



May 6, 2020

Arianne Darr
Bolin Community Land Trust
6 Wharf Road
Bolin, CA 94924

Ms. Darr,

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 31 Wharf Road (APN 193-061-03), Bolinas, Marin County, California (Study Area). One site visit was conducted on April 9, 2020. The approximately 1.85-acre Study Area is extremely steep and south-facing, and is composed of a developed/disturbed area, coast live oak woodland, common velvet grass grassland, and seasonal wetland seep. It is WRA's understanding the Bolinas Community Land Trust (BCLT) is interested in developing a portion or all of the parcel for affordable housing, but WRA has not been provided with site-specific plans.

This report describes the results of the site visit for which the Study Area was assessed concerning: (1) presence of early-season special-status plants; (2) potential to support special-status species (plants and wildlife); and (3) the presence of other biological resources protected by local, state, and federal laws and regulations including a delineation of wetlands and non-wetland waters for California Coastal Commission (CCC), U.S. Army Corps of Engineers (Corps), and Regional Water Quality Control Board (RWQCB) jurisdiction. This report also contains an evaluation of potential impacts to special-status species and potentially regulated habitats that may or may not occur as a result of the proposed project.

BIOLOGICAL SITE ASSESSMENT METHODS

Prior to the singular site visit, background literature was reviewed to determine potential presence of regulated vegetation types, aquatic communities, and special-status plant and wildlife species. Resources reviewed for regulated vegetation communities and aquatic features include aerial photography (Google Earth 2020), the Bolinas 7.5-minute quadrangle (USGS 2020), California Soil Resources Lab's Online Soil Survey (CSRL 2020), the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2020a), the California Native Plant Society's (CNPS) Electronic Inventory (2020a), *A Manual of California Vegetation, Online Edition* (CNPS 2020b), Consortium of California Herbaria (CCH 2020), *Marin Flora* (Howell et al. 2007), U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) (2020a) map, and the California Aquatic Resources Inventory (CARI) (SFEI 2020).

Following the background literature review, WRA biologists conducted one site visit on April 9, 2020. All plant and wildlife species observed within the Study Area were documented (Attachment B). All land cover types were documented including wetlands or non-wetland waters potentially jurisdictional by the CCC, Corps, and the RWQCB. The wetlands and non-wetland waters were mapped following a one-parameter approach based on the three-parameter guidelines developed by the Corps for the Arid West region (Corps 2010). All relevant data were

collected using a sub-meter accurate GPS unit, which were then digitized utilizing ArcGIS 10.0. All plant species were identified to a taxonomic level sufficient to determine rare status (CNPS 2020a) and/or invasive status (Cal-IPC 2006).

ASSESSMENT, SURVEY, AND DELINEATION RESULTS

Environmentally Sensitive Habitat Areas (ESHAs)

Seasonal Wetland – Pacific Rush Wetland (*Juncus effusus* Herbaceous Alliance). Rank: G4 S4; Potentially Jurisdictional under CWA and CCA; ESHA. Seasonal wetlands are known from a variety of topographic positions and soil types where surface waters collect and flows are reduced, and/or subsurface waters approach the soil surface as a rising water table or seep. In the Study Area, one seasonal wetland occupies 0.01 acre as seasonal seep-swale. The vegetation is dominated by herbaceous hydrophytes including Pacific rush (*Juncus effusus*), common rush (*Juncus patens*), and tall flatsedge (*Cyperus eragrostis*) situated on the edges of these wetlands.

Indicators of wetland hydrology include direct observation of saturation and minor flow patterns. The soils were saturated during the site visit, and are assumed hydric given the presence of strong vegetation and wetland hydrology indicators. Because all three wetland parameters (vegetation, soil, and hydrology) are clearly evidenced, those areas mapped as wetland in the Study Area would be considered ESHA by the CCA and Marin County LCP, as well as being jurisdictional under the CWA.

Non-Environmentally Sensitive Habitat Areas (Non-ESHAs)

Developed Area (no vegetation alliance). CDFW Rank: None; Non-ESHA. The Study Area contains an informal garden and laid down materials, as well as a compacted gravel driveway and parking that is connected to Wharf Road, totaling 0.54 acre. Vegetation is minimal and entirely composed of disturbance-adapted non-natives including upright veldt grass (*Ehrharta erecta*), white-flowered onion (*Allium triquetrum*), old-man-of-spring (*Senecio vulgaris*), field burweed (*Soliva sessilis*), bur medic (*Medicago polymorpha*), and English plantain (*Plantago lanceolata*). A few trees and shrubs are rooted and overhang the developed areas, primarily Monterey cypress (*Hesperocyparis macrocarpa*). This land cover type is not considered sensitive by the CDFW or Marin County LCP.

Non-native Grassland – Common Velvet Grass-Sweet Vernal Grass Meadows (*Holcus lanatus*-*Anthoxanthum odoratum* Semi-Natural Herbaceous Stands). CDFW Rank: None; Non-ESHA. Non-native grasslands occur throughout California, particularly in the Sierra Foothills, Coast Range, Transverse Range, and Peninsular Ranges, situated on coastal terraces, valley bottoms, and foothills underlain by a variety of soil types (Sawyer et al. 2009, CNPS 2020b). Grassland is a minor land cover type in the Study Area totaling 0.04 acre. The dominant cover is common velvet grass (*Holcus lanatus*) and sweet vernal grass (*Anthoxanthum odoratum*). Other plants with substantial cover includes coyote brush (*Baccharis pilularis*), big rattlesnake grass (*Briza maxima*), soft chess (*Bromus hordeaceus*), bull thistle (*Cirsium vulgare*), and wild radish (*Raphanus sativus*). This land cover type is not considered sensitive by the CDFW or Marin County LCP.

Coast Live Oak Woodland (*Quercus agrifolia* Woodland Alliance). CDFW Rank: G5 S4: Coast live oak woodlands occur throughout coastal California, particularly in the Coast Range, Transverse Range, and Peninsular Ranges, situated on alluvial terraces, canyon bottoms, stream banks, slopes, and flats underlain by a variety of deep substrates (Sawyer et al. 2009, CNPS 2020b). This woodland is the dominant land cover type in the Study Area totaling 1.3 acres. The dominant cover is coast live oak (*Quercus agrifolia*), with substantial cover of Monterey pine (*Pinus radiata*), Monterey cypress (*Hesperocyparis macrocarpa*), and California bay (*Umbellularia californica*). The understory is mixed with shrubs and herbs including poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), French broom (*Genista monspeliensis*), California blackberry (*Rubus ursinus*), English ivy (*Hedera helix*), Cape ivy (*Delairea odorata*), hedge nettle (*Stachys ajugoides*), and common veldt grass (*Ehrharta erecta*). This land cover type is not considered sensitive by the CDFW or Marin County LCP.

Special-status Plant Species

A total of 35 special-status plant species have been documented within five miles of the Study Area (Figure A-2); however, only five of these species have the potential to occur in the Study Area. The remaining 30 species are unlikely or have no 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;
- 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.

On April 9, 2020, a WRA botanist traversed the entire Study Area recording each plant species observed. Plant species were identified with *Marin Flora* (Howell et al. 2007), *The Jepson Manual, 2nd Edition* (Baldwin et al. 2012), and/or the Jepson eFlora online database (Jepson eFlora 2020). The timing of the surveys coincided with all of the four special-status species bloom periods with potential to occur in the Study Area. Based on the results of the April surveys, no special-status plant species are present within the Study Area. The following plants were assessed to have a potential to occur within the Study Area, none of which were observed during the site visit.

Marin manzanita (*Arctostaphylos virgata*), CRPR 1B. Moderate Potential (Not Observed). Marin manzanita is an evergreen shrub in the heath family (Ericaceae) that blooms from January to March. It typically occurs on sandstone and granitic substrate in broadleaf upland forest, closed-cone conifer forest, chaparral, and North Coast coniferous forest at elevations ranging from 195 to 2,275 feet (CDFW 2020a, CNPS 2020a, Baldwin et al. 2012).

Glory bush (*Ceanothus gloriosus* var. *exaltatus*), CRPR 4. Moderate Potential (Not Observed): Glory bush is an evergreen shrub in the buckthorn family (Rhamnaceae) that blooms from March through July, sometimes August. It typically occurs in chaparral habitat within a maritime influence at elevations ranging from 95 to 1,985 feet (CDFW 2020a, CNPS 2020a).

Point Reyes ceanothus (*Ceanothus gloriosus* var. *gloriosus*), CRPR 4. Moderate Potential (Not Observed): Point Reyes ceanothus is an evergreen shrub in the buckthorn family (Rhamnaceae) that blooms from March through May. It typically occurs on bluffs and terraces underlain by sandy substrates in coastal bluff scrub, coastal scrub, coastal dune, and closed-cone coniferous forest habitat at elevations ranging from 15 to 1,690 feet (CNPS 2020a, Baldwin et al. 2012).

Western leatherwood (*Dirca occidentalis*), CRPR 1B. Moderate Potential (Not Observed). Western leatherwood is a deciduous shrub in the mezereum family (Thymelaeaceae) that blooms from January to April, but is typically identifiable via vegetative structures into late summer and/or early fall. It typically occurs on brushy, mesic slopes in partial shade in broadleaf upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland habitat at elevations range from 165 to 1,285 feet (CDFW 2020a, CNPS 2020a, Baldwin et al. 2012).

California bottle-brush grass (*Elymus californicus*), CRPR 4. Moderate Potential (Not Observed). California bottle-brush grass is a perennial graminoid in the grass family (Poaceae) that blooms from May to November. It typically occurs along stream banks or other mesic sites within broadleaf upland forest, cismontane woodland, North Coast coniferous forest, and riparian woodland habitat at elevations ranging from 45 to 1,530 feet (CNPS 2020a).

Special-status Wildlife Species

A total of 26 special-status wildlife species have been documented within five miles of the Study Area (Figure A-3), of which six species, along with nesting birds protected under the Migratory Bird Treaty Act (MBTA), have the potential to occur within the Study Area. The potential for these species to occur within the Study Area are summarized below. The remaining 20 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) necessary to provide nesting 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 Bolinas 7.5-minute quadrangle (USGS 2018). The following special-status wildlife species with the potential to occur in the Study Area are described below.

Pallid Bat (*Antrozous pallidus*). CDFW Species of Special Concern, WBWG High Priority, Moderate Potential. Pallid bats are distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma, and Kansas. This species occurs in a number of habitats ranging from rocky arid deserts to grasslands, and into higher elevation coniferous forests. They are most abundant in the arid Sonoran life zones below 6,000 feet, but have been found up to 10,000 feet in the Sierra Nevada. Pallid bats often roost in colonies of between 20 and several hundred individuals. Roosts are typically in rock crevices, tree hollows, mines, caves, and a variety of man-made structures, including vacant and occupied buildings. Tree roosting has been documented in large conifer snags (e.g. ponderosa pine), inside basal hollows of redwoods and giant sequoias, and within bole cavities in oak trees. They have also been reported roosting in stacks of burlap sacks and stone piles. Pallid bats are primarily insectivorous, feeding on large prey that is taken on the ground, or sometimes in flight. Prey items include arthropods such as scorpions, ground crickets, and cicadas (WBWG 2010).

Townsend's Western big-eared bat (*Corynorhinus townsendii townsendii*). CDFW Species of Special Concern, WBWG High Priority, Moderate Potential. This species ranges throughout western North America, from British Columbia to the central Mexico. They are typically associated with caves, but are also found in man-made structures, including mines and buildings. While many bats wedge themselves into tight cracks and crevices, big-eared bats hang from walls and ceilings in the open. Males roost singly during the spring and summer months while females aggregate in the spring at maternity roosts to give birth. Females roost with their young until late summer or early fall, until young become independent, flying and foraging on their own. Hibernation roosts tend to be made up of small aggregations of individuals in central and southern California (Pierson and Rainey 1998).

Hoary bat (*Lasiurus cinereus*), WBWG Medium Priority. Moderate Potential (Unknown). Hoary bats are highly associated with forested habitats in the western United States. They are a solitary species and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches, typically at the edge of a clearing. Roosts are typically 10 to 30 feet above the ground. This species reportedly has a strong preference for moths, but is also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps (WBWG 2015). Tree foliage within the Study Area (particularly adjacent to cleared areas) provides potential roosting substrates for this species; the nearest documented occurrence is approximately 1.7 miles south of the Study Area.

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.

Great blue heron (*Ardea herodias*). CDFW Protected Rookery Sites. Moderate Potential. Feeds mostly in slow moving or calm freshwater, also along seacoasts. Occasionally in surf and fields. Nests in trees, bushes, on ground and artificial structures, usually near water (Butler 1992).

Great egret (*Ardea alba*). CDFW Protected Rookery Sites. Moderate Potential. Great egrets Feed and rest in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. The birds primarily forage for fishes, amphibians, snakes, snails, crustaceans, insects, and small mammals (Palmer 1962). Nests in large trees, and roosts in trees (Grinnell and Miller 1944, Cogswell 1977). In northern California, fairly common to common yearlong in coastal lowlands, inland valleys, and the Central Valley.

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).

SUMMARY & HABITAT/SPECIES-SPECIFIC SUMMARY

Sensitive Land Cover (ESHA)

Seasonal wetland: A 0.01-acre seasonal wetland seep-swale was identified within the Study Area (Figure A-4). This wetland is considered an ESHA under the CCA and Marin County LCP, and would likely be considered a jurisdictional feature by the Corps under Section 404 and 401 of the CWA. Under the Marin County LCP Unit II, “a buffer strip 100 feet in width, minimum, as measured landward from the edge of the wetland, shall be established along the periphery of all wetlands.” The Project should be designed to fall outside of the on-site wetland by one hundred feet or greater to be in compliance with the LCP.

Special-status Plants (ESHA)

No special-status plants were observed in the Study Area during the protocol-level rare plant surveys. Therefore, no impacts to special-status plants are anticipated to occur as a result of constructing the Project.

Special-status Wildlife (ESHA)

Nesting birds (including special-status birds): Greater egret (*Ardea alba*) and great blue heron (*Ardea herodias*) rookeries, as well as non-status bird species whose nesting activities are protected by federal and/or state regulations have the potential to nest within the Study Area. Regulatory agencies (e.g., CDFW) typically treat February 1 through August 31 as the general nesting bird season, i.e. the period when project activities (tree/vegetation removal, ground disturbance, etc.) may result in impacts to nesting birds. In order to avoid impacts to nesting birds all tree and other vegetation removal within the Study Area, should be conducted from September 1 to January 31, outside of the nesting bird season.

Special-status bats: Pallid bat, Townsend’s big-eared bat, and hoary bat have the potential to roost, including maternity roosting, within the standing trees located within the Study Area. In order to avoid impacts to special-status bat species, all removal and trimming of trees should be conducted between September 1 and January 31, outside of the local bat maternity roosting period.

Monarch butterfly: Monarch butterflies have the potential to roost in the on-site larger Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and blue gum (*Eucalyptus globulus*) during the winter months (November through January). Two daylight surveys conducted in this period would determine their absence or presence. If present, the roost tree should be avoided by the Project to ensure continued roosting of this species.

Summary

Based on the site visit and review of information pertinent to the Study Area, the construction of a Project, with the abovementioned recommendations, will not result in impacts to special-status plant or wildlife species, or to any sensitive habitats. The Project should be designed to avoid impacting ESHAs and their buffers. If vegetation was removed outside of nesting/roosting seasons noted above to special-status/non-status nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code, nor would it impact special-status bats.

Based on the evidence collected, a Project 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 questions or require additional information, please contact us.

Sincerely,

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

Aaron Arthur
Associate Plant Biologist
WRA, Inc.

References

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Attachment A – Figures



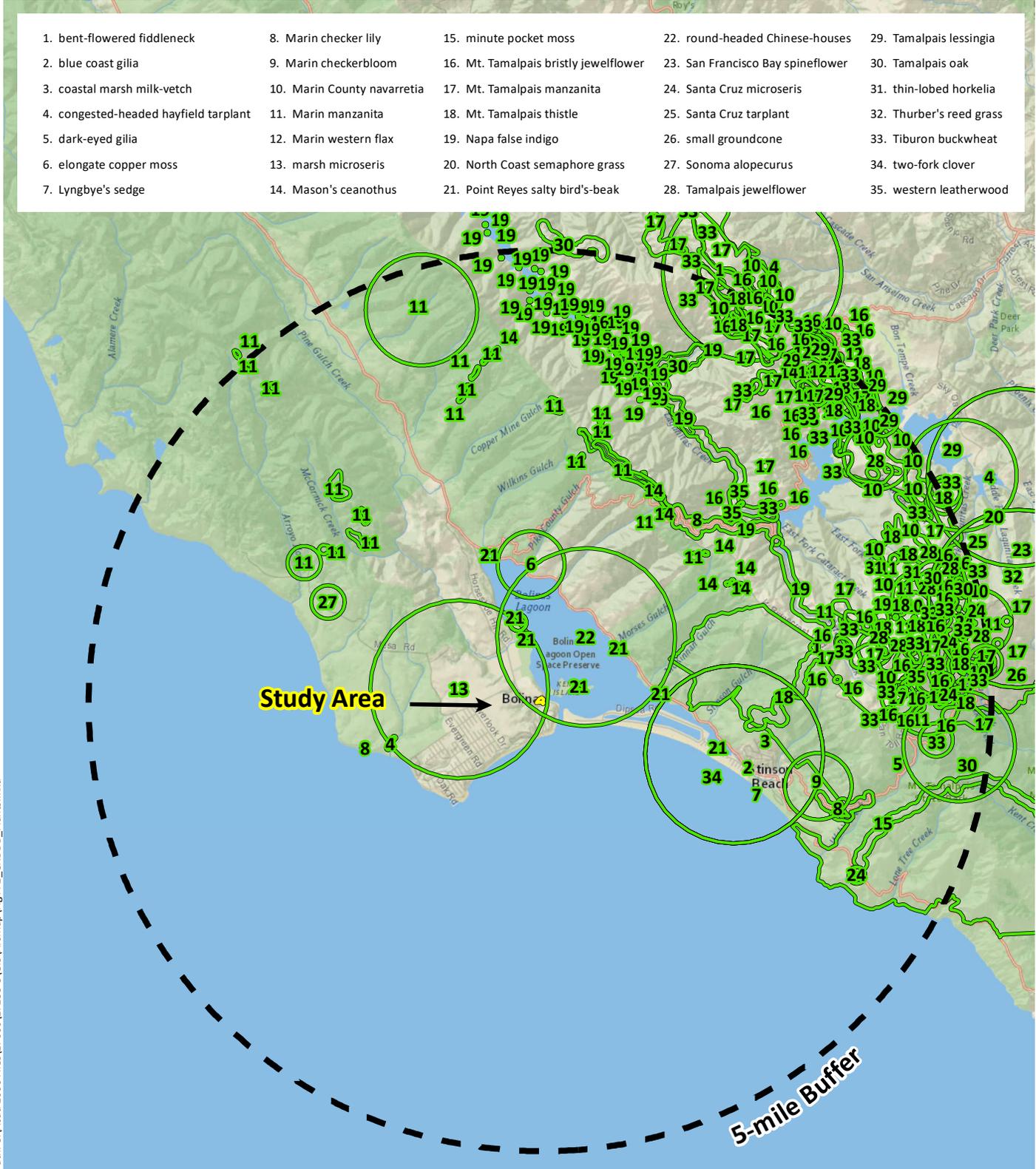
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Sources: National Geographic, WRA | Prepared By: aarthur, 5/1/2020

Figure A-1. Study Area Location

31 Wharf Road
Bolinas, Marin County





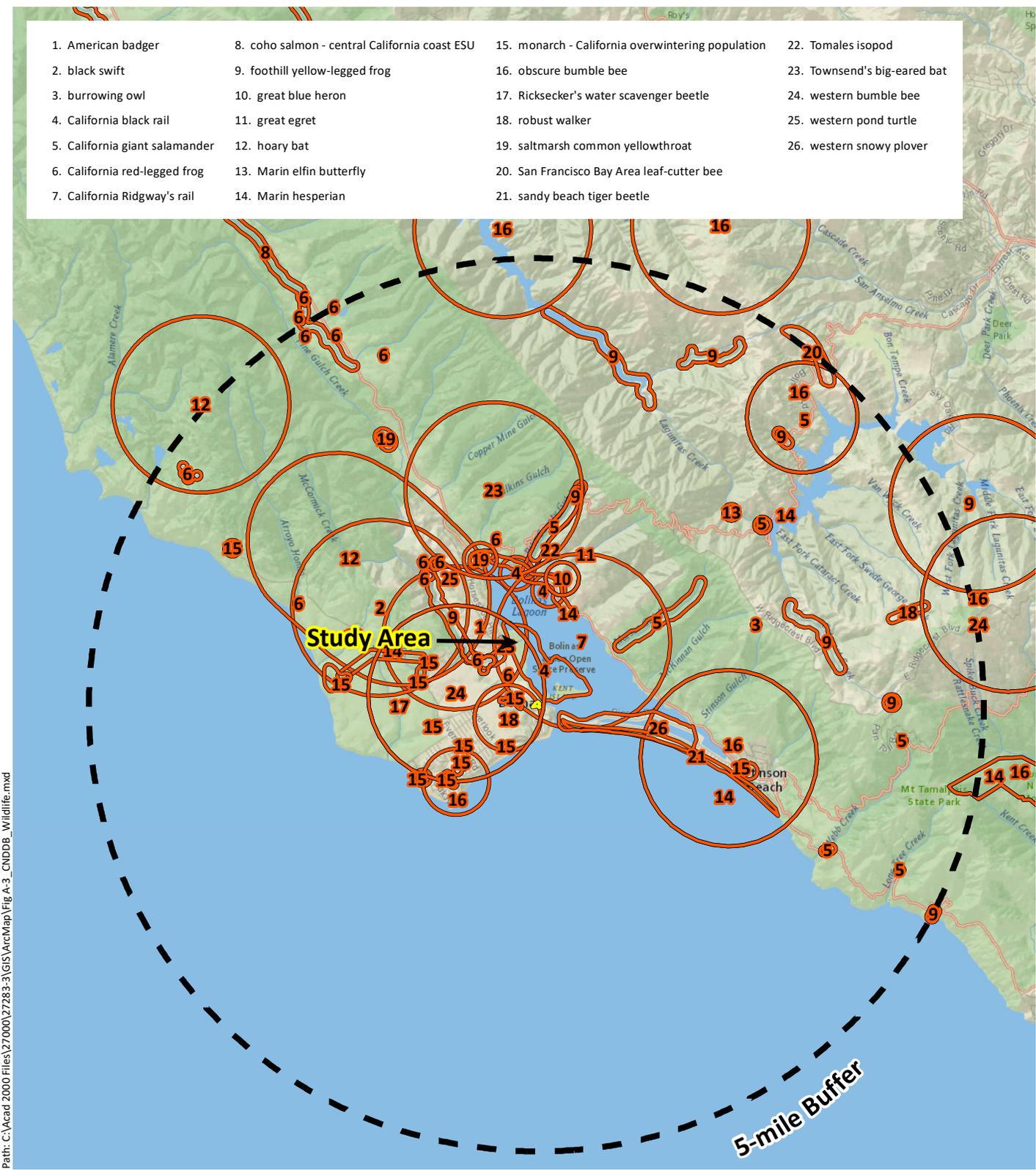
Path: C:\Acad 2000 Files\27000\27283-3\GIS\ArcMap\Fig A-2_CNDDDB_Plants.mxd

Sources: National Geographic, CNDDDB May 2020, WRA | Prepared By: aarthur, 5/1/2020

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

31 Wharf Road
Bolinas, Marin County



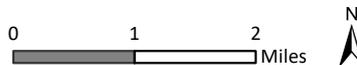


Path: C:\Acad 2000 Files\27000\27283-3\GIS\ArcMap\Fig A-3_CNDDDB_Wildlife.mxd

Sources: National Geographic, CNDDDB May 2020, WRA | Prepared By: aarthur, 5/1/2020

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

31 Wharf Road
Bolinas, Marin County



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Study Area (1.85 ac.)

Land Cover

- Developed/Disturbed (0.54 ac.)
- Common Velvet Grass Meadow (0.04 ac.)
- Coast Live Oak Woodland (1.3 ac.)
- Seasonal Wetland (0.01 ac.)
- 100' Wetland Buffer

Sources: DigitalGlobe 2016 Aerial, WRA | Prepared By: aarthur, 5/6/2020

Figure A-4. Land Cover

31 Wharf Road
Bollinas, Marin County



Attachment B – Observed Plants within the Study Area

Table B-1. Plant species observed in the Study Area, April 9, 2020

| Family | Scientific name | Common name | Life form | Origin | Rare Status ¹ | Invasive Status ² | Wetland indicator ³ |
|-----------------|---|-------------------------|---------------------|------------|--------------------------|------------------------------|--------------------------------|
| Alliaceae | <i>Allium triquetrum</i> | threecorner leek | perennial forb | non-native | -- | assessed | NL |
| Anacardiaceae | <i>Toxicodendron diversilobum</i> | poison oak | deciduous shrub | native | -- | -- | FACU |
| Apiaceae | <i>Conium maculatum</i> | poison hemlock | perennial forb | non-native | -- | moderate | FACW |
| Apiaceae | <i>Foeniculum vulgare</i> | fennel | perennial forb | non-native | -- | high | NL |
| Apiaceae | <i>Heracleum maximum</i> | common cowparsnip | perennial forb | native | -- | -- | FACW |
| Apiaceae | <i>Torilis arvensis</i> | hedge parsley | annual forb | non-native | -- | moderate | NL |
| Aquifoliaceae | <i>Ilex aquifolium</i> | English holly | evergreen tree | non-native | -- | moderate | NL |
| Araceae | <i>Zantedeschia aethiopica</i> | calla lily | perennial forb | non-native | -- | limited | OBL |
| Araliaceae | <i>Hedera helix</i> | English ivy | evergreen vine | non-native | -- | high | NL |
| Asteraceae | <i>Baccharis pilularis</i> ssp. <i>consanguinea</i> | coyote brush | evergreen shrub | native | -- | -- | NL |
| Asteraceae | <i>Carduus pycnocephalus</i> | Italian thistle | annual forb | non-native | -- | moderate | NL |
| Asteraceae | <i>Cirsium vulgare</i> | bull thistle | perennial forb | non-native | -- | moderate | FACU |
| Asteraceae | <i>Delairea odorata</i> | Cape ivy | perennial forb | non-native | -- | high | FAC |
| Asteraceae | <i>Erigeron canadensis</i> | Canadian horseweed | annual forb | native | -- | -- | FACU |
| Asteraceae | <i>Senecio vulgaris</i> | old man in the Spring | annual forb | non-native | -- | -- | FACU |
| Asteraceae | <i>Soliva sessilis</i> | field burweed | annual forb | non-native | -- | -- | FACU |
| Asteraceae | <i>Taraxacum officinale</i> | common dandelion | perennial forb | non-native | -- | assessed | FACU |
| Boraginaceae | <i>Myosotis latifolia</i> | broadleaf forget-me-not | perennial forb | non-native | -- | limited | NL |
| Brassicaceae | <i>Raphanus sativus</i> | wild radish | perennial forb | non-native | -- | limited | NL |
| Brassicaceae | <i>Sinapis arvensis</i> | charlock | annual forb | non-native | -- | limited | NL |
| Caryophyllaceae | <i>Stellaria media</i> | common chickweed | annual forb | non-native | -- | -- | FACU |
| Cucurbitaceae | <i>Marah oregana</i> | coast manroot | perennial vine | native | -- | -- | NL |
| Cupressaceae | <i>Hesperocyparis macrocarpa</i> | Monterey cypress | evergreen tree | native | -- | -- | NL |
| Cyperaceae | <i>Carex praegracilis</i> | clustered field sedge | perennial graminoid | native | -- | -- | FACW |

| Family | Scientific name | Common name | Life form | Origin | Rare Status ¹ | Invasive Status ² | Wetland indicator ³ |
|-----------------|---|-----------------------|---------------------|------------|--------------------------|------------------------------|--------------------------------|
| Cyperaceae | <i>Cyperus eragrostis</i> | tall flat-sedge | perennial graminoid | native | -- | -- | FACW |
| Dryopteridaceae | <i>Dryopteris arguta</i> | California wood fern | perennial fern | native | -- | -- | NL |
| Dryopteridaceae | <i>Polystichum munitum</i> | western swordfern | perennial fern | native | -- | -- | FACU |
| Fabaceae | <i>Genista monspessulana</i> | French broom | evergreen shrub | non-native | -- | high | NL |
| Fabaceae | <i>Medicago arabica</i> | spotted burclover | annual forb | non-native | -- | -- | NL |
| Fabaceae | <i>Medicago polymorpha</i> | bur medic | annual forb | non-native | -- | limited | FACU |
| Fabaceae | <i>Vicia sativa</i> | garden vetch | annual forb | non-native | -- | -- | FACU |
| Fagaceae | <i>Quercus agrifolia</i> | coast live oak | evergreen tree | native | -- | -- | NL |
| Geraniaceae | <i>Erodium brachycarpum</i> | foothill filaree | annual forb | non-native | -- | limited | NL |
| Geraniaceae | <i>Geranium dissectum</i> | cutleaf geranium | annual forb | non-native | -- | moderate | NL |
| Juglandaceae | <i>Juglans hindsii</i> | black walnut | deciduous tree | native | -- | -- | FAC |
| Juncaceae | <i>Juncus effusus</i> ssp. <i>pacificus</i> | Pacific rush | perennial graminoid | native | -- | -- | FACW |
| Juncaceae | <i>Juncus patens</i> | common rush | perennial graminoid | native | -- | -- | FACW |
| Lamiaceae | <i>Lamium purpureum</i> | purple deadnettle | annual forb | non-native | -- | -- | NL |
| Lamiaceae | <i>Stachys ajugoides</i> | bugle hedgenettle | perennial forb | native | -- | -- | OBL |
| Malvaceae | <i>Malva nicaeensis</i> | bull mallow | annual forb | non-native | -- | -- | NL |
| Myrtaceae | <i>Eucalyptus globulus</i> | blue gum | evergreen tree | non-native | -- | moderate | NL |
| Oxalidaceae | <i>Oxalis pes-caprae</i> | Bermuda buttercup | perennial forb | non-native | -- | moderate | NL |
| Pinaceae | <i>Pinus muricata</i> | Bishop pine | evergreen tree | native | -- | -- | NL |
| Pinaceae | <i>Pinus radiata</i> | Monterey pine | evergreen tree | native | -- | limited | NL |
| Plantaginaceae | <i>Plantago lanceolata</i> | English plantain | perennial forb | non-native | -- | limited | FAC |
| Plantaginaceae | <i>Plantago major</i> | common plantain | perennial forb | non-native | -- | -- | FAC |
| Poaceae | <i>Anthoxanthum odoratum</i> | sweet vernalgrass | perennial graminoid | non-native | -- | moderate | FAC |
| Poaceae | <i>Avena barbata</i> | wild oat | annual graminoid | non-native | -- | moderate | NL |
| Poaceae | <i>Briza maxima</i> | big rattlesnake grass | annual graminoid | non-native | -- | limited | NL |

| Family | Scientific name | Common name | Life form | Origin | Rare Status ¹ | Invasive Status ² | Wetland indicator ³ |
|--------------|-------------------------------|------------------------|---------------------|------------|--------------------------|------------------------------|--------------------------------|
| Poaceae | <i>Bromus catharticus</i> | Chilean brome | perennial graminoid | non-native | -- | -- | NL |
| Poaceae | <i>Bromus diandrus</i> | rip-gut brome | annual graminoid | non-native | -- | moderate | NL |
| Poaceae | <i>Cynosurus echinatus</i> | dogtail grass | annual graminoid | non-native | -- | moderate | NL |
| 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>Poa annua</i> | annual bluegrass | annual graminoid | non-native | -- | -- | FAC |
| Polygonaceae | <i>Rumex pulcher</i> | fiddle dock | perennial forb | non-native | -- | -- | FAC |
| 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 armeniacus</i> | Himalayan blackberry | evergreen shrub | non-native | -- | high | FAC |
| Rosaceae | <i>Rubus ursinus</i> | California blackberry | evergreen shrub | native | -- | -- | FACU |
| Rubiaceae | <i>Galium aparine</i> | common bedstraw | annual forb | native | -- | -- | FACU |

All species identified using the *Jepson Manual, 2nd Edition* (Baldwin et al. 2012) and *Marin Flora* (Howell et al. 2007); nomenclature follows *The Jepson Flora Project* (eFlora 2020) unless otherwise noted

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

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

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

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

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

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