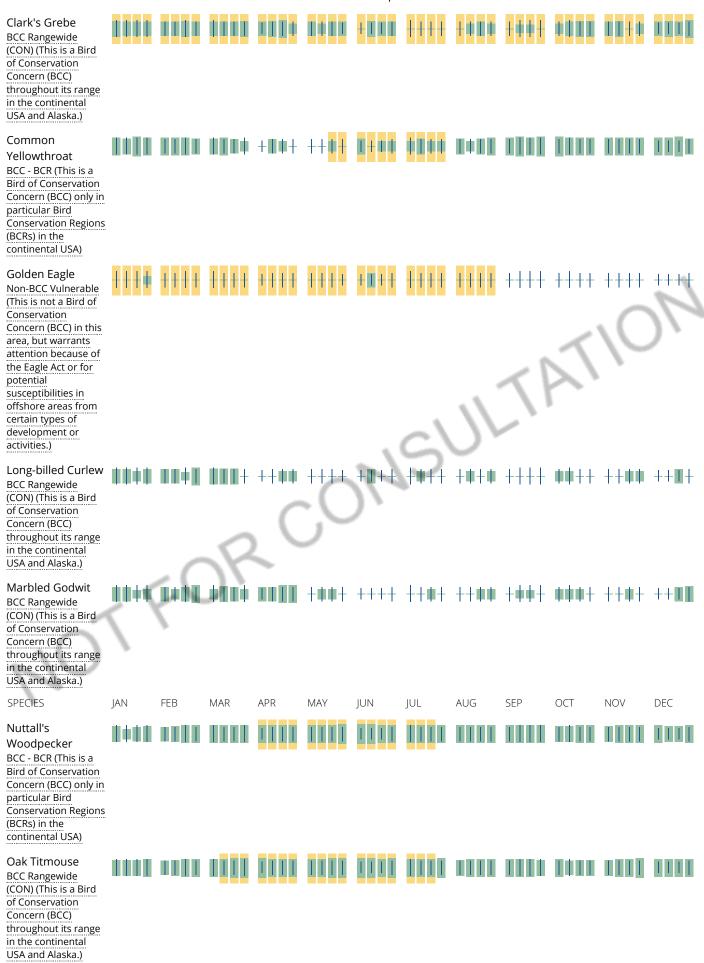
A week is marked as having no data if there were no survey events for that week.

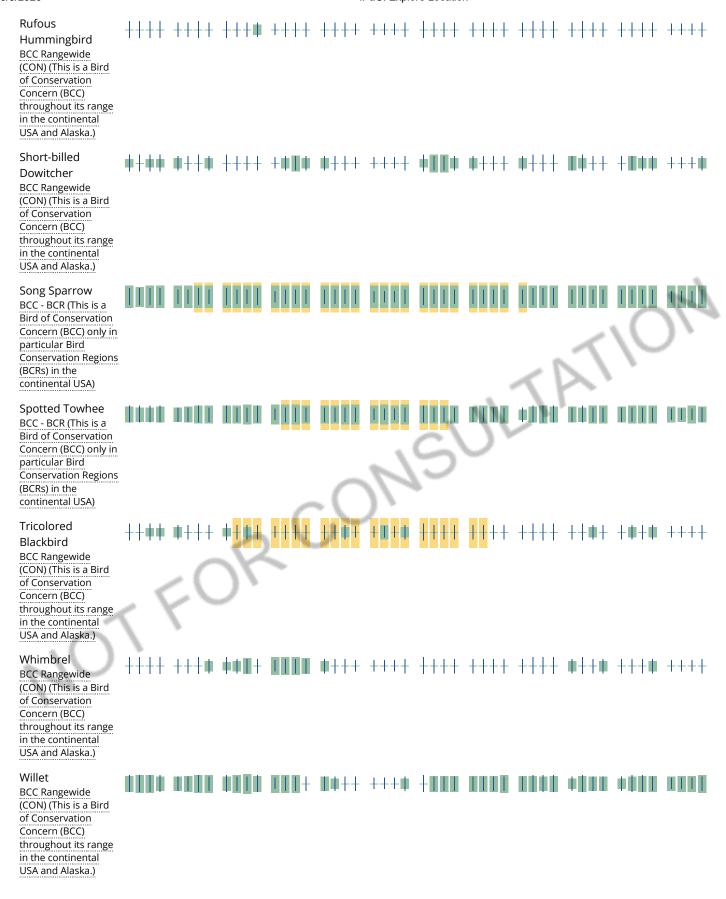
Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

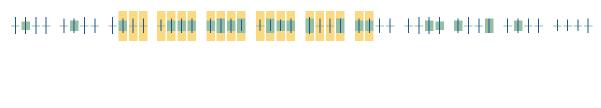








Wrentit
BCC Rangewide
(CON) (This is a Bird
of Conservation
Concern (BCC)
throughout its range
in the continental
USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

<u>Nationwide Conservation Measures</u> describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. <u>Additional measures</u> and/or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>AKN Phenology Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

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 <u>Northeast Ocean Data Portal</u>. 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 <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.



Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

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.

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

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the <u>NWI map</u> to view wetlands at this location.

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.

NOT FOR CONSULTATION



California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

Quad IS (San Rafael (3712285))

/>span style='color:Red'> AND Taxonomic Group IS (Ferns OR Gymnosperms OR Honocots OR Lichens OR Bryophytes)

Species	Flowert Cada	Endoral Status	State Status	Clobal Bart	State Deal-	Rare Plant Rank/CDFW
Species Amorpha californica var. napensis	PDFAB08012	Federal Status None	None Status	Global Rank G4T2	State Rank S2	1B.2
Napa false indigo	FDFAB00012	None	None	0412	32	10.2
Amsinckia lunaris	PDBOR01070	None	None	G3	S 3	1B.2
bent-flowered fiddleneck	1 DBORO1070	None	NOTIC	00	00	10.2
Arctostaphylos montana ssp. montana	PDERI040J5	None	None	G3T3	S3	1B.3
Mt. Tamalpais manzanita	. 220000			30.0		.2.0
Arctostaphylos virgata	PDERI041K0	None	None	G2	S2	1B.2
Marin manzanita						
Calamagrostis crassiglumis	PMPOA17070	None	None	G3Q	S2	2B.1
Thurber's reed grass						
Chloropyron maritimum ssp. palustre	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
Point Reyes salty bird's-beak						
Chorizanthe cuspidata var. cuspidata	PDPGN04081	None	None	G2T1	S1	1B.2
San Francisco Bay spineflower						
Cirsium hydrophilum var. vaseyi	PDAST2E1G2	None	None	G2T1	S1	1B.2
Mt. Tamalpais thistle						
Dirca occidentalis	PDTHY03010	None	None	G2	S2	1B.2
western leatherwood						
Eriogonum luteolum var. caninum	PDPGN083S1	None	None	G5T2	S2	1B.2
Tiburon buckwheat						
Fissidens pauperculus	NBMUS2W0U0	None	None	G3?	S2	1B.2
minute pocket moss						
Fritillaria lanceolata var. tristulis	PMLIL0V0P1	None	None	G5T2	S2	1B.1
Marin checker lily						
Gilia millefoliata	PDPLM04130	None	None	G2	S2	1B.2
dark-eyed gilia						
Helianthella castanea	PDAST4M020	None	None	G2	S2	1B.2
Diablo helianthella						
Hemizonia congesta ssp. congesta	PDAST4R065	None	None	G5T2	S2	1B.2
congested-headed hayfield tarplant	DDI IN04000	-	-	0.4	0.4	45.4
Hesperolinon congestum Marin western flax	PDLIN01060	Threatened	Threatened	G1	S1	1B.1
	DD A CT 4 VOOO	Thusatauad	Forder was a	64	04	4D 4
Holocarpha macradenia Santa Cruz tarplant	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
Horkelia tenuiloba	PDROS0W0E0	None	None	G2	S2	1B.2
thin-lobed horkelia	FDKOSOMOEO	IAOHE	NOUL	92	32	10.2
Kopsiopsis hookeri	PDORO01010	None	None	G4?	S1S2	2B.3
small groundcone	1 5011001010	140110	140110	J+:	3102	20.0
sa groundoono						



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
Lessingia micradenia var. micradenia	PDAST5S063	None	None None	G2T2	S2	1B.2
Tamalpais lessingia						
Microseris paludosa	PDAST6E0D0	None	None	G2	S2	1B.2
marsh microseris						
Navarretia rosulata	PDPLM0C0Z0	None	None	G2	S2	1B.2
Marin County navarretia						
Pentachaeta bellidiflora	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
white-rayed pentachaeta						
Plagiobothrys glaber	PDBOR0V0B0	None	None	GH	SH	1A
hairless popcornflower						
Pleuropogon hooverianus	PMPOA4Y070	None	Threatened	G2	S2	1B.1
North Coast semaphore grass						
Polygonum marinense	PDPGN0L1C0	None	None	G2Q	S2	3.1
Marin knotweed						
Quercus parvula var. tamalpaisensis	PDFAG051Q3	None	None	G4T2	S2	1B.3
Tamalpais oak						
Sidalcea calycosa ssp. rhizomata	PDMAL11012	None	None	G5T2	S2	1B.2
Point Reyes checkerbloom						
Sidalcea hickmanii ssp. viridis	PDMAL110A4	None	None	G3TH	SH	1B.1
Marin checkerbloom						
Stebbinsoseris decipiens	PDAST6E050	None	None	G2	S2	1B.2
Santa Cruz microseris						
Streptanthus batrachopus	PDBRA2G050	None	None	G2	S2	1B.3
Tamalpais jewelflower						
Streptanthus glandulosus ssp. pulchellus	PDBRA2G0J2	None	None	G4T2	S2	1B.2
Mt. Tamalpais bristly jewelflower						
Trifolium amoenum	PDFAB40040	Endangered	None	G1	S1	1B.1
two-fork clover						

Record Count: 33



California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

Quad IS (San Rafael (3712285))

style='color:Red'> AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Species	Flowert Code	Endoral Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Species Adela oplerella	IILEE0G040	Federal Status None	State Status None	G2 G10Dai Rank	State Rank	33C or FP
Opler's longhorn moth	IILLLUGU40	None	None	G2	32	
Antrozous pallidus	AMACC10010	None	None	G5	S 3	SSC
pallid bat	AWAGGTOOTG	None	None	G 5	00	000
Ardea herodias	ABNGA04010	None	None	G5	S4	
great blue heron	7.5.107.01010	140110	110110	00	0.	
Bombus caliginosus	IIHYM24380	None	None	G4?	S1S2	
obscure bumble bee						
Bombus occidentalis	IIHYM24250	None	Candidate	G2G3	S1	
western bumble bee			Endangered			
Callophrys mossii marinensis	IILEPE2207	None	None	G4T1	S1	
Marin elfin butterfly						
Corynorhinus townsendii	AMACC08010	None	None	G3G4	S2	SSC
Townsend's big-eared bat						
Dicamptodon ensatus	AAAAH01020	None	None	G3	S2S3	SSC
California giant salamander						
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle						
Eucyclogobius newberryi	AFCQN04010	Endangered	None	G3	S3	SSC
tidewater goby						
Lasiurus cinereus	AMACC05030	None	None	G5	S4	
hoary bat						
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Melospiza melodia samuelis	ABPBXA301W	None	None	G5T2	S2	SSC
San Pablo song sparrow						
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G4	S2?	
Pomatiopsis binneyi	IMGASJ9010	None	None	G1	S1	
robust walker						
Rallus obsoletus obsoletus	ABNME05011	Endangered	Endangered	G5T1	S1	FP
California Ridgway's rail						
Rana boylii	AAABH01050	None	Candidate	G3	S3	SSC
foothill yellow-legged frog			Threatened			
Reithrodontomys raviventris	AMAFF02040	Endangered	Endangered	G1G2	S1S2	FP
salt-marsh harvest mouse						
Spirinchus thaleichthys	AFCHB03010	Candidate	Threatened	G5	S1	
longfin smelt						



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
Trachusa gummifera	IIHYM80010	None	None	G1	S1	
San Francisco Bay Area leaf-cutter bee						
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Vespericola marinensis Marin hesperian	IMGASA4140	None	None	G2	S2	

Record Count: 22



*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

55 matches found. Click on scientific name for details

Search Criteria

Found in Quad 3712285

Q Modify Search Criteria Export to Excel Modify Columns & Modify Sort Display Photos

- <u>iviouny oc</u>	ATOTI OTICOTIA	It to Excel	odily oblaiting 24 inc	any cort	<u> </u>	10100	
Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank		Global Rank
Amorpha californica var. napensis	Napa false indigo	Fabaceae	perennial deciduous shrub	Apr-Jul	1B.2	S2	G4T2
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S3	G3
<u>Arabis blepharophylla</u>	coast rockcress	Brassicaceae	perennial herb	Feb-May	4.3	S4	G4
Arctostaphylos montana ssp. montana	Mt. Tamalpais manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	1B.3	S3	G3T3
Arctostaphylos virgata	Marin manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	1B.2	S2	G2
Aspidotis carlotta-halliae	Carlotta Hall's lace fern	Pteridaceae	perennial rhizomatous herb	Jan-Dec	4.2	S3	G3
<u>Astragalus breweri</u>	Brewer's milk-vetch	Fabaceae	annual herb	Apr-Jun	4.2	S3	G3
<u>Calamagrostis</u> <u>crassiglumis</u>	Thurber's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	2B.1	S2	G3Q
Calamagrostis ophitidis	serpentine reed grass	Poaceae	perennial herb	Apr-Jul	4.3	S3	G3
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar- Jun	4.2	S4	G4
Calochortus umbellatus	Oakland star-tulip	Liliaceae	perennial bulbiferous herb	Mar-May	4.2	S3?	G3?
<u>Castilleja ambigua var.</u> <u>ambigua</u>	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	4.2	S3S4	G4T4
<u>Ceanothus gloriosus var.</u> <u>exaltatus</u>	glory brush	Rhamnaceae	perennial evergreen shrub	Mar- Jun(Aug)	4.3	S4	G4T4
Ceanothus pinetorum	Kern ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	4.3	S3	G3
Ceanothus rigidus	Monterey ceanothus	Rhamnaceae	perennial evergreen shrub	Feb- Apr(Jun)	4.2	S4	G4
<u>Chloropyron maritimum</u> <u>ssp. palustre</u>	Point Reyes bird's- beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Oct	1B.2	S2	G4?T2
	San Francisco Bay	Polygonaceae	annual herb	Apr-	1B.2	S1	G2T1
www.rareplants.cnps.org/result.htm	l?adv=t&quad=3712285						1/3

			,				
<u>Chorizanthe cuspidata</u> <u>var. cuspidata</u>	spineflower			Jul(Aug)			
<u>Cirsium hydrophilum var.</u> <u>vaseyi</u>	Mt. Tamalpais thistle	Asteraceae	perennial herb	May-Aug	1B.2	S1	G2T1
Cistanthe maritima	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar- Jun(Aug)	4.2	S3	G3G4
Cypripedium californicum	California lady's- slipper	Orchidaceae	perennial rhizomatous herb	Apr- Aug(Sep)	4.2	S4	G4
<u>Dirca occidentalis</u>	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan- Mar(Apr)	1B.2	S2	G2
Elymus californicus	California bottle-brush grass	Poaceae	perennial herb	May- Aug(Nov)	4.3	S4	G4
<u>Eriogonum luteolum var.</u> <u>caninum</u>	Tiburon buckwheat	Polygonaceae	annual herb	May-Sep	1B.2	S2	G5T2
Erysimum franciscanum	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	4.2	S3	G3
Fissidens pauperculus	minute pocket moss	Fissidentaceae	moss		1B.2	S2	G3?
<u>Fritillaria lanceolata var.</u> <u>tristulis</u>	Marin checker lily	Liliaceae	perennial bulbiferous herb	Feb-May	1B.1	S2	G5T2
Gilia capitata ssp. tomentosa	woolly-headed gilia	Polemoniaceae	annual herb	May-Jul	1B.1	S1	G5T1
Gilia millefoliata	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	1B.2	S2	G2
<u>Grindelia hirsutula var.</u> <u>maritima</u>	San Francisco gumplant	Asteraceae	perennial herb	Jun-Sep	3.2	S1	G5T1Q
Helianthella castanea	Diablo helianthella	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	1B.2	S2	G5T2
Hesperolinon congestum	Marin western flax	Linaceae	annual herb	Apr-Jul	1B.1	S1	G1
Holocarpha macradenia	Santa Cruz tarplant	Asteraceae	annual herb	Jun-Oct	1B.1	S1	G1
Horkelia tenuiloba	thin-lobed horkelia	Rosaceae	perennial herb	May- Jul(Aug)	1B.2	S2	G2
Kopsiopsis hookeri	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	Apr-Aug	2B.3	S1S2	G4?
Leptosiphon acicularis	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	4.2	S4?	G4?
<u>Leptosiphon grandiflorus</u>	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	4.2	S3S4	G3G4
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	3	S2S3	G3?
<u>Lessingia micradenia var.</u> <u>micradenia</u>	Tamalpais lessingia	Asteraceae	annual herb	(Jun)Jul- Oct	1B.2	S2	G2T2
Micropus amphibolus	Mt. Diablo cottonweed	Asteraceae	annual herb	Mar-May	3.2	S3S4	G3G4
Microseris paludosa	marsh microseris	Asteraceae	perennial herb	Apr- Jun(Jul)	1B.2	S2	G2
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G4T2
Navarretia rosulata	Marin County navarretia	Polemoniaceae	annual herb	May-Jul	1B.2	S2	G2
Pentachaeta bellidiflora	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	1B.1	S1	G1

3/3/2020		CNPS I	nventory Results				
<u>Perideridia gairdneri ssp.</u> g <u>airdneri</u>	Gairdner's yampah	Apiaceae	perennial herb	Jun-Oct	4.2	S3S4	G5T3T4
<u>Plagiobothrys glaber</u>	hairless popcornflower	Boraginaceae	annual herb	Mar-May	1A	SH	GH
Pleuropogon hooverianus	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	1B.1	S2	G2
Polygonum marinense	Marin knotweed	Polygonaceae	annual herb	(Apr)May- Aug(Oct)	3.1	S2	G2Q
Quercus parvula var. tamalpaisensis	Tamalpais oak	Fagaceae	perennial evergreen shrub	Mar-Apr	1B.3	S2	G4T2
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	4.2	S3	G4
<u>Sidalcea calycosa ssp.</u> <u>rhizomata</u>	Point Reyes checkerbloom	Malvaceae	perennial rhizomatous herb	Apr-Sep	1B.2	S2	G5T2
Stebbinsoseris decipiens	Santa Cruz microseris	Asteraceae	annual herb	Apr-May	1B.2	S2	G2
Streptanthus batrachopus	Tamalpais jewelflower	Brassicaceae	annual herb	Apr-Jul	1B.3	S2	G2
<u>Streptanthus glandulosus</u> <u>ssp. pulchellus</u>	Mt. Tamalpais bristly jewelflower	Brassicaceae	annual herb	May- Jul(Aug)	1B.2	S2	G4T2
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1

Suggested Citation

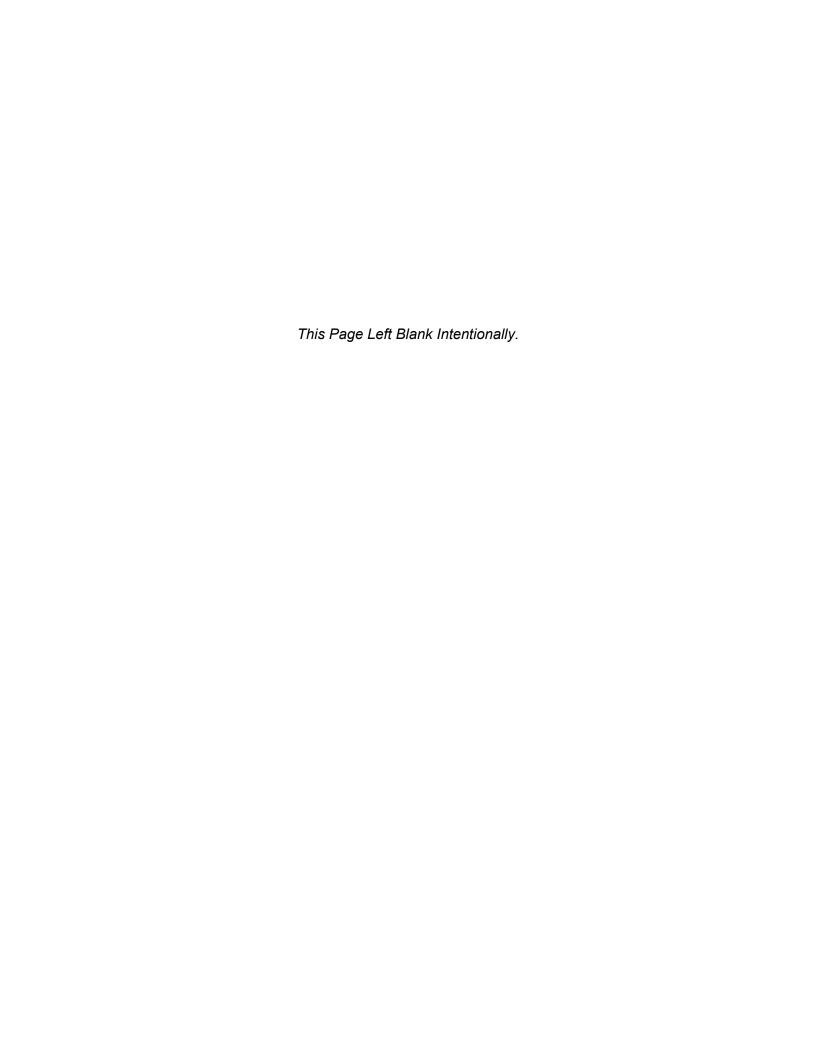
California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 03 March 2020].

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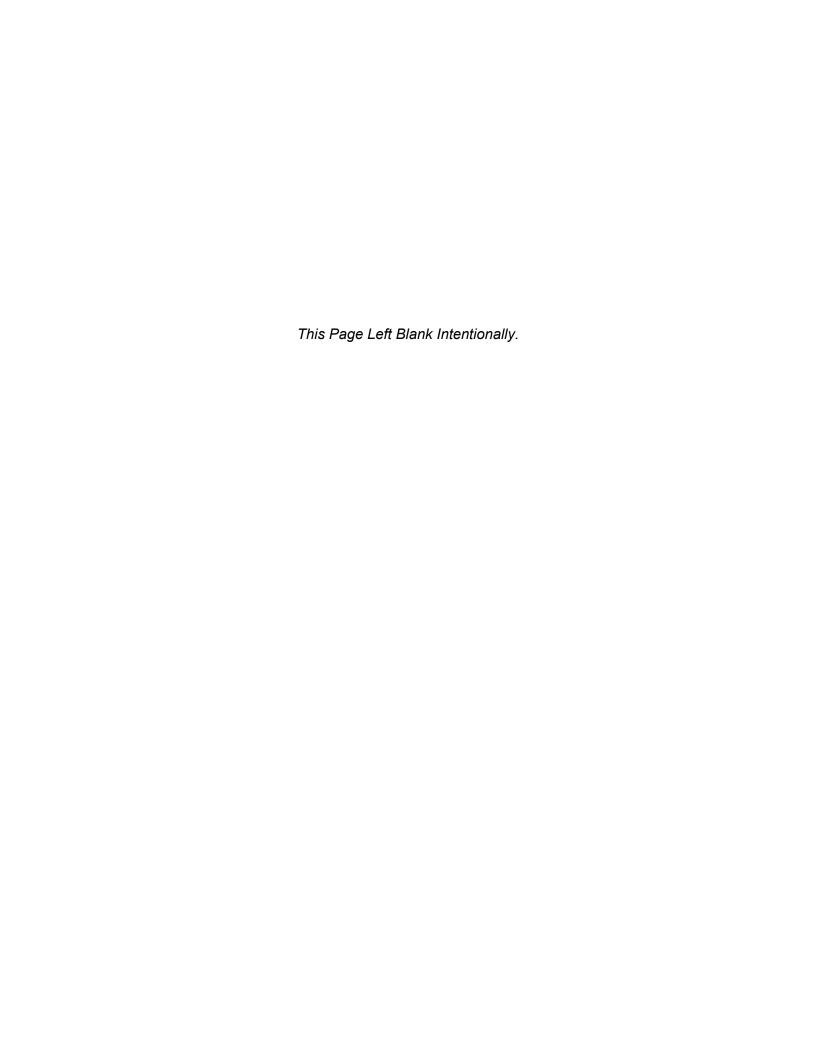
rareplants@cnps.org

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Attachment C-

Site Photographs





Photograph 1. Photograph depicting vegetation within the parcels, dominated by non-native, invasive silver wattle (*Acacia dealbata*), and French broom (*Genista monspessulana*), with occasional native coast live oak (*Quercus agrifolia*) trees present.



Photograph 2. Photograph depicting vegetation within the Ross Street Terrace right-of-way, dominated by non-native annual grasses and Bermuda buttercup (*Oxalis pes-caprae*).





Photograph 3. Photograph depicting non-native, invasive silver wattle (*Acacia dealbata*) to be removed within the parcels.



Photograph 4. Photograph depicting a native coast live oak City tree within the Ross Street Terrace right-of-way, which is proposed for removal.

