

December 9, 2020

Greg Kidd  
Hard Yaka, Inc.  
P.O. Box 1186  
Crystal Bay, NV 89402

**Re: Biological Site Assessment at 69 Starbuck Drive, Muir Beach, Marin County (APN: 199-201-03); WRA Project #30299**

Mr. Kidd,

The purpose of this letter report is to provide you the initial results of one site visit in support of the Biological Site Assessment (BSA) that WRA, Inc. conducted at 69 Starbuck Drive (APN 199-201-03), Muir Beach, Marin County, California (Study Area; Attachment A). The approximately 0.77-acre Study Area is moderately sloped and northeast-facing, and is predominantly composed of hardscaped and landscaped areas. It is WRA's understanding that you are interested in developing an accessory dwelling unit (ADU). Although WRA has not been provided with site-specific plans, the limited size of the parcel, presumed approximated footprint, and site visit results are sufficient to evaluate such a development.

This report describes the results of the site visit for which the Study Area was assessed concerning: (1) the presence of land cover types protected under local, state, and federal laws and regulations (e.g., wetlands, oak woodlands) and (2) the presence and/or potential to support special-status plants and wildlife. This report also contains an evaluation of potential impacts to sensitive land cover and special-status species that may or may not occur as a result of the proposed project.

### **SUMMARY OF FINDINGS**

No sensitive land cover types are present, and special-status plants and most special-status wildlife do not have the potential to occur within the Study Area. A narrow Monterey cypress grove residing on the northern edge of the Study Area may support wintering roost for Monarch butterfly (*Danaus plexippus*). Additionally, other trees and large shrubs provide potential nesting substrates for non-status birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF). Basic incorporation of management practices into the final project description and implementation, will prevent impacts to these species. Based on these findings, this assessment concludes that's the construction of an ADU will not result in any potentially significant adverse biological impacts to the environment.

### **REGULATORY BACKGROUND**

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

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

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

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

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

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

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

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

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

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

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

Marin County Stream Conservation Areas: protected by the County’s Countywide Plan (CWP), and administered under the design review process by the Community Development Agency Planning Department.

- A Stream Conservation Area (SCA) is designated along all natural watercourses supporting riparian vegetation for a length of 100 feet or more. The SCA consists of the watercourse itself between the tops of the banks and a strip of land extending laterally outward from the top of both banks.

- For those ephemeral streams that do not meet these criteria to be considered an SCA, a minimum 20-foot development setback is required. Development activities that may occur within a SCA or ephemeral stream setback are closely regulated by the County and require consideration of impacts of proposed developments on species and habitats during the environmental review process.

Marin County Native Tree Protection and Preservation Ordinance: protected under Marin County Municipal code Chapter 22.75, “Native Tree Preservation and Protection”, and administered by the Community Development Agency Planning Department.

- Protected trees are defined as native oaks (*Quercus* spp.), willows (*Salix* spp.), Sargent cypress (*Hesperocyparis sargentii* [*Cupressus* s.]), and madrone (*Arbutus menziesii*) with a minimum diameter at breast height (DBH; measured 4.5 feet above grade) of six inches, and most other native tree species, including Douglas fir (*Pseudotsuga menziesii*) and California bay (*Umbellularia californica*) with a minimum DBH of 10 inches.
- Heritage trees are defined as native oaks, willows, Sargent cypress, and madrone with a minimum DBH of 16 inches, and most other native tree species with a minimum DBH of 30 inches.
- It is unlawful to remove one or more protected or heritage trees on an undeveloped lot without a tree removal permit, except as provided for in Section 22.75.050 (Exemptions) and as provided for in Section 22.75.080 (Tree Removal Permits) of the Ordinance.
- The owner of property upon which a protected tree is located may request to remove heritage or protected trees not otherwise exempt from the Ordinance by filling an application for a Tree Removal Permit application.

Tree Removal Permit conditions of approval may include planting of replacement trees at a ratio of up to three new, appropriately-sized and installed trees for each protected tree to be removed, or the payment of in-lieu fees in the amount of \$500 per replacement tree to be deposited into the Tree Preservation Fund managed by the Marin County Parks and Open Space Department.

## **METHODS**

Prior to the site visit, background literature was reviewed to determine the potential presence of regulated land cover types (including aquatic resources), and special-status plant and wildlife species. Resources reviewed included CDFW Natural Diversity Database records (CNDDDB; CDFW 2020a) and CNPS Inventory records (CNPS 2020). For special-status wildlife (specifically birds), Shuford (1993), Shuford and Gardali (2008), and Thomson et al. (2016) were also reviewed.

Following the background literature review, a qualified WRA biologist (Aaron Arthur, author) conducted a site visit on November 12, 2020. The Study Area was examined for indicators of wetlands, streams, and areas with an Ordinary High Water Mark (OHWM) potentially under the jurisdiction of the Corps, RWQCB, and CDFW, and which may be considered SCAs under the Marin CWP. The Study Area was also examined to determine if special-status species or suitable habitat to support such species was present.

## RESULTS

### Land Cover Types

The Study Area contains four land cover types: non-native grassland, coyote brush scrub, Ngaio tree grove, and Monterey pine grove. These land cover are illustrated in Attachment A and described below.

Developed Areas: Hardscaping and Landscaping (no vegetation alliance). CDFW Rank: Non; Non-ESHA. The majority of the Study Area has been developed or managed in either hardscape or landscape elements, totaling 0.71 acre. Hardscaping includes the existing single-family residence, driveways, walkways, decks, and other hard elements. Landscaping areas include those intentionally altered for aesthetics and buffering, as well as those areas that have been slightly fallow, but clearly managed. Species include blue blossom (*Ceanothus thyrsiflorus*), Pride-of-Madeira (*Echium candicans*), strawberry tree (*Arbutus unedo*), rosemary (*Rosmarinus officinalis*), California wax myrtle (*Morella californica*), and crimson bottlebrush (*Callistemon citrinus*). This land cover type is not considered sensitive by the CDFW or Marin County LCP.

Monterey Cypress Grove (*Hesperocyparis macrocarpa* Semi-Natural Shrub Stands). CDFW Rank: None; Non-ESHA<sup>1</sup>. Monterey cypress groves are limited to coastal and Bayland sites from Humboldt County to San Diego County. These groves are frequently planted along with other landscaped plants, and are situated in built environments, coastal bluffs, and coastal hills (Calflora 2020). The Study Area contains 0.06 acre of Monterey cypress grove on the western property line. The dominant cover is Monterey cypress (*Hesperocyparis macrocarpa*), with lesser cover of Douglas fir (*Pseudotsuga menziesii*), crimson bottlebrush (*Callistemon citrinus*), and Ngaio tree (*Myoporum laetum*). Due to an extremely dense canopy, the understory is essentially bereft of an herbaceous layer. This land cover type is not considered sensitive by the CDFW or Marin County LCP.

### Special-status Plant Species

A total of 38 special-status plant species have been documented within five miles of the Study Area (Figure A-2). None of these have the potential to occur in the Study Area due to one or more of the following reasons:

- Hydrologic conditions (e.g. tidal, vernal pool) necessary to support the special-status plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g. serpentine, shale) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g. elevation range) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g. alkali or acidic substrates) necessary to support this species are not present in the Study Area;
- Associated vegetation communities (e.g. chaparral, coastal prairie, redwood forest) necessary to support the special-status plant species are not present in the Study Area;

---

<sup>1</sup> Naturally occurring stands are limited to the Central Coast and are considered sensitive by CDFW; groves in Marin County are not native and are not considered sensitive by CDFW or other agencies

- Land use history and contemporary management (e.g. vegetation clearing, adjacent residential development) has degraded local habitat necessary to support the special-status plant species.

### Special-status Wildlife Species

A total of 24 special-status wildlife species have been documented within five miles of the Study Area (Figure A-3), of which one species, along with nesting birds protected under the MBTA, have the potential to occur within the Study Area. The potential for this species to occur within the Study Area is summarized below. The remaining 23 special-status species do not have the potential to occur within the Study Area due to one or more of the following reasons:

- Aquatic habitats (e.g. rivers/streams, ponds, estuaries) necessary to support the special-status wildlife species are not present in the Study Area;
- On-site aquatic habitats (e.g. seasonal wetland) is isolated/not connected to larger aquatic features to provide for migration and dispersal for special-status wildlife;
- Vegetation types (e.g. tidal marsh, chaparral) that provide nesting and/or foraging resources necessary support the special-status wildlife species are not present or within the immediate vicinity of the Study Area;
- Structures or vegetation (e.g. tules, old-growth trees) necessary to provide nesting, roosting, or cover habitat to support the special-status wildlife species are not present or within the immediate vicinity of the Study Area;
- Host plants (e.g. dog violet, harlequin lotus) necessary to provide larval and nectar resources for the special-status wildlife species are not present in the Study Area;
- The Study Area is outside (e.g. north of, west of) of the special-status wildlife species documented range (including nesting/breeding range, for birds).

A list of special-status wildlife species known to occur in the vicinity of the Study Area was compiled based on available information from CNDDDB (CDFW 2020a) for the Point Bonita 7.5-minute quadrangle (USGS 2018). The following special-status wildlife species with the potential to occur in the Study Area are described below.

Nesting birds (non-status), High Potential (Present). The Study Area contains vegetation (trees, shrubbery, etc.) that may be used as nesting habitat by bird species with baseline protections under the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. These laws/codes apply to a wide variety of native birds, including species that are non-migratory and/or commonly found near developed areas in western Marin County. In addition to adult birds, legal protections include active nests (those with eggs or young), the deliberate destruction of which is prohibited.

Monarch butterfly (*Danaus plexippus*) – overwintering roost sites. CDFW Species of Special Concern. Moderate Potential (Presence Unknown). Monarch (*Danaus plexippus*) is a large, showy butterfly is found throughout the United States, southern Canada, and Central America. It also occurs in parts of South America and other continents. In North America, this species spends spring and summer months breeding and foraging across much of its range. This is followed by migration in late summer/early fall to overwintering areas in both coastal California and central Mexico. Thousands to millions of monarchs will congregate on a tree or trees with nectar and water sources nearby for overwintering. Favored roosting sites are wind-protected tree groves typically composed of eucalyptus (*Eucalyptus* spp.), coastal pines (*Pinus radiata*, *P. muricata*, *P. coulteri*), Monterey cypress (*Hesperocyparis macrocarpa*), and coast redwood (*Sequoia sempervirens*) (CDFW

2020a, CEC 2009). These stands are typically a U-shaped formation, with several rows of trees and a multi-tiered canopy to protect from high winds, but allow sunlight to penetrate for warmth (CED 2009). Native milkweeds (*Asclepias* spp.) are the larval host, while nectar resources include milkweeds and a broader suite of flowering plants (CDFW 2020a, Opler, Lotts, and Naberhaus 2011). Documented roost sites are prevalent along the California Coast from Mendocino County south to San Diego County, with numerous documented occurrences in the Bolinas-Stinson Beach-Muir Beach region of Marin County (CDFW 2020a). The Monterey cypress grove may provide nominal roosting habitat for monarch butterflies; however, the lack of a U-shape, high density, short stature, and relatively young composition of trees, suggest that these trees are not prime habitat for such.

## **SUMMARY**

### **Land Cover**

The Study Area does not contain sensitive land cover types; therefore, there will be no impacts to such and there are no further actions recommended for land cover.

### **Special-status Plants**

The Study Area does not have the potential to support special-status plants; therefore, there will be no impacts to such and there are no further actions recommended for special-status plants.

### **Special-status Wildlife**

The Study Area has the potential to support one special-status wildlife species as well as non-status nesting birds. The following recommendations are forwarded to protect these species.

Nesting birds (including special-status birds): Non-status bird species whose nesting activities are protected by federal and/or state regulations have the potential to nest within the Study Area. However, trees will not be removed or otherwise manipulated as part of the project. Therefore, there will be no impacts to nesting birds and there are no further actions recommended for such. If trees are to be removed or limbed, in order to avoid impacts to special-status and non-status birds, such activities should be conducted between September 1 and January 31, outside of the nesting bird period.

Monarch butterfly: Monarch butterflies (*Danaus plexippus*) have the potential to roost in the on-site Monterey cypress (*Hesperocyparis macrocarpa*) during the winter months (November through January). However, these trees will not be removed or otherwise manipulated. Therefore, there will be no impacts to roosting monarch butterfly and there are no further actions recommended for such.

## **Summary**

Based on the site visit and review of information pertinent to the Study Area, the development of a single-family residence, with the abovementioned recommendations, will not result in impacts to sensitive land cover or to special-status plants or wildlife. If vegetation was removed outside of nesting/roosting seasons noted above to special-status/non-status nesting birds protected under the MBTA and CFGC, nor would it impact special-status bats.

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

If you have any questions or comments, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Aaron Arthur', written in a cursive style.

Aaron Arthur  
Senior Associate Biologist/Botanist

**Enclosures:** Attachment A – Figures  
Attachment B – Observed Species List  
Attachment C – CNPS & CDFW Database Results  
Attachment D – Representative Photographs

## REFERENCES

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken (eds.). 2012. The Jepson Manual: Vascular Plants of California, 2<sup>nd</sup> Edition. University of California Press, Berkeley, CA.
- California Department of Fish and Wildlife (CDFW). 2020a. California Natural Diversity Database (CNDDDB), Wildlife and Habitat Data Analysis Branch. Sacramento, CA. Accessed: November 2020.
- California Department of Fish and Wildlife (CDFW). 2020b. Spotted Owl Database, Wildlife and Habitat Data Analysis Branch. Sacramento. Accessed: November 2020.
- California Department of Fish and Wildlife (CDFW). 2020c. Natural Communities – Background Information. Biogeographic Data Branch. Available online at: [http://www.dfg.ca.gov/biogeodata/vegcamp/natural\\_comm\\_background.asp](http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp) Accessed: November 2020.
- California Native Plant Society (CNPS). 2020a. Online Inventory of Rare, Threatened, and Endangered Plants of California. Available at: <http://www.rareplants.cnps.org/>. Accessed: November 2020.
- California Native Plant Society (CNPS). 2020b. A Manual of California Vegetation, Online Edition. Sacramento, California. Online at: <http://vegetation.cnps.org/>; Accessed: November 2020.
- California Soil Resources Lab (CSRL). 2020. Online Soil Survey. Online at: <http://casoilresource.lawr.ucdavis.edu/drupal>. Accessed: November 2020.
- Consortium of California Herbaria (CCH). 2020. Data provided by the participants of the Consortium of California Herbaria. Available at: <http://ucjeps.berkeley.edu/consortium>. Accessed: November 2020.
- eBird. 2020. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: <http://www.ebird.org>. Accessed: November 2020.
- Google Earth. 2020. Aerial Imagery 1993-2015. Accessed: November 2020.
- Howell, J.T., F. Almeda, W. Follette, and C. Best. 2007. Marin Flora. California Academy of Sciences, San Francisco, CA and California Native Plant Society, Sacramento, CA.
- Jepson Flora Project (eds.). 2020. Jepson eFlora. Online at: <http://ucjeps.berkeley.edu/IJM.html>. Accessed: November 2020.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. *Phytoneuron* 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.
- Marin County. 1981. Marin County Local Coastal Program, Unit II. Adopted by Marin County Board of Supervisors, December 9, 1980. Certified by State Coastal Commission, April 1, 1981.
- Sawyer, J. O., T. Keeler-Wolf, J. M. Evens. 2009. A Manual of California Vegetation. 2<sup>nd</sup> Edition. California Native Plant Society Press, Sacramento, CA.



Shuford, W. D. 1993. The Marin County Breeding Bird Atlas: A Distributional and Natural History of Coastal California Birds. California Avifauna Series 1. Bushtit Books, Bolinas, CA.

U.S. Geological Survey (USGS). 2018. 7.5-minute Quadrangle Series: Point Bonita, California.

Western Bat Working Group (WBWG). 2020. Species Accounts. Available online at: <http://wbwg.org/western-bat-species/>. Accessed: November 2020.

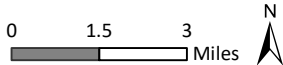
Attachment A – Figures



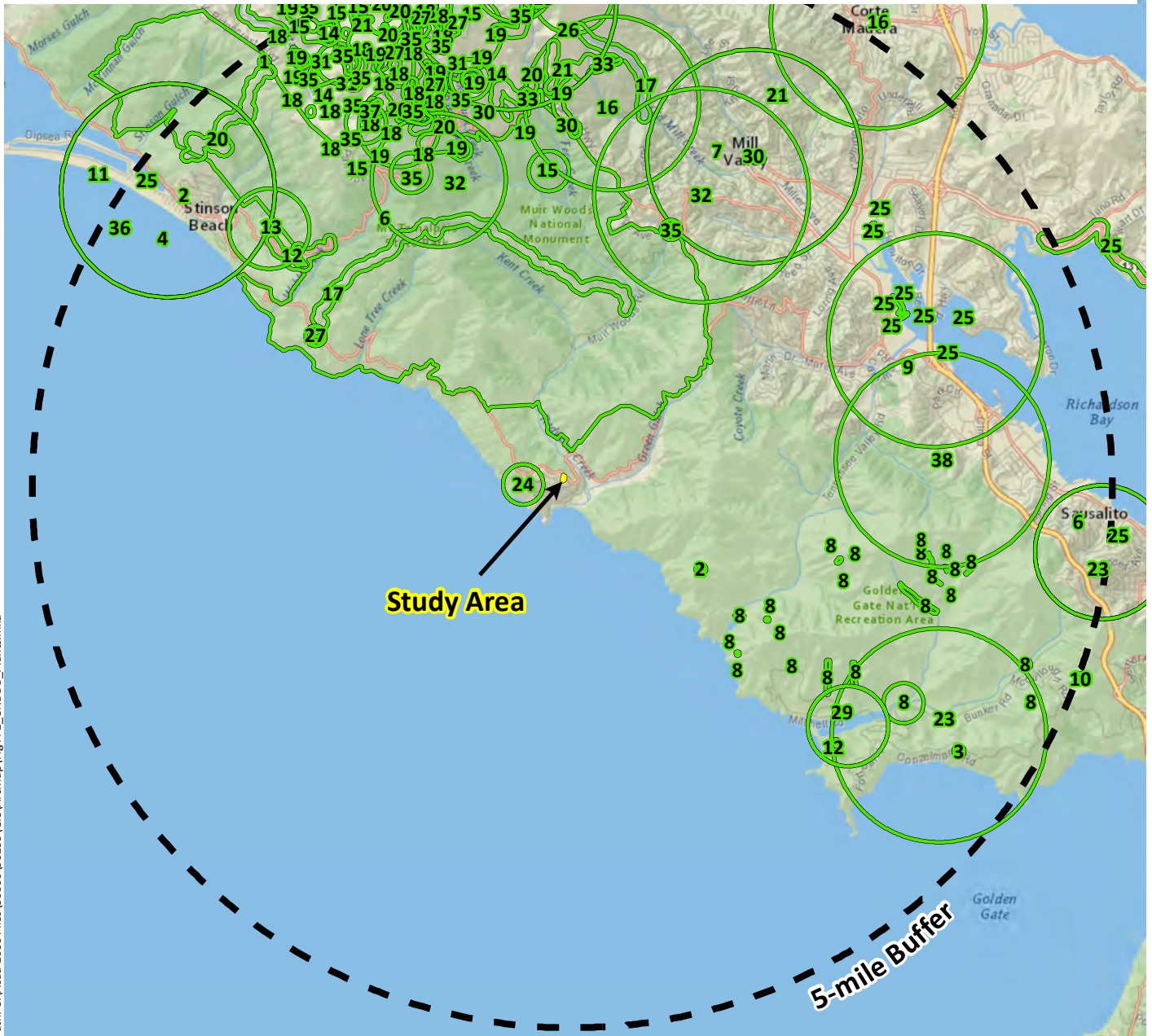
Sources: National Geographic, WRA | Prepared By: aarthur, 11/9/2020

**Figure 1. Study Area Location**

69 Starbuck Drive  
 Muir Beach  
 Marin County, CA



- |                                       |                             |                                       |                                   |                             |
|---------------------------------------|-----------------------------|---------------------------------------|-----------------------------------|-----------------------------|
| 1. bent-flowered fiddleneck           | 9. hairless popcornflower   | 17. minute pocket moss                | 25. Point Reyes salty bird's-beak | 33. thin-lobed horkelia     |
| 2. blue coast gilia                   | 10. island tube lichen      | 18. Mt. Tamalpais bristly jewelflower | 26. San Francisco Bay spineflower | 34. Thurber's reed grass    |
| 3. coastal bluff morning-glory        | 11. Lyngbye's sedge         | 19. Mt. Tamalpais manzanita           | 27. Santa Cruz microsperis        | 35. Tiburon buckwheat       |
| 4. coastal marsh milk-vetch           | 12. Marin checker lily      | 20. Mt. Tamalpais thistle             | 28. Santa Cruz tarplant           | 36. two-fork clover         |
| 5. congested-headed hayfield tarplant | 13. Marin checkerbloom      | 21. Napa false indigo                 | 29. Scouler's catchfly            | 37. western leatherwood     |
| 6. dark-eyed gilia                    | 14. Marin County navarretia | 22. North Coast semaphore grass       | 30. small groundcone              | 38. white-rayed pentachaeta |
| 7. Diablo helianthella                | 15. Marin manzanita         | 23. Oregon polemonium                 | 31. Tamalpais jewelflower         |                             |
| 8. Franciscan thistle                 | 16. marsh microsperis       | 24. Point Reyes horkelia              | 32. Tamalpais oak                 |                             |

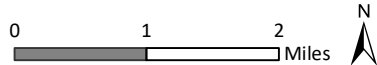


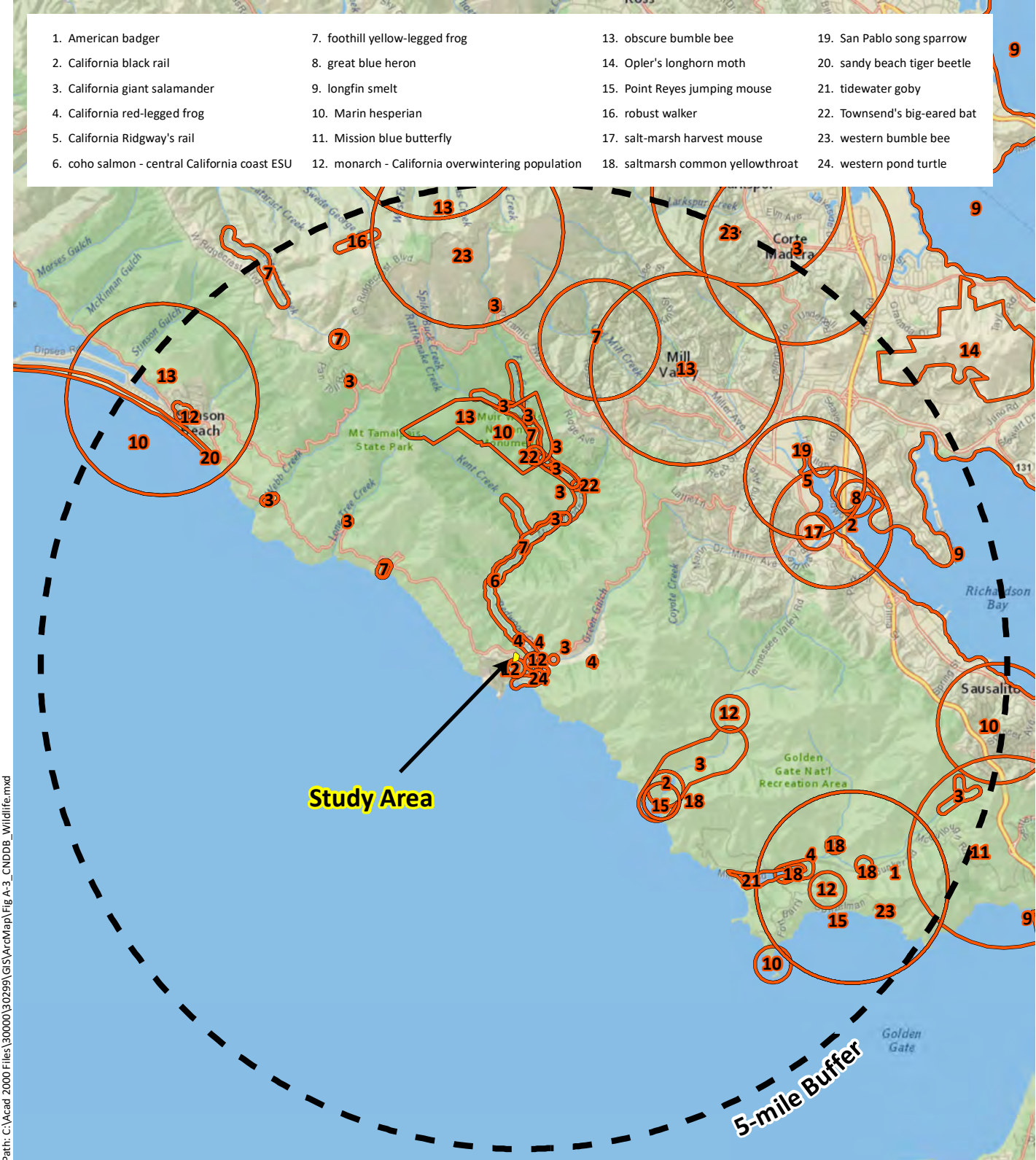
Path: C:\Acad 2000 Files\30000\30299\GIS\ArcMap\Fig A-2\_CNDDDB\_Plants.mxd

Sources: National Geographic, CNDDDB November 2020, WRA | Prepared By: aarthur, 12/9/2020

**Figure A-2. CNDDDB Special-Status Plants Documented within 5 Miles of the Study Area**

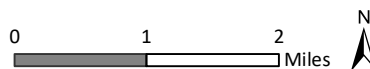
69 Starbuck Drive  
Muir Beach  
Marin County, CA





**Figure A-3. CNDDDB Special-Status Wildlife Documented within 5 Miles of the Study Area**

69 Starbuck Drive  
 Muir Beach  
 Marin County, CA

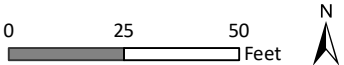




Sources: DigitalGlobe 2016 Aerial, WRA | Prepared By: aarthur, 11/25/2020

**Figure A-4. Land Cover**

69 Starbuck Drive  
 Muir Beach  
 Marin County, CA



Attachment B – Observed Species List

Table B-1. Plant species observed in the Study Area, November 12, 2020

Family	Scientific name	Common name	Life form	Origin	Rare Status <sup>1</sup>	Invasive Status <sup>2</sup>	Wetland indicator <sup>3</sup>
Araceae	<i>Zantedeschia aethiopica</i>	calla lily	perennial forb	non-native	--	limited	OBL
Asteraceae	<i>Baccharis pilularis</i>	coyote brush	evergreen shrub	native	--	--	NL
Asteraceae	<i>Cirsium vulgare</i>	bull thistle	perennial forb	non-native	--	moderate	FACU
Asteraceae	<i>Gamochaeta ustulata</i>	featherweed	perennial forb	native	--	--	FACW
Boraginaceae	<i>Echium candicans</i>	Pride-of-Madeira	evergreen shrub	non-native	--	limited	NL
Cupressaceae	<i>Hesperocyparis macrocarpa</i>	Monterey cypress	evergreen tree	native	--	--	NL
Cupressaceae	<i>Sequoia sempervirens</i>	coast redwood	evergreen tree	native	--	--	NL
Ericaceae	<i>Arbutus unedo</i>	strawberry tree	evergreen tree	non-native	--	--	NL
Fabaceae	<i>Acacia melanoxylon</i>	blackwood acacia	evergreen tree	non-native	--	limited	NL
Iridaceae	<i>Iris douglasiana</i>	Douglas' iris	perennial forb	native	--	--	NL
Juncaceae	<i>Juncus mexicanus</i>	Mexican rush	perennial graminoid	native	--	--	FACW
Juncaceae	<i>Juncus patens</i>	common rush	perennial graminoid	native	--	--	FACW
Lamiaceae	<i>Rosmarinus officinalis</i>	rosemary	evergreen shrub	non-native	--	--	NL
Moraceae	<i>Morella californica</i>	California wax myrtle	evergreen shrub	native	--	--	FACW
Myrsinaceae	<i>Lysimachia arvensis</i>	scarlet pimpernel	annual forb	non-native	--	--	NL
Myrtaceae	<i>Callistemon citrinus</i>	crimson bottlebrush	evergreen shrub	non-native	--	--	NL
Pinaceae	<i>Pseudotsuga menziesii</i>	Douglas fir	evergreen tree	native	--	--	FACU
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain	perennial forb	non-native	--	limited	FAC
Poaceae	<i>Briza maxima</i>	big rattlesnake grass	annual graminoid	non-native	--	limited	NL
Poaceae	<i>Cynodon dactylon</i>	Bermuda grass	perennial graminoid	non-native	--	moderate	FACU
Poaceae	<i>Ehrharta erecta</i>	panic veldtgrass	perennial graminoid	non-native	--	moderate	NL
Poaceae	<i>Holcus lanatus</i>	common velvet grass	perennial graminoid	non-native	--	moderate	FAC
Poaceae	<i>Phalaris aquatica</i>	harding grass	perennial graminoid	non-native	--	moderate	FACU
Rhamnaceae	<i>Ceanothus thyrsiflorus</i>	blue blossom	evergreen shrub	native	--	--	NL



Family	Scientific name	Common name	Life form	Origin	Rare Status <sup>1</sup>	Invasive Status <sup>2</sup>	Wetland indicator <sup>3</sup>
Rhamnaceae	<i>Frangula californica</i>	California coffeeberry	evergreen shrub	native	--	--	NL
Rosaceae	<i>Cotoneaster franchetii</i>	orange cotoneaster	evergreen shrub	non-native	--	moderate	NL
Rosaceae	<i>Prunus cerasifera</i>	cherry plum	deciduous tree	non-native	--	limited	NL
Rosaceae	<i>Rubus ursinus</i>	California blackberry	evergreen shrub	native	--	--	FACU
Scrophulariaceae	<i>Myoporum laetum</i>	Ngaio tree	evergreen shrub	non-native	--	moderate	FACU

All species identified using the *Jepson Manual, 2<sup>nd</sup> Edition* (Baldwin et al. 2012) and *A Flora of Sonoma County* (Best et al. 1996); nomenclature follows *The Jepson Flora Project* (eFlora 2020) unless otherwise noted

<sup>1</sup>Rare Status: The CNPS Inventory of Rare and Endangered Plants (CNPS 2020a)

- FE: Federal Endangered
- FT: Federal Threatened
- SE: State Endangered
- ST: State Threatened
- SR: State Rare
- Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- Rank 1B: Plants rare, threatened, or endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere
- Rank 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
- Rank 3: Plants about which we need more information – a review list
- Rank 4: Plants of limited distribution – a watch list

<sup>2</sup>Invasive Status: California Invasive Plant Inventory (Cal-IPC 2006)

- High: Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.
- Moderate: Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited moderate distribution ecologically
- Limited: Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically
- Assessed: Assessed by Cal-IPC and determined to not be an existing current threat

<sup>3</sup>Wetland Status: National List of Plant Species that Occur in Wetlands, Arid West Region (Corps 2018)

- OBL: Almost always a hydrophyte, rarely in uplands
- FACW: Usually a hydrophyte, but occasionally found in uplands
- FAC: Commonly either a hydrophyte or non-hydrophyte
- FACU: Occasionally a hydrophyte, but usually found in uplands
- UPL: Rarely a hydrophyte, almost always in uplands
- NL: Rarely a hydrophyte, almost always in uplands
- NI: No information; not factored during wetland delineation

Attachment C – CNPS & CDFW Database Search Results



Selected Elements by Element Code  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



**Query Criteria:** Quad (Point Bonita (3712275)) AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAH01020	<i>Dicamptodon ensatus</i> California giant salamander	None	None	G3	S2S3	SSC
AAABH01022	<i>Rana draytonii</i> California red-legged frog	Threatened	None	G2G3	S2S3	SSC
AAABH01050	<i>Rana boylei</i> foothill yellow-legged frog	None	Endangered	G3	S3	SSC
ABNME03041	<i>Laterallus jamaicensis coturniculus</i> California black rail	None	Threatened	G3G4T1	S1	FP
ABPAU08010	<i>Riparia riparia</i> bank swallow	None	Threatened	G5	S2	
ABPBX1201A	<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	None	None	G5T3	S3	SSC
AFCHA02034	<i>Oncorhynchus kisutch pop. 4</i> coho salmon - central California coast ESU	Endangered	Endangered	G4	S2	
AFCHB03010	<i>Spirinchus thaleichthys</i> longfin smelt	Candidate	Threatened	G5	S1	
AFCQN04010	<i>Eucyclogobius newberryi</i> tidewater goby	Endangered	None	G3	S3	
AMAFH01031	<i>Zapus trinotatus orarius</i> Point Reyes jumping mouse	None	None	G5T1T3Q	S1S3	SSC
AMAJC03010	<i>Eumetopias jubatus</i> Steller (=northern) sea-lion	Delisted	None	G3	S2	
AMAJF04010	<i>Taxidea taxus</i> American badger	None	None	G5	S3	SSC
ARAAD02030	<i>Emys marmorata</i> western pond turtle	None	None	G3G4	S3	SSC
IICOL02101	<i>Cicindela hirticollis gravida</i> sandy beach tiger beetle	None	None	G5T2	S2	
IICOL67020	<i>Lichnanthe ursina</i> bumblebee scarab beetle	None	None	G2	S2	
IHHYM24250	<i>Bombus occidentalis</i> western bumble bee	None	Candidate Endangered	G2G3	S1	
IILEPG801A	<i>Plebejus icarioides missionensis</i> Mission blue butterfly	Endangered	None	G5T1	S1	
IILEPP2012	<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	None	None	G4T2T3	S2S3	



**Selected Elements by Element Code**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
IMGASA4140	<i>Vespericola marinensis</i> Marin hesperian	None	None	G2	S2	
PDAST2E050	<i>Cirsium andrewsii</i> Franciscan thistle	None	None	G3	S3	1B.2
PDAST470D3	<i>Grindelia hirsutula var. maritima</i> San Francisco gumplant	None	None	G5T1Q	S1	3.2
PDAST4R065	<i>Hemizonia congesta ssp. congesta</i> congested-headed hayfield tarplant	None	None	G5T2	S2	1B.2
PDAST5N010	<i>Layia carnosa</i> beach layia	Endangered	Endangered	G2	S2	1B.1
PDAST6X030	<i>Pentachaeta bellidiflora</i> white-rayed pentachaeta	Endangered	Endangered	G1	S1	1B.1
PDBOR0V0B0	<i>Plagiobothrys glaber</i> hairless popcornflower	None	None	GX	SX	1A
PDCAR0U1MC	<i>Silene scouleri ssp. scouleri</i> Scouler's catchfly	None	None	G5T4T5	S2S3	2B.2
PDCON040D2	<i>Calystegia purpurata ssp. saxicola</i> coastal bluff morning-glory	None	None	G4T2T3	S2S3	1B.2
PDPLM040B3	<i>Gilia capitata ssp. chamissonis</i> blue coast gilia	None	None	G5T2	S2	1B.1
PDPLM04130	<i>Gilia millefoliata</i> dark-eyed gilia	None	None	G2	S2	1B.2
PDPLM09180	<i>Leptosiphon rosaceus</i> rose leptosiphon	None	None	G1	S1	1B.1
PDPLM0E050	<i>Polemonium carneum</i> Oregon polemonium	None	None	G3G4	S2	2B.2
PDROS0W043	<i>Horkelia cuneata var. sericea</i> Kellogg's horkelia	None	None	G4T1?	S1?	1B.1
PDROS0W0B0	<i>Horkelia marinensis</i> Point Reyes horkelia	None	None	G2	S2	1B.2
PMCYP032Y0	<i>Carex comosa</i> bristly sedge	None	None	G5	S2	2B.1
PMLIL0V0P1	<i>Fritillaria lanceolata var. tristulis</i> Marin checker lily	None	None	G5T2	S2	1B.1
PMPON03010	<i>Heteranthera dubia</i> water star-grass	None	None	G5	S2	2B.2

Record Count: 36

\*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

## Plant List

16 matches found. [Click on scientific name for details](#)

### Search Criteria

Found in Quad 3712275

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Arabis blepharophylla</a>	coast rockcress	Brassicaceae	perennial herb	Feb-May	4.3	S4	G4
<a href="#">Astragalus nuttallii var. nuttallii</a>	ocean bluff milk-vetch	Fabaceae	perennial herb	Jan-Nov	4.2	S4	G4T4
<a href="#">Calystegia purpurata ssp. saxicola</a>	coastal bluff morning-glory	Convolvulaceae	perennial herb	(Mar)Apr-Sep	1B.2	S2S3	G4T2T3
<a href="#">Castilleja ambigua var. ambigua</a>	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	4.2	S3S4	G4T4
<a href="#">Chorizanthe valida</a>	Sonoma spineflower	Polygonaceae	annual herb	Jun-Aug	1B.1	S1	G1
<a href="#">Cirsium andrewsii</a>	Franciscan thistle	Asteraceae	perennial herb	Mar-Jul	1B.2	S3	G3
<a href="#">Erysimum franciscanum</a>	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	4.2	S3	G3
<a href="#">Fritillaria lanceolata var. tristulius</a>	Marin checker lily	Liliaceae	perennial bulbiferous herb	Feb-May	1B.1	S2	G5T2
<a href="#">Gilia capitata ssp. chamissonis</a>	blue coast gilia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G5T2
<a href="#">Gilia millefoliata</a>	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	1B.2	S2	G2
<a href="#">Grindelia hirsutula var. maritima</a>	San Francisco gumplant	Asteraceae	perennial herb	Jun-Sep	3.2	S1	G5T1Q
<a href="#">Horkelia cuneata var. sericea</a>	Kellogg's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.1	S1?	G4T1?
<a href="#">Horkelia marinensis</a>	Point Reyes horkelia	Rosaceae	perennial herb	May-Sep	1B.2	S2	G2
<a href="#">Pentachaeta bellidiflora</a>	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
<a href="#">Polemonium carneum</a>	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	2B.2	S2	G3G4
<a href="#">Silene scouleri ssp. scouleri</a>	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	2B.2	S2S3	G5T4T5

**Suggested Citation**

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 24 November 2020].

**Search the Inventory**[Simple Search](#)[Advanced Search](#)[Glossary](#)**Information**[About the Inventory](#)[About the Rare Plant Program](#)[CNPS Home Page](#)[About CNPS](#)[Join CNPS](#)**Contributors**[The Calflora Database](#)[The California Lichen Society](#)[California Natural Diversity Database](#)[The Jepson Flora Project](#)[The Consortium of California Herbaria](#)[CalPhotos](#)**Questions and Comments**[rareplants@cnps.org](mailto:rareplants@cnps.org)

© Copyright 2010-2018 California Native Plant Society. All rights reserved.

Attachment D – Representative Photographs



Hardscaped (proposed project location) in the central eastern portion of the Study Area



Hardscaped (proposed project: foreground; residence: background) in the eastern portion of the Study Area



Landscape (neglected) area in the central portion of the Study Area



Monterey cypress grove on northern edge of the Study Area