

Appendix E
Biological Report

April 14, 2022

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Re: Biological Report for the Aldersly Retirement Community Redevelopment Project; San Rafael, Marin County, California

Mr. Lin:

This letter provides a biological evaluation for the proposed Aldersly Retirement Community Redevelopment Project (Project) located at 326 Mission Avenue (Study Area) in the City of San Rafael, Marin County, California (Figure 1, Attachment A). The purpose of this assessment is to provide technical biological resources information to support an application for redevelopment of the Study Area. This report evaluates the potential for the Study Area to support special-status species, sensitive land cover types (e.g., specific vegetation communities), and aquatic features as well as evaluating the potential for impacts to these biological resources as a result of the Project. A desktop review and a site visit were used for this analysis.

The Study Area is located on an approximately 3.1-acre property (Assessor Parcel Numbers [APNs] 014-05-054, 014-05-032), situated east of US 101 in the central portion of the City of San Rafael. The Study Area is currently a fully developed retirement facility and is completely surrounded by urban development including a high school, apartments, homes and commercial centers. The nearest natural environmental feature is San Rafael Creek located approximately 0.25 mile to the south, and separated from the Study Area by prominent (high-traffic) streets and shopping centers. No natural corridors connect to the Study Area to nearby natural or otherwise undeveloped areas.

SUMMARY OF FINDINGS

A biological assessment of the Study Area was performed in March 2022. The Study Area is entirely developed and does not contain any sensitive land cover types or aquatic features. Given these existing conditions, all special-status plant and wildlife species known to be within the vicinity are unlikely or have no potential to occur within the Study Area. As such, the Project does not have the potential to result in significant impacts to biological resources, with the exception of general nesting birds; measures to avoid impacts to the latter are included herein.

METHODS

On March 29, 2022, WRA biologist Nicholas Brinton visited the Study Area to map land cover types, document plant and wildlife species present, and evaluate on-site habitat for the potential to support special-status species. Prior to the site visit, the WRA biologist reviewed literature resources and

performed database searches to assess the potential for sensitive biological communities (e.g., wetlands) and special-status species (e.g., endangered plants), including:

- Soil Survey of Marin County (USDA 2022)
- San Rafael 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2022)
- Contemporary aerial photographs (Google Earth 2022)
- National Wetlands Inventory (USFWS 2022)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2022a)
- California Native Plant Society Inventory of Rare Plants (CNPS 2022a)
- Consortium of California Herbaria (CCH1, CCH2 2022)
- A Manual of California Vegetation, Online Edition (CNPS 2022b)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- California Natural Community List (CDFW 2018)

Database searches (i.e., CNDDDB, CNPS) for special-status species focused on the San Rafael and San Quentin USGS 7.5-minute quadrangles.

Following the remote assessment, the biologist completed a field review over the course of one day to document: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if such provided suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic natural communities (e.g., wetlands) were present, and (4) if special-status species were present. The Study Area was reviewed for the presence of aquatic resources including wetlands and unvegetated waters of the State and waters of the U.S. Methods for identifying these areas relied on the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), Arid West Regional Supplement (Corps 2008), A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008), Corps of Engineers Regulatory Guidance Letter 05-05 (Corps 2005), and related documentation. For any streams observed, top of bank is identified in the field by indicators such as benching and changes in vegetation.

REGULATORY SETTING

Local Land Use and Policy

The Study Area is within the City of San Rafael and is subject to the San Rafael General Plan (San Rafael 2021). General Plan Policies relevant to biological resources are covered in Sections C-1.12 through C-1.17 and are discussed in more detail below. Marin County codes are also discussed further below.

Sensitive Natural Communities

Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2022a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDDB; CDFW 2021b). Vegetation alliances are ranked 1 through 5 in the CNDDDB based on NatureServe's (2020) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to

sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under the California Environmental Quality Act (CEQA; CCR Title 14, Div. 6, Chap. 3, Appendix G). Sensitive natural communities also include streams, lakes and associated riparian vegetation protected by CDFW under Sections 1600-1616 of California Fish and Game Code. In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act and Section 21083.4 of California Public Resources Code.

Wetlands, Streams and Aquatic Areas

The U.S. Army Corps of Engineers (Corps) regulates “Waters of the U.S.” under Section 404 of the Clean Water Act. Waters of the U.S. are defined in the Code of Federal Regulations (CFR) as waters susceptible to use in commerce, including interstate waters and wetlands, all non-wetland waters (intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Regulated areas under these programs include wetlands and unvegetated water bodies (such as lakes and streams) meeting defined criteria described in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and related Supplements and Regulatory Guidance Letters. Waters of the State include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019).

Special Status Species

This report assesses the presence and potential presence of species protected by a range of federal and state laws and regulations. Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features “essential to the conservation of the species.” Specific protections and permitting mechanisms for these species differ under each of these acts, and a species’ designation under one law does not automatically provide protection under the other. California Fish and Game Code (CFGC) also includes lists of “Fully Protected Species”, which are specific lists of birds, mammals, reptiles, amphibians, and fishes designated with this status. Special protections for nesting birds and breeding bats are also provided by the federal Bald and Golden Eagle Protection Act, federal Migratory Bird Treaty Act (MBTA), and sections 3503, 3503.5 and 3513 of CFGC. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. The Marine Mammal Protection Act (MMPA) was enacted in 1972 and protects all marine mammals within the territorial boundaries of the United States from take. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 “rare” or “endangered” plant species, and prevents “take”, with few exceptions, of these species. Plant species on the CNPS Rare and Endangered Plant Inventory (Inventory; CNPS 2022a) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some Rank 3 species, are also considered special-status plant species and must be considered under CEQA. Rank 4 and some Rank 3 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare.

Additional CEQA-Specific Protections

To address additional species protections afforded under CEQA, CDFW has developed a list of special species as “a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status;” this list includes lists developed by other organizations. Additionally, any species listed as sensitive within local plans, policies and ordinances are sensitive under CEQA. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

VEGETATION COMMUNITIES AND LAND COVER TYPES

During the site visit, WRA Inc. (WRA) evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. Communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List (CDFW 2022) and A Manual of California Vegetation, Online Edition (CNPS 2022b). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists.

As shown in Figure 2 (Attachment A), WRA observed a single land cover type within the Study Area: Developed. No other landscape cover types, aquatic resources, or potentially sensitive land cover types were observed.

TABLE 1. VEGETATION COMMUNITY AND LAND COVER TYPES

COMMUNITY/LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN STUDY AREA
<i>Terrestrial Community/Land Cover</i>			
Developed	None	None	3.13

Terrestrial Communities

Developed/Disturbed Area (no vegetation alliance). CDFW Rank: None.

The entire Study Area is mapped as developed/disturbed. These areas include buildings, paved driveways, paved walkways and other hardscapes associated with urban development. In addition, vegetation that is present in this community includes landscaped gardens, ornamental trees and shrubs as well as flowers which are all managed for aesthetics. This land cover type is not designated as a sensitive natural community by CDFW.



Aquatic Resources

No streams, wetlands or other aquatic resources are present within the Study Area. The developed nature of the Study Area precludes any natural water features and as such there will be no impact to aquatic resources.

SENSITIVE PLANT SPECIES

The entire Study Area is developed and plant species present there consist nearly entirely of ornamental species specifically planted and maintained as landscaping. No natural or unmanaged areas were present that could support sensitive plants. Based upon a review of the resource databases (CNPS and CNNDDB), a total of 67 special-status plant species have been documented within a 5-mile radius of the Study Area. None of those plants have the potential to occur for one or more of the following reasons:



Grounds within the Study Area are entirely paved and landscaped. No natural waters or undeveloped surfaces are present to support sensitive aquatic resources. Large trees such as the palm in the background are scheduled for removal and while large are not sensitive species.

- Edaphic (soil) conditions (e.g., mafic, serpentine, sandy) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane, elevations, rock outcrops) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., chaparral, broadleaved upland forest, coastal dunes) necessary to support the special-status plant species are not present in the Study Area; or
- The Study Area is geographically isolated from the documented range of the special-status plant species.

Due to the highly developed and managed nature of the Study Area, and the additional reasons noted above, no special-status plant species are likely to occur.

SENSITIVE WILDLIFE SPECIES

Sensitive wildlife species were identified using a 5-mile radius through a search of the CDFW RareFind 5 (CNDDDB) database (CDFW 2022a). Of the 37 special-status wildlife species documented in the vicinity of the Study Area, most were excluded based on a lack of habitat features. Features not found within the Study Area that are required to support special-status wildlife species include:

- Vernal pools
- Streams, marshes or wetland habitats;
- Stock ponds or other standing water;
- Riparian or other dense forest vegetation;
- Sand dunes or bare gravelly outcrops;

- Large burrows;
- Presence of specific host plants;
- Forest or other expanses of trees,
- Native grassland; or
- Caves, bridges, abandoned/dilapidated buildings.

The absence of such habitat features eliminates components critical to the survival or movement of most special-status species found in the vicinity. Given the developed nature of the Study Area, no special-status species have the potential to occur in the immediate vicinity of or in portions of the Study Area. However, general nesting birds protected by the California Fish and Game Code (CFGC) and specifically cited under the San Rafael General Plan (C-1.13E) do have the potential to occur within the Study Area and minimization measures are discussed below to assure the proposed Project has a less than significant impact on native nesting birds.



Buildings were in good repair and occupied at the time of the assessment. None of the buildings showed signs of current or potential future occupation by bats or other wildlife. For example, all vents were covered by well-maintained screens which would prevent entrance by wildlife including bats.

LOCAL BIOLOGICAL RESOURCE PLANS AND POLICIES

General Plan Policies

Policy C-1.12-1.17 cover a variety of natural or sensitive species and habitats including: natural habitats, special-status species, invasive plants, landscaping, urban forestry and tree management. While natural habitats are absent, and invasive plants are controlled through management of onsite landscaping, redevelopment would also need to consider management of the urban forest (C-1.16) and potential impacts to heritage trees (C-1.17). Prior to removal of any trees, an application will need to be made through the City to obtain permission to remove such trees (see summary of the arborist's survey below). Additionally, policy C-1.13E: Avoidance of nesting birds, is particularly applicable to the Study Area as nesting birds are the only protected species (under CFGC) that may occur within the Study Area and as such should work occur during the nesting season, surveys will be necessary to minimize potential impacts.

Marin County Sensitive Resources

In Marin County, a sensitive resource includes "jurisdictional wetlands, occurrences of special-status species, occurrences of sensitive natural communities, wildlife nurseries and nesting areas, and wildlife movement corridors. The County development review process typically requires a site assessment by qualified professionals to confirm whether any sensitive resources could be affected."

WILDLIFE CORRIDORS

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed habitat connectivity data available through CDFW from the Essential Connectivity Areas dataset (CDFW and Caltrans 2010; CDFW 2022b). Additionally, aerial imagery (Google Earth 2022) for the local area was referenced to assess if local core habitat areas were present within or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The Study Area is not within a wildlife corridor depicted in the Wildlife Corridor Map in the Conservation Element of the General Plan. Furthermore, information from CDFW (2022) does not place the Study Area within a known or potential movement corridor. Dense urban development surrounding the Study Area precludes free movement by wildlife and as such no corridors or impacts to corridors would occur as a result of the Project.

FINDINGS AND RECOMMENDATIONS

Based on the site visit and review of the proposed Project, the Project does not have the potential to result in significant impacts to biological resources with the exception of general nesting birds. The sections below contain a summary and recommendations (if appropriate) for best management practices to employ as part of the project to comply with existing laws and regulations relevant to biological resources for the Project.

Sensitive Vegetation and Aquatic Communities

The project will result in no impact to sensitive vegetation communities. The Study Area is entirely developed and any vegetation present is intentionally planted and managed for aesthetics. No special-status plants or aquatic communities are present that would be impacted as a result of the Project.

Special-status Species

Sixty-seven (67) special-status plant species and 37 special-status wildlife species are documented within five miles of the Study Area (Attachment B). Upon review of existing conditions, species distributions, and habitat requirements, no special-status plant or wildlife species are likely to occur. This is due almost entirely to the developed, paved and landscaped nature of the Study Area. However, native birds with baseline protections under CFGC and MBTA are likely to nest within the Study Area, and may be impacted if redevelopment activities such as vegetation removal or building demolition were to occur during the nesting season (typically considered to be February 1 – August 31).

To avoid impacts to native nesting birds, it is recommended that any Project activities (particularly tree/vegetation removal and building demolition) occur between September 1 and January 31, outside of the nesting season. However, should work need to occur during the nesting season (Feb. 1 – August 31) a preconstruction nesting bird survey should be conducted prior to initiating work. During the survey, a qualified biologist should survey the Study Area and any publicly accessible areas within 300 feet to determine if native birds are nesting in proximity to the Project. If an active nest is located (i.e., one containing eggs or young) a work-exclusion buffer should be implemented around the nest commensurate with the nest location and species. In some cases, buffers may be as small as 25 feet for hidden nests

(e.g., in tree or building cavities) and/or for urban adapted species; buffers may also extend up to 300 feet for raptors or more sensitive species. No construction activity should occur within the established buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) or the nest has become otherwise inactive (e.g. due to predation). At that time the buffer may be removed and work within the buffer resume.

Implementation of this measure would reduce impacts to nesting raptors and passerines to a level considered less than significant pursuant to CEQA.

Local Plans and Policies

No creeks, wetlands or other sensitive resources are present that would require buffers, mitigation or further consideration under the City Plan or County Code. Measures described above for nesting birds, the only sensitive biological resource potentially present would, comply with these codes.

A tree survey of the Study Area was previously performed by MacNair & Associates (2018), with a total of 159 trees assessed. These trees are overwhelmingly non-native ornamentals planted for landscaping purposes; only three native trees (all coast live oaks [*Quercus agrifolia*]) were identified. Recommendations regarding management and preservation of on-site trees is provided in the arborist's report.

Wildlife Corridors

The Project would have no impact on existing established wildlife corridors.

Habitat Conservation Plans

The Project does not overlap and is not in proximity to an area covered by an existing Habitat Conservation Plan. Therefore, the project would not conflict with such a plan.

While some best management practices are warranted to comply with existing established Codes and standards, the Project would not result in any significant impacts to biological resources if the measures recommended above are followed.

Sincerely,



Jason Yakich
Senior Biologist

Enclosures: Attachment A - Figures
Attachment B – Species Database Search Results

REFERENCES

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Sources: National Geographic, WRA | Prepared By: mrochelle, 4/3/2022

Figure 1. Study Area Location

Aldersly Retirement Community
326 Mission Ave., San Rafael, California

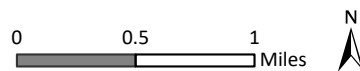




Figure 2.
Study Area Land Cover

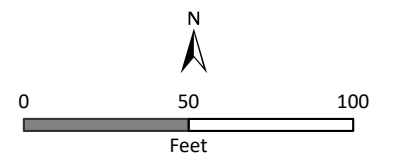
Aldersly Retirement Community
326 Mission Ave., San Rafael, California



 Study Area - 3.13 ac.

Land Cover Types

-  Developed - Hardscape - 2.02 ac.
-  Developed - Landscaped - 1.11 ac.





Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (San Rafael (3712285)) OR San Quentin (3712284) AND Taxonomic Group (Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
bent-flowered fiddleneck <i>Amsinckia lunaris</i>	PDBOR01070	None	None	G3	S3	1B.2
coastal triquetrella <i>Triquetrella californica</i>	NBMUS7S010	None	None	G2	S2	1B.2
congested-headed hayfield tarplant <i>Hemizonia congesta ssp. congesta</i>	PDAST4R065	None	None	G5T2	S2	1B.2
dark-eyed gilia <i>Gilia millefoliata</i>	PDPLM04130	None	None	G2	S2	1B.2
Diablo helianthella <i>Helianthella castanea</i>	PDAST4M020	None	None	G2	S2	1B.2
fragrant fritillary <i>Fritillaria liliacea</i>	PMLIL0V0C0	None	None	G2	S2	1B.2
hairless popcornflower <i>Plagiobothrys glaber</i>	PDBOR0V0B0	None	None	GX	SX	1A
long-styled sand-spurrey <i>Spergularia macrotheca var. longistyla</i>	PDCAR0W062	None	None	G5T2	S2	1B.2
Marin checker lily <i>Fritillaria lanceolata var. tristulis</i>	PMLIL0V0P1	None	None	G5T2	S2	1B.1
Marin County navarretia <i>Navarretia rosulata</i>	PDPLM0C0Z0	None	None	G2	S2	1B.2
Marin knotweed <i>Polygonum marinense</i>	PDPGN0L1C0	None	None	G2Q	S2	3.1
Marin manzanita <i>Arctostaphylos virgata</i>	PDERI041K0	None	None	G2	S2	1B.2
Marin western flax <i>Hesperolinon congestum</i>	PDLIN01060	Threatened	Threatened	G1	S1	1B.1
marsh microseris <i>Microseris paludosa</i>	PDAST6E0D0	None	None	G2	S2	1B.2
minute pocket moss <i>Fissidens pauperculus</i>	NBMUS2W0U0	None	None	G3?	S2	1B.2
Mt. Tamalpais bristly jewelflower <i>Streptanthus glandulosus ssp. pulchellus</i>	PDBRA2G0J2	None	None	G4T2	S2	1B.2
Mt. Tamalpais manzanita <i>Arctostaphylos montana ssp. montana</i>	PDERI040J5	None	None	G3T3	S3	1B.3
Mt. Tamalpais thistle <i>Cirsium hydrophilum var. vaseyi</i>	PDAST2E1G2	None	None	G2T1	S1	1B.2
Napa false indigo <i>Amorpha californica var. napensis</i>	PDFAB08012	None	None	G4T2	S2	1B.2



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
North Coast semaphore grass <i>Pleuropogon hooverianus</i>	PMPOA4Y070	None	Threatened	G2	S2	1B.1
Point Reyes checkerbloom <i>Sidalcea calycosa ssp. rhizomata</i>	PDMAL11012	None	None	G5T2	S2	1B.2
Point Reyes salty bird's-beak <i>Chloropyron maritimum ssp. palustre</i>	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
saline clover <i>Trifolium hydrophilum</i>	PDFAB400R5	None	None	G2	S2	1B.2
San Francisco Bay spineflower <i>Chorizanthe cuspidata var. cuspidata</i>	PDPGN04081	None	None	G2T1	S1	1B.2
Santa Cruz microseris <i>Stebbinsoseris decipiens</i>	PDAST6E050	None	None	G2	S2	1B.2
Santa Cruz tarplant <i>Holocarpha macradenia</i>	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
small groundcone <i>Kopsiopsis hookeri</i>	PDORO01010	None	None	G4?	S1S2	2B.3
Suisun Marsh aster <i>Symphyotrichum lentum</i>	PDASTE8470	None	None	G2	S2	1B.2
Tamalpais jewelflower <i>Streptanthus batrachopus</i>	PDBRA2G050	None	None	G2	S2	1B.3
Tamalpais lessingia <i>Lessingia micradenia var. micradenia</i>	PDAST5S063	None	None	G2T2	S2	1B.2
Tamalpais oak <i>Quercus parvula var. tamalpaisensis</i>	PDFAG051Q3	None	None	G4T2	S2	1B.3
thin-lobed horkelia <i>Horkelia tenuiloba</i>	PDROS0W0E0	None	None	G2	S2	1B.2
Thurber's reed grass <i>Calamagrostis crassiglumis</i>	PMPOA17070	None	None	G3Q	S2	2B.1
Tiburon buckwheat <i>Eriogonum luteolum var. caninum</i>	PDPGN083S1	None	None	G5T2	S2	1B.2
Tiburon jewelflower <i>Streptanthus glandulosus ssp. niger</i>	PDBRA2G0T0	Endangered	Endangered	G4T1	S1	1B.1
Tiburon mariposa-lily <i>Calochortus tiburonensis</i>	PMLIL0D1C0	Threatened	Threatened	G1	S1	1B.1
Tiburon paintbrush <i>Castilleja affinis var. neglecta</i>	PDSCR0D013	Endangered	Threatened	G4G5T1T2	S1S2	1B.2
two-fork clover <i>Trifolium amoenum</i>	PDFAB40040	Endangered	None	G1	S1	1B.1
western leatherwood <i>Dirca occidentalis</i>	PDTHY03010	None	None	G2	S2	1B.2
white-rayed pentachaeta <i>Pentachaeta bellidiflora</i>	PDAST6X030	Endangered	Endangered	G1	S1	1B.1

Record Count: 40



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (San Rafael (3712285) OR San Quentin (3712284)) AND Taxonomic Group (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Alameda song sparrow <i>Melospiza melodia pusillula</i>	ABPBXA301S	None	None	G5T2?	S2S3	SSC
black-crowned night heron <i>Nycticorax nycticorax</i>	ABNGA11010	None	None	G5	S4	
California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041	None	Threatened	G3G4T1	S1	FP
California giant salamander <i>Dicamptodon ensatus</i>	AAAAH01020	None	None	G3	S2S3	SSC
California red-legged frog <i>Rana draytonii</i>	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	ABNME05011	Endangered	Endangered	G3T1	S1	FP
coho salmon - central California coast ESU <i>Oncorhynchus kisutch pop. 4</i>	AFCHA02034	Endangered	Endangered	G5T2T3Q	S2	
Cooper's hawk <i>Accipiter cooperii</i>	ABNKC12040	None	None	G5	S4	WL
double-crested cormorant <i>Nannopterum auritum</i>	ABNFD01020	None	None	G5	S4	WL
eulachon <i>Thaleichthys pacificus</i>	AFCHB04010	Threatened	None	G5	S2	
foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050	None	Endangered	G3	S3	SSC
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
great egret <i>Ardea alba</i>	ABNGA04040	None	None	G5	S4	
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G3G4	S4	
longfin smelt <i>Spirinchus thaleichthys</i>	AFCHB03010	Candidate	Threatened	G5	S1	
Marin elfin butterfly <i>Callophrys mossii marinensis</i>	IILEPE2207	None	None	G4T1	S1	
Marin hesperian <i>Vespericola marinensis</i>	IMGASA4140	None	None	G2	S2	
mimic tryonia (=California brackishwater snail) <i>Tryonia imitator</i>	IMGASJ7040	None	None	G2	S2	



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
monarch - California overwintering population <i>Danaus plexippus pop. 1</i>	IILEPP2012	Candidate	None	G4T2T3	S2S3	
northern harrier <i>Circus hudsonius</i>	ABNKC11011	None	None	G5	S3	SSC
obscure bumble bee <i>Bombus caliginosus</i>	IIHYM24380	None	None	G4?	S1S2	
Opler's longhorn moth <i>Adela oplerella</i>	IILEE0G040	None	None	G2	S2	
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
robust walker <i>Pomatiopsis binneyi</i>	IMGASJ9010	None	None	G1	S1	
salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	AMAFF02040	Endangered	Endangered	G1G2	S1S2	FP
salt-marsh wandering shrew <i>Sorex vagrans halicoetes</i>	AMABA01071	None	None	G5T1	S1	SSC
San Francisco Bay Area leaf-cutter bee <i>Trachusa gummifera</i>	IIHYM80010	None	None	G1	S1	
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	ABPBXA301W	None	None	G5T2	S2	SSC
San Pablo vole <i>Microtus californicus sanpabloensis</i>	AMAFF11034	None	None	G5T1T2	S1S2	SSC
short-eared owl <i>Asio flammeus</i>	ABNSB13040	None	None	G5	S3	SSC
snowy egret <i>Egretta thula</i>	ABNGA06030	None	None	G5	S4	
Tiburon micro-blind harvestman <i>Microcina tiburona</i>	ILARA47060	None	None	G1	S1	
tidewater goby <i>Eucyclogobius newberryi</i>	AFCQN04010	Endangered	None	G3	S3	
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G4	S2	SSC
western bumble bee <i>Bombus occidentalis</i>	IIHYM24250	None	None	G2G3	S1	
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
white-tailed kite <i>Elanus leucurus</i>	ABNKC06010	None	None	G5	S3S4	FP





Record Count: 37

CNPS Rare Plant Inventory

Search Results

67 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3712285:3712284]



▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
<u><i>Amorpha californica</i> var. <i>napensis</i></u>	Napa false indigo	Fabaceae	perennial deciduous shrub	Apr-Jul	None	None	G4T2	S2	1B.2	 © 2016 John Doyen
<u><i>Amsinckia lunaris</i></u>	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2	 © 2011 Neal Kramer
<u><i>Arabis blepharophylla</i></u>	coast rockcress	Brassicaceae	perennial herb	Feb-May	None	None	G4	S4	4.3	 © 2011 Neal Kramer
<u><i>Arctostaphylos montana</i> ssp. <i>montana</i></u>	Mt. Tamalpais manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	None	None	G3T3	S3	1B.3	 © 2018 John Doyen
<u><i>Arctostaphylos virgata</i></u>	Marin manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	None	None	G2	S2	1B.2	No Photo Available
<u><i>Aspidotis carlotta-halliae</i></u>	Carlotta Hall's lace fern	Pteridaceae	perennial rhizomatous herb	Jan-Dec	None	None	G3	S3	4.2	No Photo Available
<u><i>Astragalus breweri</i></u>	Brewer's milk-vetch	Fabaceae	annual herb	Apr-Jun	None	None	G3	S3	4.2	No Photo Available
<u><i>Calamagrostis crassiglumis</i></u>	Thurber's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	None	None	G3Q	S2	2B.1	No Photo Available
<u><i>Calamagrostis ophitidis</i></u>	serpentine reed grass	Poaceae	perennial herb	Apr-Jul	None	None	G3	S3	4.3	No Photo Available
<u><i>Calandrinia breweri</i></u>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2	No Photo Available
<u><i>Calochortus</i></u>	Tiburon	Liliaceae	perennial	Mar-Jun	FT	CT	G1	S1	1B.1	


<u><i>tiburoniensis</i></u>	mariposa-lily		bulbiferous herb								No Photo Available
<u><i>Calochortus umbellatus</i></u>	Oakland star-tulip	Liliaceae	perennial bulbiferous herb	Mar-May	None	None	G3?	S3?	4.2		No Photo Available
<u><i>Calochortus uniflorus</i></u>	pink star-tulip	Liliaceae	perennial bulbiferous herb	Apr-Jun	None	None	G4	S4	4.2		© 2021 Scot Loring
<u><i>Calystegia collina</i> ssp. <i>oxyphylla</i></u>	Mt. Saint Helena morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	None	None	G4T3	S3	4.2		No Photo Available
<u><i>Castilleja affinis</i> var. <i>neglecta</i></u>	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	FE	CT	G4G5T1T2	S1S2	1B.2		No Photo Available
<u><i>Castilleja ambigua</i> var. <i>ambigua</i></u>	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	None	None	G4T4	S3S4	4.2		©2011 Dylan Neubauer
<u><i>Ceanothus gloriosus</i> var. <i>exaltatus</i></u>	glory brush	Rhamnaceae	perennial evergreen shrub	Mar-Jun(Aug)	None	None	G4T4	S4	4.3		©2018 John Doyen
<u><i>Ceanothus pinetorum</i></u>	Kern ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	None	None	G3	S3	4.3		©2017 Aaron Schusteff
<u><i>Chloropyron maritimum</i> ssp. <i>palustre</i></u>	Point Reyes salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Oct	None	None	G4?T2	S2	1B.2		©2017 John Doyen
<u><i>Chorizanthe cuspidata</i> var. <i>cuspidata</i></u>	San Francisco Bay spineflower	Polygonaceae	annual herb	Apr-Jul(Aug)	None	None	G2T1	S1	1B.2		No Photo Available
<u><i>Cirsium hydrophilum</i> var. <i>vaseyi</i></u>	Mt. Tamalpais thistle	Asteraceae	perennial herb	May-Aug	None	None	G2T1	S1	1B.2		No Photo Available
<u><i>Cistanthe maritima</i></u>	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2		No Photo Available
<u><i>Collomia diversifolia</i></u>	serpentine collomia	Polemoniaceae	annual herb	May-Jun	None	None	G4	S4	4.3		©2019 Zoya Akulova
<u><i>Cypripedium</i></u>	California lady's-	Orchidaceae	perennial	Apr-	None	None	G4	S4	4.2		

<u><i>californicum</i></u>	slipper		rhizomatous herb	Aug(Sep)								© 2012 Barry Rice
<u><i>Dirca occidentalis</i></u>	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr)	None	None	G2	S2	1B.2			No Photo Available
<u><i>Elymus californicus</i></u>	California bottle-brush grass	Poaceae	perennial herb	May-Aug(Nov)	None	None	G4	S4	4.3			No Photo Available
<u><i>Eriogonum luteolum</i></u> var. <u><i>caninum</i></u>	Tiburon buckwheat	Polygonaceae	annual herb	May-Sep	None	None	G5T2	S2	1B.2			No Photo Available
<u><i>Erysimum franciscanum</i></u>	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	None	None	G3	S3	4.2			No Photo Available
<u><i>Erythranthe nudata</i></u>	bare monkeyflower	Phrymaceae	annual herb	May-Jun	None	None	G4	S4	4.3			John Doyen 2015
<u><i>Fissidens pauperculus</i></u>	minute pocket moss	Fissidentaceae	moss		None	None	G3?	S2	1B.2			©2021 Scot Loring
<u><i>Fritillaria lanceolata</i></u> var. <u><i>tristulis</i></u>	Marin checker lily	Liliaceae	perennial bulbiferous herb	Feb-May	None	None	G5T2	S2	1B.1			© 2020 Barry Rice
<u><i>Fritillaria liliacea</i></u>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2	S2	1B.2			© 2004 Carol W. Witham
<u><i>Gilia millefoliata</i></u>	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2			© 2017 John Doyen
<u><i>Helianthella castanea</i></u>	Diablo helianthella	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2			© 2013 Christopher Bronny
<u><i>Hemizonia congesta</i></u> ssp. <u><i>congesta</i></u>	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	None	None	G5T2	S2	1B.2			© 2015 Vernon Smith
<u><i>Hesperolinon congestum</i></u>	Marin western flax	Linaceae	annual herb	Apr-Jul	FT	CT	G1	S1	1B.1			© 2009 Neal

Kramer

<u><i>Holocarpha macradenia</i></u>	Santa Cruz tarplant	Asteraceae	annual herb	Jun-Oct	FT	CE	G1	S1	1B.1		© 2011 Dylan Neubauer
<u><i>Horkelia tenuiloba</i></u>	thin-lobed horkelia	Rosaceae	perennial herb	May-Jul(Aug)	None	None	G2	S2	1B.2		© 1994 Doreen L. Smith
<u><i>Hosackia gracilis</i></u>	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2		© 2015 John Doyen
<u><i>Iris longipetala</i></u>	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2		© 2014 Aaron Schusteff
<u><i>Juncus acutus</i> ssp. <i>leopoldii</i></u>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		© 2019 Belinda Lo
<u><i>Kopsiopsis hookeri</i></u>	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	Apr-Aug	None	None	G4?	S1S2	2B.3		©2016 Vernon Smith
<u><i>Leptosiphon acicularis</i></u>	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2		© 2007 Len Blumin
<u><i>Leptosiphon grandiflorus</i></u>	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	None	None	G3G4	S3S4	4.2		© 2003 Doreen L. Smith
<u><i>Lessingia hololeuca</i></u>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3		© 2015 Aaron Schusteff

<u><i>Lessingia micradenia</i></u> var. <u><i>micradenia</i></u>	Tamalpais lessingia	Asteraceae	annual herb	(Jun)Jul-Oct	None	None	G2T2	S2	1B.2	 © 2015 Vernon Smith
<u><i>Microseris paludosa</i></u>	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	None	None	G2	S2	1B.2	No Photo Available
<u><i>Navarretia rosulata</i></u>	Marin County navarretia	Polemoniaceae	annual herb	May-Jul	None	None	G2	S2	1B.2	No Photo Available
<u><i>Pentachaeta bellidiflora</i></u>	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	No Photo Available
<u><i>Perideridia gairdneri</i></u> ssp. <u><i>gairdneri</i></u>	Gairdner's yampah	Apiaceae	perennial herb	Jun-Oct	None	None	G5T3T4	S3S4	4.2	 ©2007 Neal Kramer
<u><i>Piperia michaelii</i></u>	Michael's rein orchid	Orchidaceae	perennial herb	Apr-Aug	None	None	G3	S3	4.2	No Photo Available
<u><i>Plagiobothrys glaber</i></u>	hairless popcornflower	Boraginaceae	annual herb	Mar-May	None	None	GX	SX	1A	No Photo Available
<u><i>Pleuropogon Hooverianus</i></u>	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	None	CT	G2	S2	1B.1	No Photo Available
<u><i>Polygonum marinense</i></u>	Marin knotweed	Polygonaceae	annual herb	(Apr)May-Aug(Oct)	None	None	G2Q	S2	3.1	No Photo Available
<u><i>Quercus parvula</i></u> var. <u><i>tamalpaisensis</i></u>	Tamalpais oak	Fagaceae	perennial evergreen shrub	Mar-Apr	None	None	G4T2	S2	1B.3	No Photo Available
<u><i>Ranunculus lobbii</i></u>	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	None	None	G4	S3	4.2	No Photo Available
<u><i>Sidalcea calycosa</i></u> ssp. <u><i>rhizomata</i></u>	Point Reyes checkerbloom	Malvaceae	perennial rhizomatous herb	Apr-Sep	None	None	G5T2	S2	1B.2	No Photo Available
<u><i>Spergularia macrotheca</i></u> var. <u><i>longistyla</i></u>	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May	None	None	G5T2	S2	1B.2	No Photo Available
<u><i>Stebbinsoseris decipiens</i></u>	Santa Cruz microseris	Asteraceae	annual herb	Apr-May	None	None	G2	S2	1B.2	No Photo Available

<u><i>Streptanthus batrachopus</i></u>	Tamalpais jewelflower	Brassicaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.3	
										© 2012 Aaron Schusteff
<u><i>Streptanthus glandulosus</i> ssp. <i>niger</i></u>	Tiburon jewelflower	Brassicaceae	annual herb	May-Jun	FE	CE	G4T1	S1	1B.1	No Photo Available
<u><i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i></u>	Mt. Tamalpais bristly jewelflower	Brassicaceae	annual herb	May- Jul(Aug)	None	None	G4T2	S2	1B.2	No Photo Available
<u><i>Symphytotrichum lentum</i></u>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May- Nov	None	None	G2	S2	1B.2	No Photo Available
<u><i>Toxicoscordion fontanum</i></u>	marsh zigadenus	Melanthiaceae	perennial bulbiferous herb	Apr-Jul	None	None	G3	S3	4.2	No Photo Available
<u><i>Trifolium amoenum</i></u>	two-fork clover	Fabaceae	annual herb	Apr-Jun	FE	None	G1	S1	1B.1	No Photo Available
<u><i>Trifolium hydrophilum</i></u>	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	No Photo Available
<u><i>Triquetrella californica</i></u>	coastal triquetrella	Pottiaceae	moss		None	None	G2	S2	1B.2	No Photo Available

Showing 1 to 67 of 67 entries

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