

Biological Site Assessment Mallard Pointe Project Belvedere, Marin County, California

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SECTION 1: INTRODUCTION

At the request of Mallard Pointe 1951, LLC, FirstCarbon Solutions (FCS) conducted a Biological Site Assessment (BSA) for the Mallard Pointe Project located in the City of Belvedere, in Marin County, California. The purpose of the BSA is to evaluate to what extent the project site has value as habitat for endangered, rare or threatened species as it pertains to processing a California Environmental Quality Act (CEQA) Class 32 infill development exemption.

1.1 - Project Location and Purpose

The 2.8-acre project site includes approximately 22 residences along Mallard Road on Assessor's Parcel Numbers (APNs) 060-072-27, 060-072-28, and 060-072-18. The project site is centered around 37.874805° latitude and -122.464953° longitude. As shown in Exhibit 1, the regional location of the project site is the Tiburon peninsula of the northern San Francisco Bay Area; the project site boundaries are shown on Exhibit 2.

The proposed project would include demolition of the existing structures and construction of new residences.

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SECTION 2: REGULATORY BACKGROUND

2.1 - Federal

2.1.1 - Endangered Species Act of 1973

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act of 1973. Section 9 of the Endangered Species Act protects listed species from “take,” which is broadly defined as actions taken to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” The Endangered Species Act protects threatened and endangered plants and animals and their habitats. Additionally, the USFWS designates specific areas as “Critical Habitat” for Endangered Species Act-listed species.

Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq.*).

2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq.*) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

2.2 - State

2.2.1 - CEQA Guidelines

CEQA requires public agencies to evaluate potential impacts to special-status species and their habitat. The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources.

Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

- Have a substantial adverse effect on federally and State-protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan.

2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050–2098 outline the protection provided to California’s rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Fish and Game Code Section 2081 established an incidental take permit program for State-listed species. The CDFW maintains a list of “candidate species,” which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq.*) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from “take” prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.” Project impacts to these species

are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a “Species of Special Concern.” The CDFW maintains lists of “Species of Special Concern” that serve as species “watch lists.” Species with this status may have limited distributions or limited populations and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project Study Area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

California Fish and Game Code continues to protect non-listed bat species and their roosting habitat, including individual roosts and maternity colonies. Relevant regulations include California Fish and Game Code Sections 86; 2000; 2014; 3007; and 4150, along with Title 14 of California Code of Regulations.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that “may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake” or “deposit debris, waste, or other materials that could pass into any river, stream, or lake.” “River, stream, or lake” includes

waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water. CDFW jurisdiction typically extends to the edge or “drip line” of the riparian habitat or top of bank.

2.2.4 - California Native Plant Society

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- **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 common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed, a review list
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations. Nevertheless, some level of CEQA review is justified for California Rare Plant Rank (CRPR) 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document. Some circumstances, such as local rarity, having occurrences peripheral to the taxon’s distribution, or having occurrences on unusual substrates or rare and declining habitats, provide justification for treating some CRPR 4 taxa occurrences as regionally rare or unique. One limitation to fully analyzing impacts on CRPR 4 taxa is the difficulty in obtaining current data on the number and condition of the occurrences.¹

2.3 - Regional and Local

2.3.1 - City of Belvedere General Plan

General Plan Policies related to biological resources are folded into Chapter 4: Sustainability and Resource Conservation Element and are codified in Goal SUST-1 through Goal SUST-13. While all sustainability goals in Chapter 4 are directly or indirectly relevant for conservation for biological resources, most notably, the following goals and actions would be directly applicable to the proposed project analyzed here:

¹ California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. January 21, 2020.

- Goal SUST-10** Protect natural habitats and biological resources including sensitive aquatic habitat, streams, and riparian corridors.
- Policy SUST-10.1** Remain updated on the status of potential avoidance and mitigation measures related to potentially endangered and special-status species.
- Policy SUST-10.2** Regulate and mitigate the impacts of pile replacement, installation and reinforcement for structures built over water and installation and expansion of piers, docks and boat hoists.
- Goal SUST-11** Promote healthy waterways and reduce toxics in runoff.

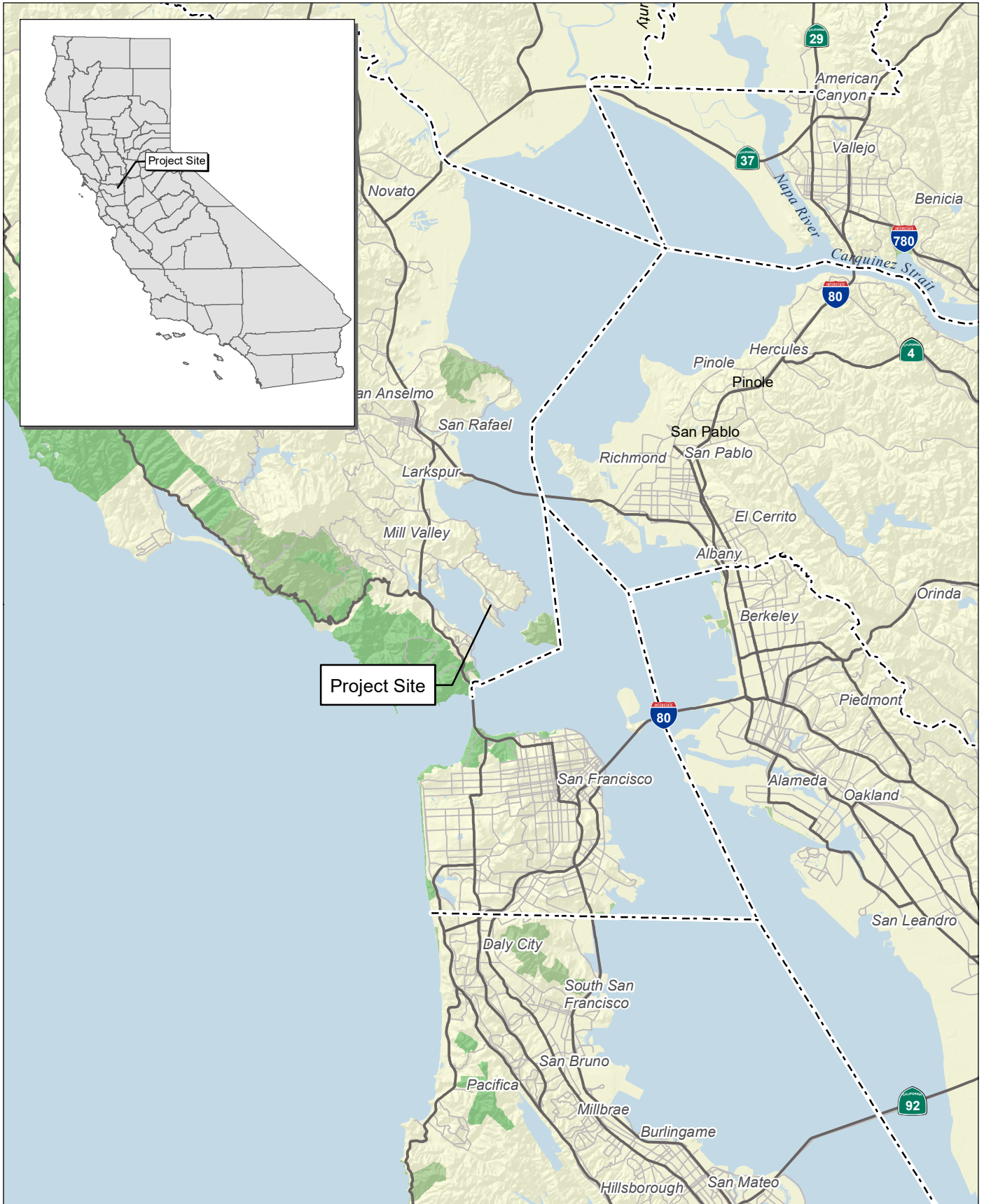
Actions

- SUST-11.1.2** Encourage the use of non-toxic weed and pest controls on lawns and landscaping, particularly in areas surrounding the Lagoon.
- SUST-11.1.3** Encourage minimizing the use of fertilizers, particularly in areas surrounding the Lagoon.
- Goal SUST-12** Enhance the urban forest.
- Policy SUST-12.1** Protect existing trees and encourage the planting of new trees.
- Policy SUST-12.2** Protect the local tree canopy as habitat for nesting birds and survey trees slated for removal for nesting birds prior to permit issuance.
- Policy SUST-12.5** Evaluate development applications for possible adverse impacts to special-status birds and bats.

2.3.2 - Municipal Code Related to Project-related Biological Resources

The City of Belvedere Municipal Code includes provisions to regulate tree removal (Section 20.04.015, Title 20, Architectural and Environmental Design Review) and also provides parameters for exemptions, as stated in City of Belvedere—Administrative Policy Manual, Policy 15.2 *Removal of Significant Trees*.

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Source: Census 2000 Data, The CaSIL

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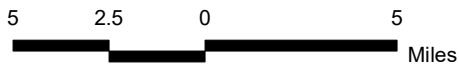


Exhibit 1 Regional Location Map

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Source: Bing | Marin County GIS Data

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Exhibit 2 Project Site

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SECTION 3: METHODS

3.1 - Literature Review

The literature review provides a baseline understanding of endangered, rare or threatened species known to occur or potentially occurring on the project site and relevant adjacent areas.

3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist examined existing environmental documentation for the project site and local vicinity. This documentation included biological studies for the area, including Mallard Pointe Tree Inventory² (Appendix A), the Biological Resources Section of the City of Belvedere General Plan and General Plan Environmental Impact Report (GP EIR); literature pertaining to habitat requirements of special-status species potentially occurring in the vicinity of the site; and federal register listings, protocols, and species and habitat data provided by the USFWS and the CDFW. These and other documents are cited within this report.

3.1.2 - Topographic Maps, Aerial Imagery, and Online Mappers

An FCS Biologist reviewed current United States Geological Survey (USGS) 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.³ Information obtained from the review of the topographic maps included elevation range, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the United States Environmental Protection Agency (EPA) Watershed Assessment, Tracking, and Environmental Results System (WATERS).⁴ Aerial photographs provide a perspective of the most current and historic site conditions relative to on-site and off-site land use, land cover, and potential locations of wildlife movement corridors. Online mappers of Marin County⁵ and USFWS' National Wetland Inventory (NWI)⁶

3.1.3 - Soil Survey

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.⁷ These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based

² Urban Forestry Associates, Inc. Mallard Pointe Tree Inventory. September 28, 2021.

³ United States Geological Survey (USGS). 2021. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed January 2022.

⁴ United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed January 2022.

⁵ County of Marin. MarinMap. <https://www.marinmap.org/Html5Viewer/Index.html?viewer=smmdataviewer>. Accessed January 2022.

⁶ United States Fish and Wildlife Service (USFWS). Wetlands Mapper. <https://www.fws.gov/wetlands/data/mapper.html>. Accessed January 2022.

⁷ Natural Resources Conservation Service (NRCS). 2021. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed January 2022.

exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish if soil conditions on-site are suitable for any special-status plant species.

3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the general project vicinity. The list was based on a search of the CDFW CNDDDB, a special-status species database, and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California database for nine USGS quadrants of and surrounding the Study Area.^{8,9}

The CNDDDB Biogeographic Information and Observation System (BIOS 5) database and/or CNDDDB Geographic Information System (GIS) data were used to review the distance between known recorded occurrences of specific special-status species and the project site.¹⁰

3.2 - Field Survey

FCS Senior Biologist, Bernhard Warzecha, conducted a reconnaissance-level biological survey of the accessible areas of the project site and relevant adjacent areas on November 5, 2021. The objective of the survey included identification of general site conditions, biological resources, including habitats potentially suitable habitat for special-status plant and wildlife species, and an evaluation of habitat value of Belvedere Lagoon.

3.2.1 - Vegetation

Common plant species observed during the reconnaissance-level survey were identified by visual characteristics and morphology in the field and recorded. Plant species were identified using taxonomical guides, including Jepson eFlora and Calflora.^{11,12} Taxonomic nomenclature used in this study follows The Jepson Manual: Vascular Plants of California.¹³ Common plant names, when not available from The Jepson Manual, were taken from other regionally specific references. Vegetation types and boundaries were noted on aerial photos and through field observation and digitized using ESRI ArcGIS software® ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the project site was prepared. Vegetation community and land cover types used to help classify habitat

⁸ California Department of Fish and Wildlife (CDFW). 2021. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed August 17, 2021.

⁹ California Native Plant Society (CNPS). 2021. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed August 17, 2021.

¹⁰ California Department of Fish and Wildlife (CDFW). 2021. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed August 17, 2021.

¹¹ Jepson Flora Project (eds.) 2020. Jepson eFlora, <https://ucjeps.berkeley.edu/eflora/>. Accessed on Jun 24, 2020.

¹² Calflora. 2021. Calflora: Information on California plants for education, research, and conservation. Website: <http://www.calflora.org/>. Accessed August 17, 2021.

¹³ Baldwin, B. et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).

types are based on Manual of California Vegetation and cross-referenced with the CDFW Natural Communities List.^{14,15}

3.2.2 - Wildlife

Wildlife species detected during the reconnaissance-level survey by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to potentially occur within the project site.¹⁶ Appropriate field guides were used to assist with species identification during surveys, such as Peterson, Reid, and Stebbins.^{17,18,19} Online resources such as eBird and California Herps were consulted as well, as needed.^{20,21}

3.2.3 - Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas can create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between separated populations.

The project site was evaluated for evidence of a wildlife movement corridor during the field survey. Conclusions were made by combining field observations with information compiled during the literature review, including aerial photographs, USGS topographic maps and resource maps for the vicinity, and FCS Biologist’s professional knowledge of the requirements for wildlife movement corridor use.

¹⁴ Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento. 1300 pp.

¹⁵ California Department of Fish and Wildlife (CDFW). 2021. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities>. Accessed January 2022.

¹⁶ California Department of Fish and Wildlife (CDFW). 2021. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed January 2022.

¹⁷ Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.

¹⁸ Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition. Boston: Houghton Mifflin Harcourt.

¹⁹ Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.

²⁰ eBird. 2021. Online bird occurrence database. Website: <http://ebird.org/content/ebird/>. Accessed January 2022.

²¹ California Herps. 2021. A Guide to the Amphibians and Reptiles of California. Website: <http://www.californiaherps.com>

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SECTION 4: RESULTS

The following section summarizes the results of the literature search, database review, and biological resources field survey. Weather conditions during the field survey were clear and dry.

4.1 - Environmental Setting

4.1.1 - Topography and Hydrogeomorphology

The project site is located on a terrace approximately 5–8 feet above mean sea level (AMSL), directly on the western shoreline of Belvedere Lagoon. Based on analysis of historical USGS quadrangle maps, the terrace of the project site was constructed through fill placed into Belvedere Lagoon at some time between 1915 and 1947. The project area drains precipitation runoff directly into the lagoon. Precipitation runoff from the east-facing slopes (west of the project site) collect in drainages above the project site and are routed through and around the project site via an underground stormwater drainage system. No open creeks remain on the project site. Belvedere Lagoon is described in more detail in the Land Cover section and in the Impacts and Recommendations section below.

4.1.2 - Soils

The soils of the terrestrial areas of the project site are mapped as approximately Xerorthents-Urban land complex, 0–9 percent slopes. Belvedere Lagoon is mapped as “Water.”²²

4.1.3 - Land Cover Types and Vegetation

The following section includes the results and discussion of land cover types as they relate to endangered, rare or threatened species of the project site, including vegetation cover and Belvedere Lagoon and shoreline.

Developed

All terrestrial areas of the project site (approximately 2.8 acres, based on parcels mapped by Marin County, [Exhibit 3]) and surrounding areas are fully developed, including several buildings and other hardscape such as roadways, sidewalks, and driveways. Remaining vegetation consist entirely of landscaping and predominantly ornamental plants, including trees. Per the Tree Inventory for the project (Appendix A), 48 trees were inventoried and predominantly consisted of small- to medium-size non-native ornamental species. The only native trees on-site are four coast live oak (*Quercus agrifolia*); however, because of the developed context of the site, ongoing maintenance and management, small plant cover extent, and scattered locations, these four coast live oaks do not form a natural plant community type, e.g., they are not considered oak woodland. Regardless, certain individual trees on-site may be protected pursuant to the City of Belvedere tree ordinance (see Impact Analysis below.) Belvedere Lagoon, including the shoreline, can be considered

²² United States Department of Agriculture (USDA), Natural Resources Conservation Service. 2021. Web Soil Survey 3.3.2. Website: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed August 17, 2021.

developed as well, but is addressed here as a separate land cover type because of its different habitat potential and regulatory status.

Aquatic (Belvedere Lagoon)

The parcel boundaries of the project site, as mapped by Marin County, overlap with the Belvedere Lagoon shoreline and open water for approximately 0.20 acre (Exhibit 3); Belvedere Lagoon is therefore included as a separate aquatic landcover type for the purpose of this evaluation of endangered, rare or threatened species.

Belvedere Lagoon is classified as a “Lake” by the USGS²³ and has a hydrological connection to San Francisco Bay via a pump station along San Rafael Avenue. The pump station takes water into Belvedere Lagoon during the summer months and pumps water out of the lagoon during the winter months. Extensive residential development is present along the shoreline of Belvedere Lagoon, and the waters of Belvedere Lagoon are treated with dyes to control algal growth.²⁴

The Belvedere Lagoon shoreline at the project site consists of fill stabilized with medium-size rock-slope protection; no emergent wetland vegetation cover was observed within the areas of the project site. Belvedere Lagoon is considered low-quality habitat for endangered, rare or threatened species. The pump station does not generally allow for safe and effective passage of fish species into and out of the lagoon. In addition, the residential use and treatment of the lagoon with dyes to control algal growth reduces the viability of its aquatic habitat.²⁵

4.1.4 - Wildlife

Wildlife use within the Study Area is relatively low due to a general lack of natural habitats resulting from development, active management, and landscaping. However, the trees and shrubs on-site have the potential to support nesting birds, and the project site and surrounding areas could be visited by a set of wildlife species tolerant of human-modified environments, including mourning dove (*Zenaida macroura*), western crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), Anna’s hummingbird (*Calypte anna*), western scrub jay (*Aphelocoma californica*), California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), western fence lizard (*Sceloporus occidentalis*), skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), mule deer (*Odocoileus hemionus*), various common squirrel species, and others.

4.2 - Endangered, Rare or Threatened Species

4.2.1 - Special-status Plant Species

Combined databases of CNDDDB and CNPS identify 116 special-status including special-status and/or CRPR-ranked plant species within the USGS quadrant of the project site and directly abutting quadrants (Appendix B). However, because of the fully developed nature and urban land use of the

²³ United States Geological Survey (USGS). <https://edits.nationalmap.gov/apps/gaz-domestic/public/search/names/05a41c81-3a16-5523-8845-084556e2cf29/summary>. Accessed January 2022.

²⁴ WRA, Inc. 2008. Biological Technical Report: City of Belvedere General Plan Update.

²⁵ Ibid.

project site and adjacent areas, no suitable habitat for sensitive or special-status plant species remains. This conclusion is consistent with the latest available evaluation of biological resources, conducted by WRA, Inc. in 2008.²⁶

4.2.2 - Special-status Wildlife Species

The CNDDDB identifies 78 special-status wildlife species within the nine USGS quadrant of and adjacent to the project site (Appendix B). However, because of the fully developed nature and urban land use of the project site and adjacent areas, no suitable habitat for the special-status wildlife species evaluated have potential to occur on-site. However, the following species are discussed in more detail below as their potential presence has been raised by WRA, Inc. and the CDFW for the City of Belvedere Area.

Pallid Bat

WRA, Inc. concluded that pallid bat (*Antrozous pallidus*; State Species of Special Concern) may be the only special-status wildlife species with potential suitable habitat within the City of Belvedere General Plan area. However, Pallid bat maternity colonies and hibernating pallid bats are especially susceptible to disturbance,²⁷ and well-maintained structures are generally not considered suitable bat habitat. Given the past, current, and anticipated future high level of anthropogenic disturbance and site maintenance on the project site, it is not anticipated that suitable pallid bat habitat is present.

California Red-legged Frog

California red-legged frog (*Rana draytonii*; CRLF) is listed as endangered pursuant to the Endangered Species Act. Suitable aquatic breeding habitat for the CRLF consists of standing bodies of fresh water (with salinities less than 7.0 ppt), including: natural and man-made ponds, slow moving streams or pools within streams, and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a minimum of 20 weeks in all but the driest of years. The CRLF, including breeding, has been documented from the Bluff Point area on the eastern tip of Tiburon, approximately 1.3 miles Euclidean distance from the project site. Though Belvedere Lagoon meets the 20-week hydroperiod requirement, it is not suitable for CRLF because it contains varying concentrations of water from San Francisco Bay over the course of the year as water is pumped from the Bay to maintain water levels during the summer months. This management regime likely prohibits use of the Lagoon by CRLF due to elevated salinity levels.²⁸ Additional compounding factors that would exclude presence of CRLF from the project site include substantial dispersal barriers to the project site in the form of completely surrounding urban development and use, absence of open drainages connected to suitable breeding habitat, and absence of suitable upland aestivation habitat.

²⁶ WRA, Inc. 2008. Biological Technical Report: City of Belvedere General Plan Update.

²⁷ Western Bat Working Group. 2022. Western Bat Species Accounts. Website: <http://wbwg.org/western-bat-species/>. Accessed January 2022.

²⁸ WRA, Inc. 2008. Biological Technical Report: City of Belvedere General Plan Update.

Western Pond Turtle

Western pond turtle (*Emys marmorata*) is a California Species of Special Concern and is therefore protected through CEQA and the Fish and Game Code.

Western pond turtles occupy permanent and intermittent ponds and creeks and generally prefer deep (greater than 2 feet), quiet pools along streams and ponds and reservoirs. Important habitat features include basking sites and suitable aquatic hiding areas such as undercut banks, logs, rocks, aquatic vegetation, and/or mud and leaf-litter. Another important element of suitable habitat is the presence of nearby upland nesting areas. Turtles nest on grassy, sunny slopes adjacent to aquatic habitat. Most nest sites occur within 16–263 feet of the water, but nests have been found up to 1,640 feet from the water's edge.

The closest observation of this species from the project site was last updated in 1996 and consists of a potential waif found on Brooks Island, more than 5 miles from the project site across the San Francisco Bay. The project site itself is fully developed and therefore does not provide suitable upland (breeding) habitat, as it is highly disturbed and managed and excludes dispersal to the site due to a broad surrounding area of fully developed land. This species is not expected to occur on the project site and western pond turtle would not find suitable habitat in Belvedere Lagoon.

San Pablo Song Sparrow

San Pablo song sparrow (*Melospiza melodia samuelis*) is a State Species of Special Concern. This species was last reported in Belvedere in 1923. As with all song sparrow subspecies, dense vegetation is required for nesting sites, song perches, and cover for refuge from predators. Where vegetation is too short and sparse, Suisun song sparrow nests are more likely to be exposed to predators or flooding during high tides. Because of the absence of suitable unmanaged/undisturbed vegetation for nesting of San Pablo song sparrow, and past and ongoing anthropogenic disturbance, this species is not anticipated to be present at the project site.

Protected Functional Groups

Nesting birds and roosting bats include groups of species that are protected under federal and State law and are considered sensitive and protected under certain conditions, as described below.

Nesting Birds

The active nests of most bird species are protected by federal and/or State law (MBTA and Fish and Game Code), and protected active nests are therefore considered “special-status” for the purpose of this analysis. Species that are protected pursuant to MBTA are listed by the USFWS.²⁹ Nests are generally defined as being “active” if they contain eggs or altricial young. The project site contains trees, shrubs, and structures that provide suitable habitat for protected migratory or native resident nesting bird species relatively tolerant of human disturbance.

²⁹ United States Fish and Wildlife Service (USFWS). 2020. Website: <https://www.federalregister.gov/documents/2020/04/16/2020-06779/general-provisions-revised-list-of-migratory-birds>

Roosting Bats

Trees and/or structures on-site are potentially capable of supporting protected bat roosts (e.g., maternity roosts) of bat species tolerant to urban settings, if structures remain unoccupied and vegetation unmanaged for more than approximately one month before demolition. Protection of bats is defined in the Regulatory Settings section above.

4.2.3 - Wildlife Movement Corridors

Because of the fully developed status of the project site and surrounding areas, the project site does not provide any value as a wildlife movement corridor.

4.2.4 - Protected Trees

Per the City of Belvedere’s Tree Removal policies (Administrative Policy 15.2 Removal of Significant Trees), “Removing one or more trees native to Belvedere (such as oak trees) greater than 16 inches in diameter will be considered a significant landscaping change that will require approval of a Design Review application. A tree of this size is likely to be more than 50 years old, it may be visible from a great distance, and it may provide significant privacy protection. A tree of this size is also likely to have some social significance to Belvedere residents as a landmark and a reminder of Belvedere’s natural setting.”

Per the Tree Inventory for the project (Appendix A), 48 trees were inventoried, of which four are native to Belvedere. Three of the native trees have a diameter over 16 inches and would be protected from removal without City approval (labeled No. 2, No. 37, No. 17 in Appendix A). Tree No. 2 is located on the adjacent property off-site but was included in the Tree Inventory due to the trunk’s proximity to the property line. Trees No. 2 and No. 37 are proposed to be preserved in place, and tree No. 17 is proposed to be transplanted.

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Source: Bing | Marin County | FCS

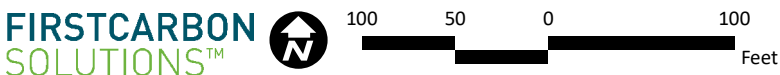


EXHIBIT 3 Land Cover Types

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SECTION 5: IMPACT ANALYSIS

The following section analyzes potential project-related impacts on endangered, rare or threatened species, and protected functional groups such as nesting birds or roosting bats, as identified as present or potentially present in Section 4.3 above. Sensitive communities, special-status plant or wildlife species, and wildlife movement corridors were determined to have no potential to occur on the project site; therefore, no impacts would occur and no further impact analysis is warranted.

The impact analysis for the remaining protected nesting birds and roosting bats is based on the project plans (Appendix C) and assumes demolition of all current structures and subsequent construction of new residential structures and infrastructure.

5.1 - Impact Analysis Related to Protected Functional Groups

5.1.1 - Nesting Birds

If active bird nests of any federally or State-protected species are present on the project site or within disturbance distance, the proposed project has the potential to disturb/disrupt protected bird nesting by removal of trees, shrubs, or structures and, in the immediate vicinity of construction activity, potentially leading to direct destruction or premature nest abandonment and therefore take of protected nests (i.e., eggs or altricial young). With implementation of Avoidance and Minimization Measure (AMM)-1 (see below), this potential impact can be reduced to a less than significant level.

5.1.2 - Roosting Bats

If bat roosts are present on the project site or within disturbance distance, demolition activities have the potential to disturb/disrupt protected bat roosts, potentially leading to direct destruction or premature roost abandonment and loss of bats (including young or rare/sensitive bat species). With implementation of AMM-2 (see below), this potential impact can be reduced to a less than significant level.

5.2 - Impact Analysis Related to Protected Trees

If removal of protected trees identified in the Tree Inventory (Appendix A) and in Section 4.2.6, above, are unavoidable, the proposed project requires City approval and impacts related to loss of trees can be avoided or minimized by adhering to the conditions of the approval and implementing the recommendations by the certified Arborist as stated in the Tree Inventory (Appendix A; AMM-3).

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SECTION 6: AVOIDANCE AND MINIMIZATION RECOMMENDATIONS

The following section includes avoidance and minimization measures to reduce the above identified potential impacts on nesting birds and roosting bats to a less than significant level.

AMM-1 Nesting Birds

If the project is implemented during the nesting season (generally February 15 to August 31), a qualified Biologist shall conduct a nesting bird survey no more than 7 days prior to start of construction to determine whether or not protected active bird nests are present within the disturbance zone of the project site.

If a protected active nest is located during the pre-construction surveys, a qualified Biologist shall determine a nest protection buffer based on species and anticipated disturbance level. The buffer shall be physically marked on-site, e.g., using fencing, pin flags, and or yellow caution tape. The buffer zone will be maintained around the active nest site(s) until the young have fledged and are foraging independently.

AMM-2 Roosting Bats

If tree removal, heavy vegetation modifications, or demolition of existing structures is proposed during the maternity roosting season for bats (April 1 through September 15), trees and/or structures with features capable of supporting roosting bats shall be surveyed by a qualified Biologist for bat roosts or evidence of bat roosting (guano, urine staining and scent, dead bats) not more than 14 days before the start of disturbance, including vegetation removal. If active roosts are discovered, a protection zone of no less than 50 feet around the active roost shall be established by the qualified Biologist. Disturbance may occur within the once active roosting ceases, as determined by the qualified Biologist.

AMM-3 Protected Trees

Obtain approval from the City of Belvedere for tree removal and follow conditions of the approval. Implement the recommendations by the certified Arborist as stated in the *Mallard Pointe Tree Inventory*, Urban Forestry Associates, Inc., October 12, 2021.

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**Appendix A:
Mallard Pointe Tree Inventory**

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Client: Mallard Pointe 1951 LLP

Arborist: Zach Vought

Project Address: 1 Mallard Rd., Belvedere

Inspection Date: September 28, 2021



ASSIGNMENT/ BACKGROUND

I was hired to evaluate trees in the residential units on Mallard Rd. in Belvedere. The purpose of the assessment was to locate and inventory trees and document their species, size and condition as a part of proposed development plans.

METHODS

- The inventory included trees with a trunk diameter of approximately six inches Dbh¹.
- Tree species, trunk diameter (in inches), health, structure, and form ratings were assessed/collected for each tree. Any notable comments regarding tree condition were included in the comments section of the spreadsheet. See Table 1, Page 6 for a description of tree condition rating criteria.
- Trees were identified with foil tags with numbers corresponding to the inventory spreadsheet.
- Tree locations were estimated using the ArcGIS Collector app. A map is provided.
- Photographs of each tree were collected and can be made available upon request.

INVENTORY

A total of 48 trees were included in the assessment. The vast majority of trees onsite are small to medium size non-native ornamental species.

The only native trees onsite were four native coast live oak (*Quercus agrifolia*) trees: T-2; T-7; T-17; T-37. I am informed T-2 and T-37 will be preserved, and attempts will be made to transplant Tree-7 & Tree-17.

Trees 2&3 are located near or off the project site were included in the assessment due to their proximity to the development footprint. They are growing near the shared fence between 16 Community Rd. and Unit 1. The design should accommodate these trees and protection measures should be provided during construction.

There are a number of fruiting olive trees onsite in varying condition. Attempts will be made to transplant as many of the olives trees and two coast live oak trees. Notes regarding the feasibility of transplanting were included in the inventory.

Zachary Vought, Urban Forester
Registered Consulting Arborist #691
ISA Board Certified Master Arborist WE-9995B
ISA Qualified Tree Risk Assessor

¹ Trunk diameter measured at 4.5 feet above the ground from the upslope side of the tree.

Tree Number	Common Name	Botanical Name	Diameter	Health	Structure	Form	Comments	Recommendations
1	Mimosa	<i>Albizia julbrissin</i>	6	Good	Good	Good		
2	Coast live oak	<i>Quercus agrifolia</i>	24 (visual estimate)	Excellent	Good	Good	Growing on adjacent property offsite. Trunk is near property line. Appears to be a shared tree but could be negatively impacted by development.	Avoid trenching, grading, or fill soil deposition within ten feet of the trunk.
3 (no tag)	fruiting olive	<i>Olea europaea</i>	10, 10	Good	Fair to Good	Good	On adjacent property.	Avoid trenching, grading, or fill soil deposition within ten feet of the trunk.
4	Persimmon	<i>Diospyros sp.</i>	5	Good	Good	Good		
5	Eugenia	<i>Eugenia australe</i>	5, 4	Good	Fair to Good	Good		
6	Pittosporum	<i>Pittosporum tobira</i>	7	Good	Good	Good		
7	Coast live oak	<i>Quercus agrifolia</i>	11	Excellent	Good	Good		Transplant.
8	Liquidamber	<i>Liquidambar styraciflua</i>	20	Good	Fair to Good	Good	Previously topped. Surface rooted.	
9	fruiting olive	<i>Olea europaea</i>	7	Good	Good	Good		Transplant.
10	fruiting olive	<i>Olea europaea</i>	9	Good	Good	Good		Transplant.
11	Blackwood Acacia	<i>Acacia melanoxylon</i>	22	Good	Fair to Good	Fair to Good		
12	Queen palm	<i>Syagrus romanzofianna</i>	12	Dead				
13	Queen palm	<i>Syagrus romanzofianna</i>	11.5	Good	Good	Good	15' high.	

Tree Number	Common Name	Botanical Name	Diameter	Health	Structure	Form	Comments	Recommendations
14	Queen palm	<i>Syagrus romanozofianna</i>	12	Good	Good	Good	12' high.	
15	Queen palm	<i>Syagrus romanozofianna</i>	9	Poor	Good	Fair		
16	Podocarpus	<i>Podocarpus gracilior</i>	17	Fair to Good	Good	Good	Chlorotic canopy.	
17	Coast live oak	<i>Quercus agrifolia</i>	16.5	Good	Good	Good	Decaying shrub embedded in lower trunk.	Transplant.
18	Italian Stone Pine	<i>Pinus pinea</i>	5	Good	Good	Good	Several small volunteer Italian stone pine trees in this back yard.	
19	Lemon Bottlebrush	<i>Callistemon citrinus</i>	9.5	Good	Good	Good	Leans away from structure.	
20	fruiting olive	<i>Olea europaea</i>	12, 11	Fair to Good	Good	Fair to Good	Previously topped.	Transplant potential fair. The size of the tree may be a problem.
21	fruiting olive	<i>Olea europaea</i>	12	Good	Good	Good	Previously topped. Fruiting olive.	Transplant potential fair. Utilities may be an issue.
22	fruiting olive	<i>Olea europaea</i>	9.5, 7.5	Good	Good	Good		Transplant potential fair. Utilities may be an issue.
23	fruiting olive	<i>Olea europaea</i>	11, 8.5	Poor to Fair	Fair	Fair	Major decay at old topping cuts.	Poor transplant potential.
24	Southern Magnolia	<i>Magnolia grandiflora</i>	7, 4	Good	Good	Good		
25	Juniper	<i>Juniperus chinensis</i>	Multistem	Excellent	Good	Good		

Tree Number	Common Name	Botanical Name	Diameter	Health	Structure	Form	Comments	Recommendations
26	Evergreen pear	<i>Pyrus kawakamii</i>	12.5	Good	Good	Good	Aggressively pruned/pollarded.	
27	Evergreen pear	<i>Pyrus kawakamii</i>	9	Good	Fair	Fair		
28	Evergreen pear	<i>Pyrus kawakamii</i>	8.5	Good	Fair to Good	Fair		
29	fruiting olive	<i>Olea europaea</i>	16.5	Fair	Fair	Fair	Large strips of dead tissue on trunk. Small canopy.	Poor transplant potential.
30	Pittosporum	<i>Pittosporum undulatum</i>	18	Fair to Good	Good	Good	Large necrotic area on lower trunk.	
31	New Zealand cabbage tree	<i>Cordyline australis</i>	Mutistem	Good	Good	Good		
32	Japanese Black Pine	<i>Pinus thunbergii</i>	7.5	Fair to Good	Good	Fair to Good		
33	Japanese Black Pine	<i>Pinus thunbergii</i>	15	Good	Good	Good		
34	Seaside Pittosporum	<i>Pittosporum crassifolium</i>	7	Fair	Fair to Good	Fair	Large necrotic area running up lower trunk.	
35	Seaside Pittosporum	<i>Pittosporum crassifolium</i>	5	Fair to Good	Good	Fair		
36	Seaside Pittosporum	<i>Pittosporum crassifolium</i>	8.5	Fair to Good	Fair to Good	Fair to Good		
37	Coast live oak	<i>Quercus agrifolia</i>	28.5	Good	Good	Good		Preserve and protect.
38	Pittosporum	<i>Pittosporum undulatum</i>	14	Good	Fair to Good	Good	Necrotic strip on top of limb.	

Tree Number	Common Name	Botanical Name	Diameter	Health	Structure	Form	Comments	Recommendations
39	Evergreen pear	<i>Pyrus kawakamii</i>	10	Good	Fair to Good	Fair	Pollarded.	
40	Camphor	<i>Cinnamomum camphora</i>	24.5	Good	Good	Good	Surface rooted. Uplifted sidewalk. Some canopy dieback in NW canopy quadrant.	
41	Camphor	<i>Cinnamomum camphora</i>	21.5	Fair	Fair	Fair	Tree exhibits low vigor. Canopy is sparse.	
42	fruiting olive	<i>Olea europaea</i>	11	Fair to Good	Good	Good	Heavily confined root zone.	
43	fruiting olive	<i>Olea europaea</i>	10.5	Good	Good	Good		Transplant.
44	Poplar	<i>Populus nigra</i>	36	Good	Fair to Good	Fair to Good	Topped/Pollarded.	
45	Japanese Maple	<i>Acer palmatum</i>	7.5, 6.5, 6.0	Fair to Good	Good	Good	Twig dieback in upper canopy.	
46	Pittosporum	<i>Pittosporum eugenioides</i>	13.5	Fair to Good	Fair	Fair	Hollow trunk. Topped. Necrotic strips running down main limbs.	
47	Loquat	<i>Eriobotrya japonica</i>	8	Good	Fair to Good	Fair to Good		
48	Privet	<i>Ligustrum lucidum</i>	6.5	Good	Good	Good		

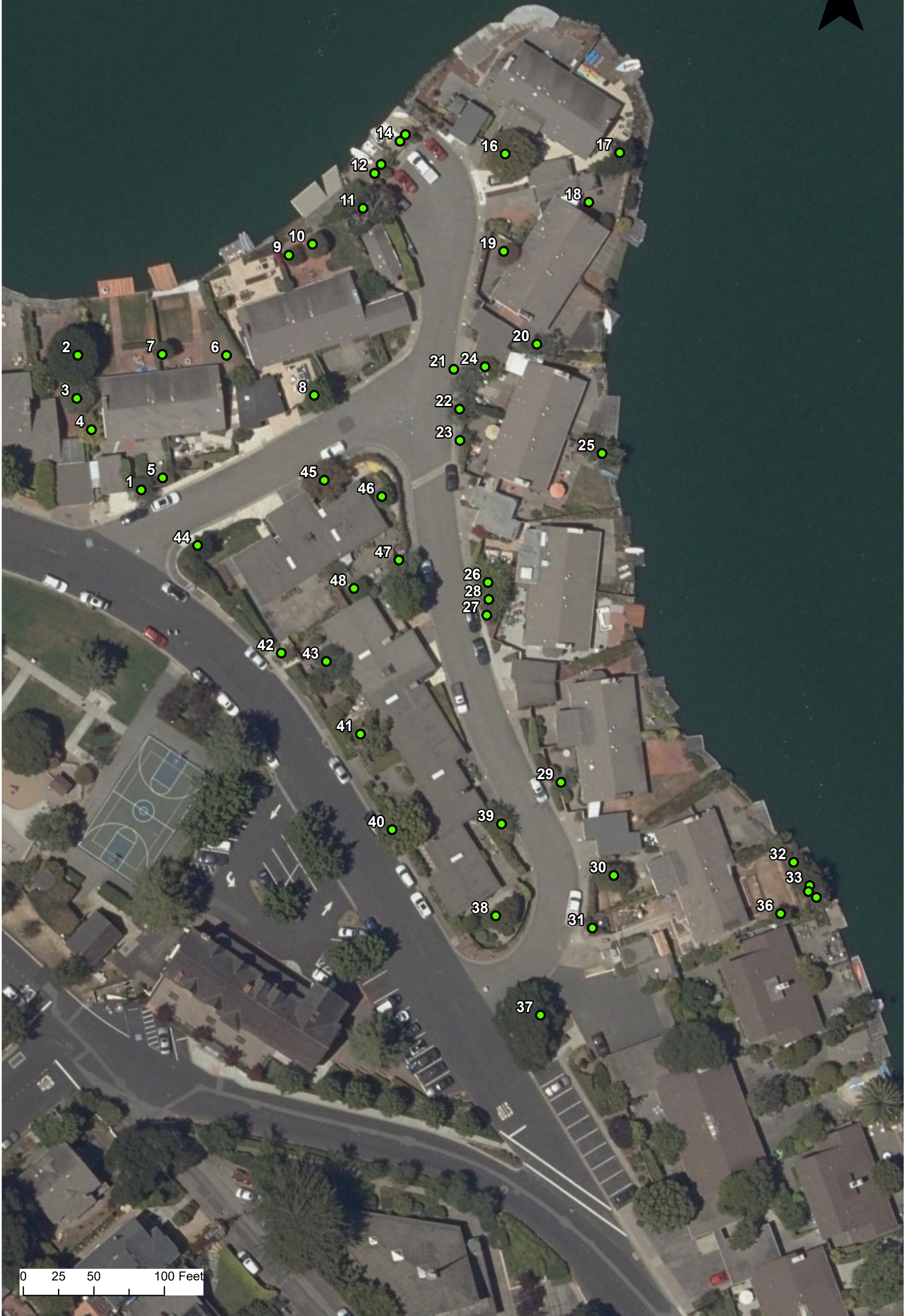
Table 1. Tree Condition Ratings

Rating category	Condition components		
	Health	Structure	Form
Excellent	High vigor and nearly perfect health with little or no twig dieback, discoloration, or defoliation	Nearly ideal and free of defects.	Nearly ideal for the species. Generally symmetric. Consistent with the intended use.
Good	Vigor is normal for the species. No significant damage due to diseases or pests. Any twig dieback, defoliation, or discoloration is minor.	Well-developed structure. Defects are minor and can be corrected.	Minor asymmetries/deviations from species norm. Mostly consistent with the intended use. Function and aesthetics are not compromised.
Fair	Reduced vigor. Damage due to insects or diseases may be significant and associated with defoliation but is not likely to be fatal. Twig dieback, defoliation, discoloration, and/or dead branches may comprise up to 50% of the crown.	A single defect of a significant nature or multiple moderate defects. Defects are not practical to correct or would require multiple treatments over several years.	Major asymmetries/deviations from species norm and/or intended use. Function and/or aesthetics are compromised.
Poor	Unhealthy and declining in appearance. Poor vigor. Low foliage density and poor foliage color are present. Potentially fatal pest infestation. Extensive twig and/or branch dieback.	A single serious defect or multiple significant defects. Recent change in tree orientation. Observed structural problems cannot be corrected. Failure may occur at any time.	Largely asymmetric/abnormal. Detracts from intended use and/or aesthetics to a significant degree.
Very poor	Poor vigor. Appears to be dying and in the last stages of life. Little live foliage.	Single or multiple severe defects. Failure is probable or imminent.	Visually unappealing. Provides little or no function in the landscape.
Dead			

SCOPE OF WORK AND LIMITATIONS

Urban Forestry Associates has no personal or monetary interest in the outcome of this investigation. All observations regarding trees in this report were made by UFA, independently, based on our education and experience. All determinations of health condition, structural condition, or hazard potential of a tree or trees at issue are based on our best professional judgment. The health and hazard assessments in this report are limited by the visual nature of the assessment. Defects may be obscured by soil, brush, vines, aerial foliage, branches, multiple trunks or other trees. Even structurally sound, healthy trees are wind thrown during severe storms or other weather events. Consequently, a conclusion that a tree does not require corrective surgery or removal is not a guarantee of no risk, hazard, or sound health.

Mallard Pointe Tree Map



0 25 50 100 Feet

**Appendix B:
Special-Status Species Recorded in the Project Vicinity**

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CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE RareFind

Query Summary:

Quad **IS** (Richmond (3712283) **OR** Oakland West (3712273) **OR** Hunters Point (3712263) **OR** San Francisco North (3712274) **OR** San Francisco South (3712264) **OR** Point Bonita (3712275) **OR** San Quentin (3712284) **OR** San Rafael (3712285))

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
<i>Accipiter cooperii</i>	Cooper's hawk	Birds	ABNKC12040	118	2	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Cismontane woodland, Riparian forest, Riparian woodland, Upper montane coniferous forest
<i>Adela oplerella</i>	Opler's longhorn moth	Insects	IILEE0G040	14	2	None	None	G2	S2	null	null	Ultramafic, Valley & foothill grassland
<i>Allium peninsulare</i> var. <i>franciscanum</i>	Franciscan onion	Monocots	PMLIL021R1	25	1	None	None	G5T2	S2	1B.2	null	Cismontane woodland, Ultramafic, Valley & foothill grassland
<i>Ambystoma californiense</i> pop. 1	California tiger salamander - central California DPS	Amphibians	AAAAA01181	1263	1	Threatened	Threatened	G2G3	S3	null	CDFW_WL-Watch List, IUCN_VU-Vulnerable	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	Dicots	PDFAB08012	76	11	None	None	G4T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Chaparral, Cismontane woodland
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	Dicots	PDBOR01070	93	5	None	None	G3	S3	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley, SB_UCSC-UC Santa Cruz	Cismontane woodland, Coastal bluff scrub, Valley & foothill grassland
<i>Antrozous pallidus</i>	pallid bat	Mammals	AMACC10010	420	6	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
<i>Archoplites interruptus</i>	Sacramento perch	Fish	AFCQB07010	5	2	None	None	G2G3	S1	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern	Aquatic, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters
<i>Arctostaphylos franciscana</i>	Franciscan manzanita	Dicots	PDERI040J3	4	4	Endangered	None	GHC	S1	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Ultramafic
<i>Arctostaphylos imbricata</i>	San Bruno Mountain manzanita	Dicots	PDERI040L0	2	2	None	Endangered	G1	S1	1B.1	null	Chaparral, Coastal scrub
<i>Arctostaphylos montana</i> ssp. <i>montana</i>	Mt. Tamalpais manzanita	Dicots	PDERI040J5	15	9	None	None	G3T3	S3	1B.3	SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Ultramafic, Valley & foothill grassland
<i>Arctostaphylos montana</i> ssp. <i>ravenii</i>	Presidio manzanita	Dicots	PDERI040J2	7	7	Endangered	Endangered	G3T1	S1	1B.1	null	Chaparral, Coastal prairie,

													Coastal scrub, Ultramafic
Arctostaphylos montaraensis	Montara manzanita	Dicots	PDERI042W0	4	1	None	None	G1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture	Chaparral, Coastal scrub	
Arctostaphylos pacifica	Pacific manzanita	Dicots	PDERI040Z0	1	1	None	Endangered	G1	S1	1B.1	null	Chaparral, Coastal scrub	
Arctostaphylos pallida	pallid manzanita	Dicots	PDERI04110	9	1	Threatened	Endangered	G1	S1	1B.1	null	Broadleaved upland forest, Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal scrub	
Arctostaphylos virgata	Marin manzanita	Dicots	PDERI041K0	32	8	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture	Broadleaved upland forest, Chaparral, Closed-cone coniferous forest, North coast coniferous forest	
Ardea alba	great egret	Birds	ABNGA04040	43	1	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland	
Ardea herodias	great blue heron	Birds	ABNGA04010	156	2	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland	
Arenaria paludicola	marsh sandwort	Dicots	PDCAR040L0	19	5	Endangered	Endangered	G1	S1	1B.1	SB_SBBG-Santa Barbara Botanic Garden	Freshwater marsh, Marsh & swamp, Wetland	
Asio flammeus	short-eared owl	Birds	ABNSB13040	11	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Great Basin grassland, Marsh & swamp, Meadow & seep, Valley & foothill grassland, Wetland	
Astragalus tener var. tener	alkali milk-vetch	Dicots	PDFAB0F8R1	65	4	None	None	G2T1	S1	1B.2	null	Alkali playa, Valley & foothill grassland, Vernal pool, Wetland	
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2011	1	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland	
Banksia incredula	incredible harvestman	Arachnids	ILARA14100	1	1	None	None	G1	S1	null	null	Chaparral, Talus slope	
Bombus caliginosus	obscure bumble bee	Insects	IIHYM24380	181	14	None	None	G4?	S1S2	null	IUCN_VU-Vulnerable	null	
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	437	1	None	None	G3G4	S1S2	null	null	null	
Bombus occidentalis	western bumble bee	Insects	IIHYM24250	306	23	None	None	G2G3	S1	null	USFS_S-Sensitive	null	
Caecidotea tomalensis	Tomales isopod	Crustaceans	ICMAL01220	6	2	None	None	G2	S2S3	null	null	Aquatic, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters	
Calamagrostis crassiglumis	Thurber's reed grass	Monocots	PMPOA17070	15	1	None	None	G3Q	S2	2B.1	null	Coastal scrub, Freshwater marsh, Marsh & swamp, Wetland	
Callophrys mossii bayensis	San Bruno elfin butterfly	Insects	IILEPE2202	6	2	Endangered	None	G4T1	S3	null	null	Valley & foothill grassland	
Callophrys mossii marinensis	Marin elfin butterfly	Insects	IILEPE2207	4	1	None	None	G4T1	S1	null	null	Redwood	

Calochortus tiburonensis	Tiburon mariposa-lily	Monocots	PMLIL0D1C0	1	1	Threatened	Threatened	G1	S1	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Ultramafic, Valley & foothill grassland
Calystegia purpurata ssp. saxicola	coastal bluff morning-glory	Dicots	PDCON040D2	42	2	None	None	G4T2T3	S2S3	1B.2	BLM_S-Sensitive	Coastal bluff scrub, Coastal dunes, Coastal scrub, North coast coniferous forest
Carex comosa	bristly sedge	Monocots	PMCYP032Y0	31	1	None	None	G5	S2	2B.1	IUCN_LC-Least Concern	Coastal prairie, Freshwater marsh, Marsh & swamp, Valley & foothill grassland, Wetland
Carex praticola	northern meadow sedge	Monocots	PMCYP03B20	14	1	None	None	G5	S2	2B.2	null	Meadow & seep, Wetland
Castilleja affinis var. neglecta	Tiburon paintbrush	Dicots	PDSCR0D013	7	3	Endangered	Threatened	G4G5T1T2	S1S2	1B.2	SB_CaIBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Ultramafic, Valley & foothill grassland
Centromadia parryi ssp. parryi	pappose tarplant	Dicots	PDAST4R0P2	39	1	None	None	G3T2	S2	1B.2	BLM_S-Sensitive	Chaparral, Coastal prairie, Marsh & swamp, Meadow & seep, Valley & foothill grassland
Charadrius nivosus nivosus	western snowy plover	Birds	ABNNB03031	138	1	Threatened	None	G3T3	S2	null	CDFW_SSC-Species of Special Concern, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Great Basin standing waters, Sand shore, Wetland
Chloropyron maritimum ssp. palustre	Point Reyes salty bird's-beak	Dicots	PDSCR0J0C3	80	12	None	None	G4?T2	S2	1B.2	BLM_S-Sensitive	Marsh & swamp, Salt marsh, Wetland
Chorizanthe cuspidata var. cuspidata	San Francisco Bay spineflower	Dicots	PDPGN04081	17	15	None	None	G2T1	S1	1B.2	null	Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub
Chorizanthe robusta var. robusta	robust spineflower	Dicots	PDPGN040Q2	20	3	Endangered	None	G2T1	S1	1B.1	null	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal dunes
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	34	1	None	None	G5T2	S2	null	null	Coastal dunes
Circus hudsonius	northern harrier	Birds	ABNKC11011	54	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Coastal scrub, Great Basin grassland, Marsh & swamp, Riparian scrub, Valley & foothill grassland, Wetland
Cirsium andrewsii	Franciscan thistle	Dicots	PDAST2E050	31	12	None	None	G3	S3	1B.2	null	Broadleaved upland forest, Coastal bluff scrub, Coastal prairie, Coastal scrub, Ultramafic
Cirsium hydrophilum var. vaseyi	Mt. Tamalpais thistle	Dicots	PDAST2E1G2	14	8	None	None	G2T1	S1	1B.2	null	Broadleaved upland forest, Chaparral, Meadow & seep, Ultramafic, Wetland
Cirsium occidentale var. compactum	compact cobwebby thistle	Dicots	PDAST2E1Z1	30	1	None	None	G3G4T2	S2	1B.2	BLM_S-Sensitive	Chaparral, Coastal dunes, Coastal prairie, Coastal scrub
Clarkia franciscana	Presidio clarkia	Dicots	PDONA050H0	4	3	Endangered	Endangered	G1	S1	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Coastal scrub, Ultramafic, Valley & foothill grassland
Coastal Brackish Marsh	Coastal Brackish Marsh	Marsh	CTT52200CA	30	1	None	None	G2	S2.1	null	null	Marsh & swamp, Wetland

Coastal Terrace Prairie	Coastal Terrace Prairie	Herbaceous	CTT41100CA	8	1	None	None	G2	S2.1	null	null	Coastal prairie
Collinsia corymbosa	round-headed Chinese-houses	Dicots	PDSCR0H060	13	2	None	None	G1	S1	1B.2	null	Coastal dunes
Collinsia multicolor	San Francisco collinsia	Dicots	PDSCR0H0B0	36	9	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCSC-UC Santa Cruz	Closed-cone coniferous forest, Coastal scrub, Ultramafic
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	6	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	45	1	None	None	G4	S1S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Meadow & seep
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	383	21	Candidate	None	G4T2T3	S2S3	null	USFS_S-Sensitive	Closed-cone coniferous forest
Dicamptodon ensatus	California giant salamander	Amphibians	AAAAH01020	234	12	None	None	G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Aquatic, Meadow & seep, North coast coniferous forest, Riparian forest
Dirca occidentalis	western leatherwood	Dicots	PDTHY03010	90	7	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Chaparral, Cismontane woodland, Closed-cone coniferous forest, North coast coniferous forest, Riparian forest, Riparian woodland
Dufourea stagei	Stage's dufourine bee	Insects	IIHYM22010	1	1	None	None	G1G2	S1	null	null	Coastal scrub
Egretta thula	snowy egret	Birds	ABNGA06030	20	2	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Meadow & seep, Riparian forest, Riparian woodland, Wetland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	180	3	None	None	G5	S3S4	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1398	13	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing

													waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Enhydra lutris nereis	southern sea otter	Mammals	AMAJF09012	2	1	Threatened	None	G4T2	S2	null	CDFW_FP-Fully Protected, IUCN_EN-Endangered, MMC_SSC-Species of Special Concern	Aquatic, Protected deepwater coastal communities	
Erethizon dorsatum	North American porcupine	Mammals	AMAFJ01010	523	2	None	None	G5	S3	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest	
Eriogonum luteolum var. caninum	Tiburon buckwheat	Dicots	PDPGN083S1	26	15	None	None	G5T2	S2	1B.2	null	Chaparral, Cismontane woodland, Coastal prairie, Ultramafic, Valley & foothill grassland	
Eucyclogobius newberryi	tidewater goby	Fish	AFCQN04010	127	5	Endangered	None	G3	S3	null	AFS_EN-Endangered, IUCN_VU-Vulnerable	Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters, South coast flowing waters	
Eumetopias jubatus	Steller sea lion	Mammals	AMAJC03010	38	1	Delisted	None	G3	S2	null	IUCN_EN-Endangered, MMC_SSC-Species of Special Concern	Marine intertidal & splash zone communities, Protected deepwater coastal communities, Rock shore	
Euphydryas editha bayensis	Bay checkerspot butterfly	Insects	IILEPK4055	30	4	Threatened	None	G5T1	S1	null	null	Coastal dunes, Ultramafic, Valley & foothill grassland	
Extriplex joaquinana	San Joaquin spearscale	Dicots	PDCHE041F3	127	1	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland	
Falco peregrinus anatum	American peregrine falcon	Birds	ABNKD06071	58	2	Delisted	Delisted	G4T4	S3S4	null	CDF_S-Sensitive, CDFW_FP-Fully Protected, USFWS_BCC-Birds of Conservation Concern	null	
Fissidens pauperculus	minute pocket moss	Bryophytes	NBMUS2W0U0	22	2	None	None	G3?	S2	1B.2	USFS_S-Sensitive	North coast coniferous forest, Redwood	
Fritillaria lanceolata var. tristulis	Marin checker lily	Monocots	PMLIL0V0P1	32	2	None	None	G5T2	S2	1B.1	null	Coastal bluff scrub, Coastal prairie, Coastal scrub, Ultramafic	
Fritillaria liliacea	fragrant fritillary	Monocots	PMLIL0V0C0	82	7	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Cismontane woodland, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland	
Geothlypis trichas sinuosa	saltmarsh common	Birds	ABPBX1201A	112	5	None	None	G5T3	S3	null	CDFW_SSC-Species of Special	Marsh & swamp	

	yellowthroat											Concern, USFWS_BCC-Birds of Conservation Concern	
<i>Gilia capitata</i> ssp. <i>chamissonis</i>	blue coast <i>gilia</i>	Dicots	PDPLM040B3	37	13	None	None	G5T2	S2	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Coastal dunes, Coastal scrub	
<i>Gilia millefoliata</i>	dark-eyed <i>gilia</i>	Dicots	PDPLM04130	54	6	None	None	G2	S2	1B.2	BLM_S-Sensitive	Coastal dunes	
<i>Gonidea angulata</i>	western ridged mussel	Mollusks	IMBIV19010	157	1	None	None	G3	S1S2	null	null	Aquatic	
<i>Grindelia hirsutula</i> var. <i>maritima</i>	San Francisco gumplant	Dicots	PDAST470D3	15	14	None	None	G5T1Q	S1	3.2	SB_UCSC-UC Santa Cruz	Coastal bluff scrub, Coastal scrub, Ultramafic, Valley & foothill grassland	
<i>Helianthella castanea</i>	Diablo <i>helianthella</i>	Dicots	PDAST4M020	107	6	None	None	G2	S2	1B.2	null	Broadleaved upland forest, Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland	
<i>Helminthoglypta nickliniana</i> <i>bridgesi</i>	Bridges' coast range shoulderband	Mollusks	IMGASC2362	6	3	None	None	G3T1	S1S2	null	IUCN_DD-Data Deficient	Valley & foothill grassland	
<i>Hemizonia congesta</i> ssp. <i>congesta</i>	congested-headed hayfield tarplant	Dicots	PDAST4R065	52	4	None	None	G5T2	S2	1B.2	SB_UCBG-UC Botanical Garden at Berkeley	Valley & foothill grassland	
<i>Hesperexax sparsiflora</i> var. <i>brevifolia</i>	short-leaved <i>evax</i>	Dicots	PDASTE5011	72	1	None	None	G4T3	S3	1B.2	BLM_S-Sensitive	Coastal bluff scrub, Coastal dunes, Coastal prairie	
<i>Hesperolinon congestum</i>	Marin western flax	Dicots	PDLIN01060	27	8	Threatened	Threatened	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Ultramafic, Valley & foothill grassland	
<i>Heteranthera dubia</i>	water star-grass	Monocots	PMPON03010	9	1	None	None	G5	S2	2B.2	IUCN_LC-Least Concern	Marsh & swamp	
<i>Hoita strobilina</i>	Loma Prieta <i>hoita</i>	Dicots	PDFAB5Z030	37	1	None	None	G2?	S2?	1B.1	null	Chaparral, Cismontane woodland, Riparian woodland, Ultramafic	
<i>Holocarpha macradenia</i>	Santa Cruz tarplant	Dicots	PDAST4X020	37	14	Threatened	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Coastal prairie, Coastal scrub, Valley & foothill grassland	
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's <i>horkelia</i>	Dicots	PDROS0W043	58	7	None	None	G4T1?	S1?	1B.1	SB_UCSC-UC Santa Cruz, USFS_S-Sensitive	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub	
<i>Horkelia marinensis</i>	Point Reyes <i>horkelia</i>	Dicots	PDROS0W0B0	36	2	None	None	G2	S2	1B.2	null	Coastal dunes, Coastal prairie, Coastal scrub	
<i>Horkelia tenuiloba</i>	thin-lobed <i>horkelia</i>	Dicots	PDROS0W0E0	27	4	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Chaparral, Valley & foothill grassland	
<i>Hydroporus leechi</i>	Leech's skyline diving beetle	Insects	IICOL55040	13	1	None	None	G1?	S1?	null	null	Aquatic	
<i>Hydroprogne caspia</i>	Caspian tern	Birds	ABNNM08020	3	1	None	None	G5	S4	null	IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	null	
<i>Hypogymnia schizidiata</i>	island tube lichen	Lichens	NLT0032640	10	1	None	None	G2G3	S2	1B.3	null	Chaparral, Closed-cone coniferous forest	
<i>Icaricia icarioides</i> <i>missionensis</i>	Mission blue butterfly	Insects	IILEPG801A	14	13	Endangered	None	G5T1	S1	null	null	Coastal prairie	
<i>Icaricia</i>	Pheres blue	Insects	IILEPG8019	1	1	None	None	G5TX	SX	null	null	Desert dunes	

icarioides pheres	butterfly												
Ischnura gemina	San Francisco forktail damselfly	Insects	IIDOD72010	7	2	None	None	G2	S2	null	IUCN_VU-Vulnerable	null	
Kopsiopsis hookeri	small groundcone	Dicots	PDORO01010	21	4	None	None	G4?	S1S2	2B.3	null	North coast coniferous forest	
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	1	None	None	G3G4	S3S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Lower montane coniferous forest, Oldgrowth, Riparian forest	
Lasiurus blossevillii	western red bat	Mammals	AMACC05060	128	1	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland	
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	238	9	None	None	G3G4	S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest	
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	303	17	None	Threatened	G3G4T1	S1	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_NT-Near Threatened, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland	
Layia carnosa	beach layia	Dicots	PDAST5N010	25	1	Endangered	Endangered	G2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Coastal dunes, Coastal scrub	
Leptosiphon rosaceus	rose leptosiphon	Dicots	PDPLM09180	31	1	None	None	G1	S1	1B.1	null	Coastal bluff scrub	
Lessingia germanorum	San Francisco lessingia	Dicots	PDAST5S010	5	5	Endangered	Endangered	G1	S1	1B.1	null	Coastal scrub	
Lessingia micradenia var. micradenia	Tamalpais lessingia	Dicots	PDAST5S063	9	6	None	None	G2T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture	Chaparral, Ultramafic, Valley & foothill grassland	
Lichnanthe ursina	bumblebee scarab beetle	Insects	IICOL67020	8	2	None	None	G2	S2	null	null	Coastal dunes	
Malacothamnus arcuatus	arcuate bush-mallow	Dicots	PDMAL0Q0E0	30	1	None	None	G2Q	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland	
Masticophis lateralis euryxanthus	Alameda whipsnake	Reptiles	ARADB21031	167	3	Threatened	Threatened	G4T2	S2	null	null	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland	
Melospiza melodia pusillula	Alameda song sparrow	Birds	ABPBXA301S	38	11	None	None	G5T2?	S2S3	null	CDFW_SSC-Species of Special Concern, USFWS_BCC-Birds of Conservation Concern	Salt marsh	
Melospiza melodia samuelis	San Pablo song sparrow	Birds	ABPBXA301W	41	9	None	None	G5T2	S2	null	CDFW_SSC-Species of Special Concern, USFWS_BCC-Birds of Conservation Concern	Salt marsh	
Microcina leei	Lee's micro-blind harvestman	Arachnids	ILARA47040	2	1	None	None	G1	S1	null	null	Valley & foothill grassland	
Microcina tiburona	Tiburon micro-blind harvestman	Arachnids	ILARA47060	2	2	None	None	G1	S1	null	null	Ultramafic, Valley & foothill grassland	
Microseris paludosa	marsh microseris	Dicots	PDAST6E0D0	38	3	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic	Cismontane woodland, Closed-cone	

												Garden, SB_UCSC-UC Santa Cruz	coniferous forest, Coastal scrub, Valley & foothill grassland
<i>Microtus californicus sanpabloensis</i>	San Pablo vole	Mammals	AMAFF11034	8	8	None	None	G5T1T2	S1S2	null		CDFW_SSC-Species of Special Concern	Marsh & swamp, Valley & foothill grassland, Wetland
<i>Monardella sinuata</i> ssp. <i>nigrescens</i>	northern curly-leaved monardella	Dicots	PDLAM18162	25	1	None	None	G3T2	S2	1B.2		SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Coastal dunes, Coastal scrub, Lower montane coniferous forest
<i>Mylopharodon conocephalus</i>	hardhead	Fish	AFCJB25010	33	1	None	None	G3	S3	null		CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters
<i>Nannopterum auritum</i>	double-crested cormorant	Birds	ABNFD01020	39	4	None	None	G5	S4	null		CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
<i>Navarretia rosulata</i>	Marin County navarretia	Dicots	PDPLM0C0Z0	15	7	None	None	G2	S2	1B.2		BLM_S-Sensitive	Chaparral, Closed-cone coniferous forest, Ultramafic
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	Marsh	CTT52110CA	53	7	None	None	G3	S3.2	null	null		Marsh & swamp, Wetland
Northern Maritime Chaparral	Northern Maritime Chaparral	Scrub	CTT37C10CA	17	1	None	None	G1	S1.2	null	null		Chaparral
<i>Nycticorax nycticorax</i>	black-crowned night heron	Birds	ABNGA11010	37	2	None	None	G5	S4	null		IUCN_LC-Least Concern	Marsh & swamp, Riparian forest, Riparian woodland, Wetland
<i>Nyctinomops macrotis</i>	big free-tailed bat	Mammals	AMACD04020	32	1	None	None	G5	S3	null		CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_MH-Medium-High Priority	null
<i>Oncorhynchus kisutch</i> pop. 4	coho salmon - central California coast ESU	Fish	AFCHA02034	23	1	Endangered	Endangered	G5T2T3Q	S2	null		AFS_EN-Endangered	Aquatic
<i>Pentachaeta bellidiflora</i>	white-rayed pentachaeta	Dicots	PDAST6X030	14	7	Endangered	Endangered	G1	S1	1B.1		SB_UCBG-UC Botanical Garden at Berkeley	Ultramafic, Valley & foothill grassland
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	Choris' popcornflower	Dicots	PDBOR0V061	42	4	None	None	G3T1Q	S1	1B.2		BLM_S-Sensitive, SB_UCSC-UC Santa Cruz	Chaparral, Coastal prairie, Coastal scrub
<i>Plagiobothrys diffusus</i>	San Francisco popcornflower	Dicots	PDBOR0V080	17	1	None	Endangered	G1Q	S1	1B.1		SB_UCSC-UC Santa Cruz	Coastal prairie, Valley & foothill grassland
<i>Plagiobothrys glaber</i>	hairless popcornflower	Dicots	PDBOR0V0B0	9	1	None	None	GX	SX	1A		null	Marsh & swamp, Salt marsh, Vernal pool, Wetland
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	Monocots	PMPOA4Y070	27	1	None	Threatened	G2	S2	1B.1		SB_BerrySB-Berry Seed Bank, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Broadleaved upland forest, Meadow & seep, North coast coniferous forest, Wetland
<i>Polemonium carneum</i>	Oregon polemonium	Dicots	PDPLM0E050	16	3	None	None	G3G4	S2	2B.2		null	Coastal prairie, Coastal scrub, Lower montane coniferous forest
<i>Polygonum marinense</i>	Marin knotweed	Dicots	PDPGN0L1C0	32	3	None	None	G2Q	S2	3.1		null	Brackish marsh, Marsh & swamp, Salt marsh, Wetland
<i>Pomatiopsis binneyi</i>	robust walker	Mollusks	IMGASJ9010	2	1	None	None	G1	S1	null	null		null
<i>Pomatiopsis californica</i>	Pacific walker	Mollusks	IMGASJ9020	4	2	None	None	G1	S1	null	null		null
<i>Quercus parvula</i> var. <i>tamalpaisensis</i>	Tamalpais oak	Dicots	PDFAG051Q3	19	15	None	None	G4T2	S2	1B.3		null	Cismontane woodland, Lower montane coniferous forest

Rallus obsoletus obsoletus	California Ridgway's rail	Birds	ABNME05011	99	15	Endangered	Endangered	G3T1	S1	null	CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List	Brackish marsh, Marsh & swamp, Salt marsh, Wetland
Rana boylei	foothill yellow-legged frog	Amphibians	AAABH01050	2476	11	None	Endangered	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFS_S-Sensitive	Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1667	24	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Reithrodontomys raviventris	salt-marsh harvest mouse	Mammals	AMAFF02040	144	10	Endangered	Endangered	G1G2	S1S2	null	CDFW_FP-Fully Protected, IUCN_EN-Endangered	Marsh & swamp, Wetland
Riparia riparia	bank swallow	Birds	ABPAU08010	298	3	None	Threatened	G5	S2	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Sanicula maritima	adobe sanicle	Dicots	PDAP11Z0D0	17	2	None	Rare	G2	S2	1B.1	SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal prairie, Meadow & seep, Ultramafic, Valley & foothill grassland
Scapanus latimanus insularis	Angel Island mole	Mammals	AMABB02032	1	1	None	None	G5T1	SH	null	null	Valley & foothill grassland
Scapanus latimanus parvus	Alameda Island mole	Mammals	AMABB02031	8	7	None	None	G5T1Q	SH	null	CDFW_SSC-Species of Special Concern	Valley & foothill grassland
Senecio aphanactis	chaparral ragwort	Dicots	PDAST8H060	98	1	None	None	G3	S2	2B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Cismontane woodland, Coastal scrub
Serpentine Bunchgrass	Serpentine Bunchgrass	Herbaceous	CTT42130CA	22	4	None	None	G2	S2.2	null	null	Valley & foothill grassland
Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom	Dicots	PDMAL11012	34	1	None	None	G5T2	S2	1B.2	null	Freshwater marsh, Marsh & swamp, Wetland
Silene scouleri ssp. scouleri	Scouler's catchfly	Dicots	PDCAR0U1MC	23	8	None	None	G5T4T5	S2S3	2B.2	null	Coastal bluff scrub, Coastal prairie, Valley & foothill grassland
Silene verecunda ssp. verecunda	San Francisco campion	Dicots	PDCAR0U213	20	12	None	None	G5T1	S1	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCSC-UC Santa Cruz	Chaparral, Coastal bluff scrub, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland
Sorex vagrans halicoetes	salt-marsh wandering shrew	Mammals	AMABA01071	12	2	None	None	G5T1	S1	null	CDFW_SSC-Species of Special Concern	Marsh & swamp, Wetland
Spargularia	long-styled	Dicots	PDCAR0W062	22	1	None	None	G5T2	S2	1B.2	null	Marsh & swamp,

macrotheca var. longistyla	sand-spurrey											Meadow & seep
Speyeria callippe callippe	callippe silverspot butterfly	Insects	IILEPJ6091	12	7	Endangered	None	G5T1	S1	null	null	Coastal scrub
Spirinchus thaleichthys	longfin smelt	Fish	AFCHB03010	46	3	Candidate	Threatened	G5	S1	null	null	Aquatic, Estuary
Stebbinsoseris decipiens	Santa Cruz microseris	Dicots	PDAST6E050	19	4	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCSC-UC Santa Cruz	Broadleaved upland forest, Chaparral, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland
Sternula antillarum browni	California least tern	Birds	ABNNM08103	75	1	Endangered	Endangered	G4T2T3Q	S2	null	CDFW_FP-Fully Protected, NABCI_RWL-Red Watch List	Alkali playa, Wetland
Streptanthus batrachopus	Tamalpais jewelflower	Dicots	PDBRA2G050	8	5	None	None	G2	S2	1B.3	SB_UCSC-UC Santa Cruz	Chaparral, Closed-cone coniferous forest, Ultramafic
Streptanthus glandulosus ssp. niger	Tiburon jewelflower	Dicots	PDBRA2G0T0	2	2	Endangered	Endangered	G4T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Ultramafic, Valley & foothill grassland
Streptanthus glandulosus ssp. pulchellus	Mt. Tamalpais bristly jewelflower	Dicots	PDBRA2G0J2	24	8	None	None	G4T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Ultramafic, Valley & foothill grassland
Suaeda californica	California seablite	Dicots	PDCHE0P020	18	5	Endangered	None	G1	S1	1B.1	null	Freshwater marsh, Marsh & swamp, Wetland
Symphotrichum lentum	Suisun Marsh aster	Dicots	PDASTE8470	175	1	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_USDA-US Dept of Agriculture	Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland
Taxidea taxus	American badger	Mammals	AMAJF04010	594	3	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, lone formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth,

													Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
<i>Thaleichthys pacificus</i>	eulachon	Fish	AFCHB04010	10	1	Threatened	None	G5	S2	null	null		Aquatic, Klamath/North coast flowing waters
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco gartersnake	Reptiles	ARADB3613B	66	7	Endangered	Endangered	G5T2Q	S2	null	CDFW_FP-Fully Protected		Artificial standing waters, Marsh & swamp, Sacramento/San Joaquin standing waters, Wetland
<i>Trachusa gummifera</i>	San Francisco Bay Area leaf-cutter bee	Insects	IIHYM80010	3	2	None	None	G1	S1	null	null		null
<i>Trifolium amoenum</i>	two-fork clover	Dicots	PDFAB40040	26	3	Endangered	None	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley, SB_USDA-US Dept of Agriculture		Coastal bluff scrub, Ultramafic, Valley & foothill grassland
<i>Trifolium hydrophilum</i>	saline clover	Dicots	PDFAB400R5	56	5	None	None	G2	S2	1B.2	null		Marsh & swamp, Valley & foothill grassland, Vernal pool, Wetland
<i>Triphysaria floribunda</i>	San Francisco owl's-clover	Dicots	PDSCR2T010	50	13	None	None	G2?	S2?	1B.2	null		Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland
<i>Triquetrella californica</i>	coastal triquetrella	Bryophytes	NBMUS7S010	13	4	None	None	G2	S2	1B.2	USFS_S-Sensitive		Coastal bluff scrub, Coastal scrub
<i>Tryonia imitator</i>	mimic tryonia (=California brackishwater snail)	Mollusks	IMGASJ7040	39	3	None	None	G2	S2	null	IUCN_DD-Data Deficient		Aquatic, Brackish marsh, Estuary, Lagoon, Marsh & swamp, Salt marsh, Wetland
Valley Needlegrass Grassland	Valley Needlegrass Grassland	Herbaceous	CTT42110CA	45	1	None	None	G3	S3.1	null	null		Valley & foothill grassland
<i>Vespericola marinensis</i>	Marin hesperian	Mollusks	IMGASA4140	23	5	None	None	G2	S2	null	null		Chaparral, Meadow & seep, North coast coniferous forest, Riparian woodland
<i>Viburnum ellipticum</i>	oval-leaved viburnum	Dicots	PDCPR07080	39	1	None	None	G4G5	S3?	2B.3	null		Chaparral, Cismontane woodland, Lower montane coniferous forest
<i>Xanthocephalus xanthocephalus</i>	yellow-headed blackbird	Birds	ABPBXB3010	13	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern		Marsh & swamp, Wetland
<i>Zapus trinotatus orarius</i>	Point Reyes jumping mouse	Mammals	AMAFH01031	5	2	None	None	G5T1T3Q	S1S3	null	CDFW_SSC-Species of Special Concern		Coastal scrub, Marsh & swamp, Meadow & seep, Valley & foothill grassland

Search Results

116 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [3712283:3712273:3712263:3712264:3712274:3712275:3712284:3712285]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK
<i>Allium peninsulare</i> var. <i>franciscanum</i>	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G5T2	S2	1B.2
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo	Fabaceae	perennial deciduous shrub	Apr-Jul	None	None	G4T2	S2	1B.2
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2
<i>Arabis blepharophylla</i>	coast rockcress	Brassicaceae	perennial herb	Feb-May	None	None	G4	S4	4.3
<i>Arctostaphylos franciscana</i>	Franciscan manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	FE	None	GHC	S1	1B.1
<i>Arctostaphylos imbricata</i>	San Bruno Mountain manzanita	Ericaceae	perennial evergreen shrub	Feb-May	None	CE	G1	S1	1B.1
<i>Arctostaphylos montana</i> ssp. <i>montana</i>	Mt. Tamalpais manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	None	None	G3T3	S3	1B.3
<i>Arctostaphylos montana</i> ssp. <i>ravenii</i>	Presidio manzanita	Ericaceae	perennial evergreen shrub	Feb-Mar	FE	CE	G3T1	S1	1B.1
<i>Arctostaphylos montaraensis</i>	Montara manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	None	None	G1	S1	1B.2
<i>Arctostaphylos pacifica</i>	Pacific manzanita	Ericaceae	evergreen shrub	Feb-Apr	None	CE	G1	S1	1B.1
<i>Arctostaphylos pallida</i>	pallid manzanita	Ericaceae	perennial evergreen shrub	Dec-Mar	FT	CE	G1	S1	1B.1
<i>Arctostaphylos virgata</i>	Marin manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	None	None	G2	S2	1B.2
<i>Arenaria paludicola</i>	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	FE	CE	G1	S1	1B.1
<i>Aspidotis carlotta-halliae</i>	Carlotta Hall's lace fern	Pteridaceae	perennial rhizomatous herb	Jan-Dec	None	None	G3	S3	4.2
<i>Astragalus breweri</i>	Brewer's milk-vetch	Fabaceae	annual herb	Apr-Jun	None	None	G3	S3	4.2
<i>Astragalus nuttallii</i> var. <i>nuttallii</i>	ocean bluff milk-vetch	Fabaceae	perennial herb	Jan-Nov	None	None	G4T4	S4	4.2
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2
<i>Calamagrostis crassiglumis</i>	Thurber's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	None	None	G3Q	S2	2B.1

<u><i>Calamagrostis ophitidis</i></u>	serpentine reed grass	Poaceae	perennial herb	Apr-Jul	None	None	G3	S3	4.3
<u><i>Calandrinia breweri</i></u>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2
<u><i>Calochortus tiburonensis</i></u>	Tiburon mariposa-lily	Liliaceae	perennial bulbiferous herb	Mar-Jun	FT	CT	G1	S1	1B.1
<u><i>Calochortus umbellatus</i></u>	Oakland star-tulip	Liliaceae	perennial bulbiferous herb	Mar-May	None	None	G3?	S3?	4.2
<u><i>Calochortus uniflorus</i></u>	pink star-tulip	Liliaceae	perennial bulbiferous herb	Apr-Jun	None	None	G4	S4	4.2
<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
<u><i>Calystegia purpurata</i> ssp. <i>saxicola</i></u>	coastal bluff morning-glory	Convolvulaceae	perennial herb	(Mar)Apr-Sep	None	None	G4T2T3	S2S3	1B.2
<u><i>Carex comosa</i></u>	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1
<u><i>Carex praticola</i></u>	northern meadow sedge	Cyperaceae	perennial herb	May-Jul	None	None	G5	S2	2B.2
<u><i>Castilleja affinis</i> var. <i>neglecta</i></u>	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	FE	CT	G4G5T1T2	S1S2	1B.2
<u><i>Castilleja ambigua</i> var. <i>ambigua</i></u>	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	None	None	G4T4	S3S4	4.2
<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
<u><i>Ceanothus pinetorum</i></u>	Kern ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	None	None	G3	S3	4.3
<u><i>Centromadia parryi</i> ssp. <i>parryi</i></u>	pappose tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.2
<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
<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
<u><i>Chorizanthe robusta</i> var. <i>robusta</i></u>	robust spineflower	Polygonaceae	annual herb	Apr-Sep	FE	None	G2T1	S1	1B.1
<u><i>Cirsium andrewsii</i></u>	Franciscan thistle	Asteraceae	perennial herb	Mar-Jul	None	None	G3	S3	1B.2
<u><i>Cirsium hydrophilum</i> var. <i>vaseyi</i></u>	Mt. Tamalpais thistle	Asteraceae	perennial herb	May-Aug	None	None	G2T1	S1	1B.2
<u><i>Cirsium occidentale</i> var. <i>compactum</i></u>	compact cobwebby thistle	Asteraceae	perennial herb	Apr-Jun	None	None	G3G4T2	S2	1B.2
<u><i>Cistanthe maritima</i></u>	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2
<u><i>Clarkia franciscana</i></u>	Presidio clarkia	Onagraceae	annual herb	May-Jul	FE	CE	G1	S1	1B.1
<u><i>Collinsia corymbosa</i></u>	round-headed Chinese-houses	Plantaginaceae	annual herb	Apr-Jun	None	None	G1	S1	1B.2

<u><i>Collinsia multicolor</i></u>	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar-May	None	None	G2	S2	1B.2
<u><i>Collomia diversifolia</i></u>	serpentine collomia	Polemoniaceae	annual herb	May-Jun	None	None	G4	S4	4.3
<u><i>Cypripedium californicum</i></u>	California lady's-slipper	Orchidaceae	perennial rhizomatous herb	Apr-Aug(Sep)	None	None	G4	S4	4.2
<u><i>Dirca occidentalis</i></u>	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr)	None	None	G2	S2	1B.2
<u><i>Elymus californicus</i></u>	California bottle-brush grass	Poaceae	perennial herb	May-Aug(Nov)	None	None	G4	S4	4.3
<u><i>Equisetum palustre</i></u>	marsh horsetail	Equisetaceae	perennial rhizomatous herb	Unk	None	None	G5	S1S3	3
<u><i>Eriogonum luteolum</i></u> <u>var. <i>caninum</i></u>	Tiburon buckwheat	Polygonaceae	annual herb	May-Sep	None	None	G5T2	S2	1B.2
<u><i>Erysimum franciscanum</i></u>	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	None	None	G3	S3	4.2
<u><i>Erythranthe laciniata</i></u>	cut-leaved monkeyflower	Phrymaceae	annual herb	Apr-Jul	None	None	G4	S4	4.3
<u><i>Erythranthe nudata</i></u>	bare monkeyflower	Phrymaceae	annual herb	May-Jun	None	None	G4	S4	4.3
<u><i>Extriplex joaquinana</i></u>	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2
<u><i>Fissidens pauperculus</i></u>	minute pocket moss	Fissidentaceae	moss		None	None	G3?	S2	1B.2
<u><i>Fritillaria lanceolata</i></u> <u>var. <i>tristulis</i></u>	Marin checker lily	Liliaceae	perennial bulbiferous herb	Feb-May	None	None	G5T2	S2	1B.1
<u><i>Fritillaria liliacea</i></u>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2	S2	1B.2
<u><i>Gilia capitata</i></u> ssp. <u><i>chamissonis</i></u>	blue coast gilia	Polemoniaceae	annual herb	Apr-Jul	None	None	G5T2	S2	1B.1
<u><i>Gilia millefoliata</i></u>	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2
<u><i>Grindelia hirsutula</i></u> <u>var. <i>maritima</i></u>	San Francisco gumplant	Asteraceae	perennial herb	Jun-Sep	None	None	G5T1Q	S1	3.2
<u><i>Helianthella castanea</i></u>	Diablo helianthella	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2
<u><i>Hemizonia congesta</i></u> <u>ssp. <i>congesta</i></u>	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	None	None	G5T2	S2	1B.2
<u><i>Hesperevax sparsiflora</i></u> var. <u><i>brevifolia</i></u>	short-leaved evax	Asteraceae	annual herb	Mar-Jun	None	None	G4T3	S3	1B.2
<u><i>Hesperolinon congestum</i></u>	Marin western flax	Linaceae	annual herb	Apr-Jul	FT	CT	G1	S1	1B.1
<u><i>Heteranthera dubia</i></u>	water star-grass	Pontederiaceae	perennial herb (aquatic)	Jul-Oct	None	None	G5	S2	2B.2
<u><i>Hoita strobilina</i></u>	Loma Prieta hoita	Fabaceae	perennial herb	May-Jul(Aug-Oct)	None	None	G2?	S2?	1B.1
<u><i>Holocarpus</i></u>	Santa Cruz	Asteraceae	annual herb	Jun-Oct	FT	CE	G1	S1	1B.1

<i>macradenia</i>	tarplant									
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	None	None	G4T1?	S1?	1B.1	
<i>Horkelia marinensis</i>	Point Reyes horkelia	Rosaceae	perennial herb	May-Sep	None	None	G2	S2	1B.2	
<i>Horkelia tenuiloba</i>	thin-lobed horkelia	Rosaceae	perennial herb	May-Jul(Aug)	None	None	G2	S2	1B.2	
<i>Hosackia gracilis</i>	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2	
<i>Hypogymnia schizidiata</i>	island tube lichen	Parmeliaceae	foliose lichen		None	None	G2G3	S2	1B.3	
<i>Iris longipetala</i>	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2	
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2	
<i>Kopsiopsis hookeri</i>	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	Apr-Aug	None	None	G4?	S1S2	2B.3	
<i>Layia carnosa</i>	beach layia	Asteraceae	annual herb	Mar-Jul	FE	CE	G2	S2	1B.1	
<i>Leptosiphon acicularis</i>	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	
<i>Leptosiphon ambiguus</i>	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	
<i>Leptosiphon grandiflorus</i>	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	None	None	G3G4	S3S4	4.2	
<i>Leptosiphon latisectus</i>	broad-lobed leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3	
<i>Leptosiphon rosaceus</i>	rose leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G1	S1	1B.1	
<i>Lessingia germanorum</i>	San Francisco lessingia	Asteraceae	annual herb	(Jun)Jul-Nov	FE	CE	G1	S1	1B.1	
<i>Lessingia hololeuca</i>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	
<i>Lessingia micradenia</i> var. <i>micradenia</i>	Tamalpais lessingia	Asteraceae	annual herb	(Jun)Jul-Oct	None	None	G2T2	S2	1B.2	
<i>Malacothamnus arcuatus</i>	arcuate bush-mallow	Malvaceae	perennial deciduous shrub	Apr-Sep	None	None	G2Q	S2	1B.2	
<i>Micropus amphibolus</i>	Mt. Diablo cottonweed	Asteraceae	annual herb	Mar-May	None	None	G3G4	S3S4	3.2	
<i>Microseris paludosa</i>	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	None	None	G2	S2	1B.2	
<i>Monardella sinuata</i> ssp. <i>nigrescens</i>	northern curly-leaved monardella	Lamiaceae	annual herb	(Apr)May-Jul(Aug-Sep)	None	None	G3T2	S2	1B.2	
<i>Navarretia rosulata</i>	Marin County navarretia	Polemoniaceae	annual herb	May-Jul	None	None	G2	S2	1B.2	
<i>Pentachaeta bellidiflora</i>	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah	Apiaceae	perennial herb	Jun-Oct	None	None	G5T3T4	S3S4	4.2	

<u><i>Piperia michaelii</i></u>	Michael's rein orchid	Orchidaceae	perennial herb	Apr-Aug	None	None	G3	S3	4.2
<u><i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i></u>	Choris' popcornflower	Boraginaceae	annual herb	Mar-Jun	None	None	G3T1Q	S1	1B.2
<u><i>Plagiobothrys diffusus</i></u>	San Francisco popcornflower	Boraginaceae	annual herb	Mar-Jun	None	CE	G1Q	S1	1B.1
<u><i>Plagiobothrys glaber</i></u>	hairless popcornflower	Boraginaceae	annual herb	Mar-May	None	None	GX	SX	1A
<u><i>Pleuropogon hooverianus</i></u>	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	None	CT	G2	S2	1B.1
<u><i>Polemonium carneum</i></u>	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	None	None	G3G4	S2	2B.2
<u><i>Polygonum marinense</i></u>	Marin knotweed	Polygonaceae	annual herb	(Apr)May-Aug(Oct)	None	None	G2Q	S2	3.1
<u><i>Quercus parvula</i> var. <i>tamalpaisensis</i></u>	Tamalpais oak	Fagaceae	perennial evergreen shrub	Mar-Apr	None	None	G4T2	S2	1B.3
<u><i>Ranunculus lobbii</i></u>	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	None	None	G4	S3	4.2
<u><i>Sanicula maritima</i></u>	adobe sanicle	Apiaceae	perennial herb	Feb-May	None	CR	G2	S2	1B.1
<u><i>Senecio aphanactis</i></u>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	2B.2
<u><i>Sidalcea calycosa</i> ssp. <i>rhizomata</i></u>	Point Reyes checkerbloom	Malvaceae	perennial rhizomatous herb	Apr-Sep	None	None	G5T2	S2	1B.2
<u><i>Silene scouleri</i> ssp. <i>scouleri</i></u>	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	None	None	G5T4T5	S2S3	2B.2
<u><i>Silene verecunda</i> ssp. <i>verecunda</i></u>	San Francisco champion	Caryophyllaceae	perennial herb	(Feb)Mar-Jul(Aug)	None	None	G5T1	S1	1B.2
<u><i>Spergularia macrotheca</i> var. <i>longistyla</i></u>	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May	None	None	G5T2	S2	1B.2
<u><i>Stebbinsoseris decipiens</i></u>	Santa Cruz microseris	Asteraceae	annual herb	Apr-May	None	None	G2	S2	1B.2
<u><i>Streptanthus batrachopus</i></u>	Tamalpais jewelflower	Brassicaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.3
<u><i>Streptanthus glandulosus</i> ssp. <i>niger</i></u>	Tiburon jewelflower	Brassicaceae	annual herb	May-Jun	FE	CE	G4T1	S1	1B.1
<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
<u><i>Suaeda californica</i></u>	California seablite	Chenopodiaceae	perennial evergreen shrub	Jul-Oct	FE	None	G1	S1	1B.1
<u><i>Symphotrichum lentum</i></u>	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2
<u><i>Toxicoscordion</i></u>	marsh ziaadenus	Melanthiaceae	perennial	Apr-Jul	None	None	G3	S3	4.2

<u><i>fontanum</i></u>			bulbiferous herb							
<u><i>Trifolium amoenum</i></u>	two-fork clover	Fabaceae	annual herb	Apr-Jun	FE	None	G1	S1	1B.1	
<u><i>Trifolium hydrophilum</i></u>	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	
<u><i>Triphysaria floribunda</i></u>	San Francisco owl's-clover	Orobanchaceae	annual herb	Apr-Jun	None	None	G2?	S2?	1B.2	
<u><i>Triquetrella californica</i></u>	coastal triquetrella	Pottiaceae	moss		None	None	G2	S2	1B.2	
<u><i>Viburnum ellipticum</i></u>	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3?	2B.3	

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**Appendix C:
Project Plan**

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LANDSCAPE PLAN

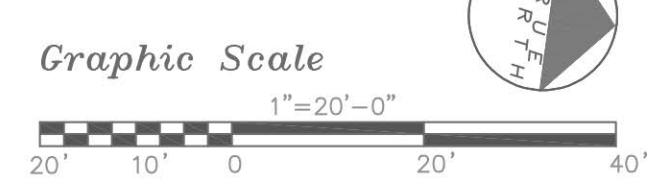
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