

**Biological Habitat Assessment  
For  
Northcoast Highway Solar Project  
(UPDATED October 24, 2022)**

**(APN #'s: 204-171-047-000, 204-081-007-000,  
204-081-004-000, & 204-081-002-000)  
Hydesville 7.5 Minute Quadrangle,  
Section 19, Township 2 N, Range 1 E  
Humboldt, California**

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### Executive Summary:

At the request of Borrego Solar (Borrego), Phoenix Biological Consulting (Phoenix) initiated a biological habitat assessment on March 22, 2020 on the approximately 86.9-acre property which included whole or in part assessor's parcel numbers (APN) 204-171-047-000, 204-081-007-000, 204-081-004-000, & 204-081-002-000, of which on 12.1 acres, Borrego is developing an approximately 2.0-megawatt (MWac) photovoltaic (PV) solar energy generation facility, an access road, and associated power line connections (project). This report represents an update to the aforementioned report conducted in March of 2020. This update includes the results of reconnaissance level botanical and wildlife surveys conducted on October 15, 2022 by biologist Kristiaan Stuart.

The proposed project site is located on an open, cultivated clover field approximately 0.8-mile west of Hydesville, Humboldt County, California, adjacent to and south of state Highway 36 and west of River Bar Road. The survey area consists primarily of active agricultural cropland (white clover and corn), coastal willow shrub and mixed riparian areas. Representative photographs and maps of the site are included in this report.

This updated report was completed following site visits by biologist Kristiaan Stuart on March 22, 2020 and October 15, 2022. The entire survey area was evaluated for potential impacts from the proposed project, including reconnaissance level sensitive plant and animal species as well as potential state and federal waters and wetlands that could be affected by the project.

The conclusions of this report are summarized as follows:

- Due to the surrounding land usage, the areas around the solar array footprint and parcel boundary are considered potential and suitable habitat for nesting birds. All potential bird species should be included in a preconstruction nesting bird survey, conducted within 30 days of ground disturbance, if the project occurs during the nesting season.
- Based on the habitat assessment, burrowing owls are not expected to be present within the development area. Nonetheless, a preconstruction survey should include burrowing owl surveys.
- The CNDDDB search indicated the presence of 47 special-status plant and wildlife species within nine quadrangle search radius. Seven (7) of the thirty-two (32) special-status plant species and five (5) of the fifteen (15) special status wildlife species have a potential to occur on site due to existing environmental and management conditions. A comprehensive botanical survey of the entire project area will not be required as there is no potential for special status plant species to

occur in previously cultivated areas (Exhibit 4). However, floristic level botanical surveys in all other native habitat and ruderal areas are required prior to any vegetation clearing or ground disturbing activities.

- Wolverton Gulch located on the eastern survey boundary is known (documented) habitat for the coastal cutthroat trout, a state species of special concern (SSC), the results of this survey show this species currently occupies Wolverton Gulch. This habitat area should be avoided due to environmental constraints associated with this sensitive habitat and species.

Recommended mitigation measures based on the results of this habitat assessment are provided at the end of this report.

### **Introduction and Purpose:**

At the request of Borrego Solar (Borrego), Phoenix Biological Consulting (Phoenix) initiated a biological habitat assessment on the approximately 86.9-acre property, Humboldt County assessor's parcel numbers (APN) 204-171-047-000, 204-081-007-000, 204-081-004-000, & 204-081-002-000, of which on 15.3-acres, Borrego is developing an approximately 2.0-megawatt (MWac) photovoltaic (PV) solar energy generation facility and associated power line connections (the Project).

The site is located on open pasture and cropland approximately 0.8 miles west of Hydesville, Humboldt County, California, adjacent to and south of Hwy 36 and west of Goose Haven Road. The site consists primarily of open pasture and cropland. Representative photographs and maps of the site are included in this report.

Per the California Environmental Quality Act (CEQA), the lead agency requires a project proponent to initiate a habitat assessment to identify sensitive biological resources that may have the potential to occur within a site. A habitat assessment report was completed following a site visit by biologist Kristiaan Stuart on March 22<sup>nd</sup>, 2020. The entire site was evaluated for potential impacts from the proposed project, including sensitive plant and animal species as well as potential state and federal waters and wetlands that could be affected by the project. This report is an update to the March 2020 habitat assessment report. Species accounts and CNDDDB assessment tables have been updated to include additional species observations and assessments during the October 15, 2022 surveys. Species tables 5 and 6 are inclusive of the results from both the March 2020 and October 2022 surveys.

Several sensitive species that are known to occur within a nine-quadrangle search of the area were identified through the California Natural Diversity Database (CNDDDB) literature/database

search. The results of the habitat assessment indicate that portions of the site have potential habitat for nesting birds and fish species.

### **Project Description:**

Borrego Solar is proposing to develop an approximately 2.0-MWac photovoltaic solar energy generation facility and associated power line (project) on approximately 12.1-acres of a 86.9-acre series of parcels, identified as APN: 204-171-047-000, 204-081-007-000, 204-081-004-000, & 204-081-002-000, located near Hydesville, Humboldt County, CA (Exhibit 6).

### **Location:**

The site is located on open pasture and cropland approximately 0.8 miles west of Hydesville, Humboldt County, California, adjacent to and south of Hwy 36 and west of Goose Haven Road within the Hydesville, CA USGS 7.5-minute quadrangle topographic map (Exhibit 1). The legal description of the project area is, Township 2 N, Range 1 E, Section 19 NW (Hydesville, CA, USGS 7.5 Minute Quadrangle). The Project's approximate center GPS coordinates are: 40.543145, -124.116441 (WGS 84).

### **Habitat and Land Use:**

The parcels are situated at an elevation ranging from 71 feet ABSL in the south, at the southern property line, to 118 feet ABSL (22 to 36 meters ABSL, respectively) near the northern property line at Hwy 36. Two large areas, an active pasture and mustard crop, comprise the majority of the survey area. Currently, the proposed project area is located in the upper pasture area (solar panel layout, APN 204-081-002-000) and extends northward to Hwy 36 (access route, APN's 204-081-004-000, 204-081-007-000 and 204-171-047-000) where it bisects a historic railway (APN 204-081-004-000) and crosses through fallow pastureland.

Currently, two actively managed areas including cultivated corn (*Zea mays*) and cultivated white clover (*Trifolium repens*) crops, are separated by a topographical break (a small cliff) of approximately 23 vertical feet. A fence line at the top of this slope delineates the cultivated white clover area from a lower cultivated corn crop (Exhibit 4). Exhibit 3, an illustration of National Wetland Inventory (NWI) spatial data, shows this topographical break as two separate wetland types: Freshwater Forested/Shrub Wetland to the west and Freshwater Emergent Wetland to the west. However, this data is erroneous. As found during the field survey, this topographical break area is a relic of the upper limits of the Van Duzen River floodplain and does not contain wetland habitat. In the southwest corner of this area is a small and dense stand of willows that could be utilized by passerine and small raptor bird species as nesting and

foraging habitat. The remainder of this area, extending to the east, is mostly dominated by ruderal herbaceous plant species.

The historic railway right of way (APN 204-081-004-000), which separates a corn field near Hwy 36 and the cultivated white clover field (APN 204-081-002-000) is now dominated by a dense willow scrub shrub habitat. Dominant species include coastal willow (*Salix hookeriana*), poison oak (*Toxicodendron diversilobum*), red elderberry (*Sambucus racemosa*) and California blackberry (*Rubus ursinus*), that is utilized by several passerine bird species for hiding, foraging, and breeding habitat. Due to access rights, this area was surveyed externally only.

A blue line stream, known as Wolverton Gulch, is located on the eastern margin of the survey area. This small, low gradient and narrow stream flows from north to south and is dominated by an open canopy of red alder (*Alnus rubra*), coastal willow (*Salix hookeriana*), arroyo willow (*Salix lasiolepis*) and sandbar willow (*Salix exigua*). The narrow riparian corridor is immediately adjacent to a cultivated corn field to the west and dense grassland (fallow hay field) to the east. The stream channel of Wolverton Gulch within the survey area, is dominated by fine substrates such as silt and fine sands. Small gravel areas occur in small riffles as well as a small number of small cobbles in isolated areas along the stream banks. Water depth varies from a few inches at the end of a pool-tail-crest to a few feet in its deepest pool habitats. The margins of the stream are in places dominated by dense patches of aquatic vegetation (*Ludwigia sp.*) and obligate wetland species such as rushes (*Juncus sp.*) and sedges (*Cyperus sp.*).

### **Field Survey:**

A pedestrian reconnaissance-level survey was conducted by Kristiaan Stuart on March 22, 2020 between the hours of 0930 and 1630 and again on October 15, 2022 between the hours of 0900 and 1330 to evaluate the project site for biological resources, including on-site vegetation communities, potentially jurisdictional waters of the U.S., and to assess the potential for occurrence of special-status plant and wildlife species within the project site. Vegetation communities and other biological resources were noted on an aerial photograph of the project site. Photographs were taken within the project during the reconnaissance-level survey (Exhibit 8, October 2022). All species observed in both surveys within and adjacent to the project site were noted in a field notebook and are included in Tables 5 and 6. Special attention was directed to portions of the survey area that may contain native vegetation, suitable habitat for sensitive plant and wildlife species, and potential waters and wetlands subject to regulatory agency jurisdiction. The undeveloped land surrounding the project was visually surveyed in order to confirm the adjacent vegetation community/land cover types, and account for any potential indirect impacts associated with the project.

### CNDDDB Rarefind Database, IPAC and Literature Review Results:

A thorough review of the California Natural Diversity Database (CNDDDB) and the US Fish and Wildlife Service's Information for Planning and Consultation (IPaC) web-based database was conducted to determine which species occur within an adjoining nine quadrangle area of the site (Tables 1, 2, and 3 of Appendix A). Forty-seven (47) sensitive species and two (2) sensitive habitat types were detected within the search radius. Multiple habitat types fall within the nine-quadrangle search radius: annual/ruderal grassland, willow scrub, pasture, cropland, and mixed riparian woodland. Therefore, several species fall out of range/habitat limits given the specific characteristics of the site (See Tables 1 & 2 for habitat potential for all sensitive species).

Twelve (12) special-status species have the potential to occur in the project's survey area. No sensitive habitat types are known to occur within the project area.

**Table 1: CNDDDB Results for Special-status Plant Species**

| <i>Scientific Name</i><br>Common Name                                   | USFWS | CDFW | CNPS | Life & Habitat Description                                                                                            | Potential to Occur                                                  |
|-------------------------------------------------------------------------|-------|------|------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <i>Abronia umbellata</i> var.<br><i>breviflora</i><br>pink sand-verbena | ----  | ---- | 1B.1 | Perennial herb. Coastal dune habitat.<br>Bloom period: June-October<br>0-10m                                          | No potential to occur. No suitable habitat in or near project area. |
| <i>Cardamine angulata</i><br>seaside bittercress                        | ----  | ---- | 2B.1 | Perennial herb. Occurs in mesic areas and streambanks in coniferous forest.<br>Blooming period: March-July<br>25-915m | No potential to occur. No suitable habitat in or near project area. |
| <i>Carex arcta</i><br>northern clustered sedge                          | ----  | ---- | 2B.2 | Perennial herb. Occurs in hydric areas in coniferous forest.<br>Blooming period: March-July<br>60-1400m               | No potential to occur. No suitable habitat in or near project area. |
| <i>Carex leptalea</i><br>bristle-stalked sedge                          | ----  | ---- | 2B.2 | Perennial herb. Occurs in hydric areas incl. meadows, seeps, marshes and bogs.<br>Bloom period: March-July<br>0-700m  | No potential to occur. No suitable habitat in or near project area. |
| <i>Carex lyngbyei</i><br>Lyngbye's sedge                                | ----  | ---- | 2B.2 | Perennial herb. Occurs in hydric areas incl. marshes and swamps.<br>Bloom period: April-August<br>0-10m               | No potential to occur. No suitable habitat in or near project area. |

|                                                                                       |      |      |      |                                                                                                                                                          |                                                                                                                                         |
|---------------------------------------------------------------------------------------|------|------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <i>Castilleja ambigua</i> var.<br><i>humboldtiensis</i><br>Humboldt Bay owl's-clover  | ---- | ---- | 1B.2 | Annual herb. Occurs in saline marshes and swamps.<br>Blooming period: April-August<br>0-3m                                                               | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Castilleja litoralis</i><br>Oregon coast paintbrush                                | ---- | ---- | 2B.2 | Perennial herb. Occurs in coastal dune and scrub habitats.<br>Blooming period: June-July<br>15-100m                                                      | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Chloropyron maritimum</i><br>ssp. <i>palustre</i><br>Point Reyes salty bird's-beak | ---- | ---- | 1B.2 | Annual herb. Occurs in coastal saline marshes and swamps.<br>Blooming period: June-Oct.<br>0-10m                                                         | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Clarkia amoena</i> ssp.<br><i>whitneyi</i><br>Whitney's farewell-to-spring         | ---- | ---- | 1B.1 | Annual herb. Occurs in coastal bluff and scrub habitats.<br>Blooming period: June-August<br>10-100m                                                      | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Coptis laciniata</i><br>Oregon goldthread                                          | ---- | ---- | 4.2  | Perennial herb. Occurs in mesic meadows, seeps and streambanks in coniferous forest.<br>Blooming period: March-May<br>0-1000m                            | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Erysimum menziesii</i><br>Menzies' wallflower                                      | FE   | SE   | 1B.1 | Perennial herb. Coastal dune habitat.<br>Bloom period: March-Sept.<br>0-35m                                                                              | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Erythronium oregonum</i><br>giant fawn lily                                        | ---- | ---- | 2B.2 | Perennial herb. Rocky, serpentine, openings in meadows and seeps of cismontane woodlands.<br>Blooming period: March-June<br>100-1150m                    | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Erythronium revolutum</i><br>coast fawn lily                                       | ---- | ---- | 2B.2 | Perennial herb. Mesic habitats within streambanks, bogs, fens of broadleaf and north coast coniferous forests.<br>Blooming period: March-July<br>0-1600m | Low potential to occur. Marginal habitat may occur in the margins of the agricultural fields and immediate area around Wolverton Gulch. |
| <i>Fissidens pauperculus</i><br>minute pocket moss                                    | ---- | ---- | 1B.2 | Moss. Mesic conditions in north coast coniferous forest.<br>Blooming period: NA<br>10-1024m                                                              | No potential to occur. No suitable habitat in or near project area.                                                                     |

|                                                                            |      |      |      |                                                                                                                                                                      |                                                                                                                                         |
|----------------------------------------------------------------------------|------|------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <i>Gilia capitata ssp. pacifica</i><br>Pacific gilia                       | ---- | ---- | 1B.2 | Annual herb. Occurs in coastal bluff scrub, chaparral, prairie and valley and foothill grassland habitats. Blooming period: April-Aug. 5-1665m                       | Low potential to occur. Marginal habitat may occur in the margins of the agricultural fields and immediate area around Wolverton Gulch. |
| <i>Gilia millefoliata</i><br>dark-eyed gilia                               | ---- | ---- | 1B.2 | Annual herb. Coastal dune habitat. Bloom period: April-July 2-30m                                                                                                    | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Hesperervax sparsiflora</i> var. <i>brevifolia</i><br>short-leaved evax | ---- | ---- | 1B.2 | Annual herb. Coastal dune, bluff scrub and prairie habitats. Bloom period: March-June 0-215m                                                                         | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Lathyrus japonicus</i><br>seaside pea                                   | ---- | ---- | 2B.1 | Perennial herb. Coastal dune habitat. Bloom period: May-Aug. 1-30m                                                                                                   | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Lathyrus palustris</i><br>marsh pea                                     | ---- | ---- | 2B.2 | Perennial herb. Mesic sites in marshes, swamps, lower montane and north coast coniferous forests. Bloom period: March-Aug. 1-100m                                    | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Layia carnosa</i><br>beach layia                                        | FE   | SE   | 1B.1 | Annual herb. Coastal dune and scrub habitat. Bloom period: March-July 0-60m                                                                                          | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Lycopodium clavatum</i><br>running-pine                                 | ---- | ---- | 4.1  | Perennial herb. Mesic areas of openings and roadsides of lower montane and north coast coniferous forest and marshes and swamps. Blooming period: June-Aug. 45-1225m | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Mitellastrax caulescens</i><br>leafy-stemmed mitrewort                  | ---- | ---- | 4.2  | Perennial herb. Mesic areas, broadleaf upland forests, lower montane and north coast coniferous forest and marshes and swamps. Blooming period: April-Oct. 5-1700m   | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Montia howellii</i><br>Howell's montia                                  | ---- | ---- | 2B.2 | Annual herb. Vernally mesic: vernal pool, meadow and seep and north coast coniferous forest habitats. Bloom period: March-May 0-835m                                 | No potential to occur. No suitable habitat in or near project area.                                                                     |

|                                                                                |      |      |      |                                                                                                                                                                   |                                                                                                                                         |
|--------------------------------------------------------------------------------|------|------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <i>Noccaea fendleri</i> ssp. <i>californica</i><br>Kneeland Prairie pennycress | FE   | ---- | 1B.1 | Annual herb. Coastal prairie habitat.<br>Bloom period: May-June<br>760-815m                                                                                       | No potential to occur. No suitable habitat in or near project area. Outside of known elevation range.                                   |
| <i>Packera bolanderi</i> var. <i>bolanderi</i><br>seacoast ragwort             | ---- | ---- | 2B.2 | Perennial herb. Coastal scrub and north coast coniferous forest.<br>Blooming period: May-July<br>30-650m                                                          | Low potential to occur. Marginal habitat may occur in the margins of the agricultural fields and immediate area around Wolverson Gulch. |
| <i>Piperia candida</i><br>white-flowered rein orchid                           | ---- | ---- | 1B.2 | Perennial herb. Broadleaf upland forests, lower montane and north coast coniferous forest and marshes and swamps.<br>Blooming period: May-Sept.<br>30-1310m       | No potential to occur. No suitable habitat in or near project area.                                                                     |
| <i>Polemonium carneum</i><br>Oregon polemonium                                 | ---- | ---- | 2B.2 | Perennial herb. Coastal prairie and scrub, and lower montane coniferous forest habitats.<br>Bloom period: April-Sept.<br>0-1830m                                  | Low potential to occur. Marginal habitat may occur in the margins of the agricultural fields and immediate area around Wolverson Gulch. |
| <i>Sidalcea malachroides</i><br>maple-leaved checkerbloom                      | ---- | ---- | 4.2  | Perennial herb. Broadleaf upland forest, coastal prairie and scrub, north coast coniferous forest and riparian woodland.<br>Blooming period: April-Aug.<br>0-730m | Low potential to occur. Marginal habitat may occur in the margins of the agricultural fields and immediate area around Wolverson Gulch. |
| <i>Sidalcea malviflora</i> ssp. <i>patula</i><br>Siskiyou checkerbloom         | ---- | ---- | 1B.2 | Perennial herb. Coastal prairie and bluff scrub, north coast coniferous forest.<br>Blooming period: May-Aug.<br>15-880m                                           | Low potential to occur. Marginal habitat may occur in the margins of the agricultural fields and immediate area around Wolverson Gulch. |
| <i>Sidalcea oregana</i> ssp. <i>eximia</i><br>coast checkerbloom               | ---- | ---- | 1B.2 | Perennial herb. Meadows and seeps, lower montane and north coast coniferous forest.<br>Blooming period: June-Aug.<br>5-1340m                                      | Low potential to occur. Marginal habitat may occur in areas between the upper grazing and lower agricultural fields.                    |
| <i>Spergularia canadensis</i> var. <i>occidentalis</i><br>western sand-spurrey | ---- | ---- | 2B.1 | Annual herb. Coastal saline march and swamp habitat.<br>Bloom period: June-Aug.<br>0-3m                                                                           | No potential to occur. No suitable habitat in or near project area. Outside of known elevation range.                                   |
| <i>Usnea longissima</i><br>Methuselah's beard lichen                           | ---- | ---- | 4.2  | Lichen. Broadleaf upland and north coast coniferous forest.<br>Blooming period: NA<br>50-1460m                                                                    | No potential to occur. No suitable habitat in or near project area. Outside of known elevation range.                                   |

**Table Key**

— = No listing

**FE** = Listed as Endangered under the Endangered Species Act

**FT** = Listed as Threatened under the Endangered Species Act

**FC** = Candidate for listing (Threatened or Endangered) under Endangered Species Act

**FD** = Delisted in accordance with the Endangered Species Act

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**SE** = Listed as Endangered under the California Endangered Species Act

**ST** = Listed as Threatened under the California Endangered Species Act

**SSC** = Species of Special Concern as identified by CDFW

**FP** = Listed as Fully Protected under California FGC

**SR** = Species identified as Rare by CDFW

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**CNPS - California Rare Plant Rank (CRPR)**

1A - Presumed Extinct in California

1B - Rare, Threatened, or Endangered in California and elsewhere

2A - Plants Presumed Extirpated in California, but common elsewhere

2B - Rare, Threatened, or Endangered in California, but more common elsewhere

3 - Need more information (a Review List)

4 - Plants of Limited Distribution (a Watch List)

**CRPR Threat Code Extension**

.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 - Fairly endangered in California (20-80% occurrences threatened)

.3 - Not very endangered in California (<20% of occurrences threatened)

Table 2: CNDDDB Results for Special-status Wildlife Species

| Scientific Name            | Common Name                 | USFWS | CDFW | Habitat Potential                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------|-------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Amphibians/Reptiles</b> |                             |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <i>Emys marmorata</i>      | western pond turtle         | ----  | SSC  | Marginal habitat is present in and adjacent to Wolverton Gulch. Upland habitat to the west of Wolverton Gulch is absent due to active agricultural practices, marginal upland habitat is present to the east of Wolverton Gulch as a narrow grassland habitat adjacent to River Bar Rd. Wolverton Gulch is presumed to be a perennial stream due to historic reports and observed fish species in the wetted channel. However, the low flow and minimal depth conditions of Wolverton Gulch in the project area does not provide adequate hiding cover for this species. Wolverton Gulch within the project area, if utilized, would likely be limited to a dispersal corridor. |
| <i>Rana aurora</i>         | northern red-legged frog    | ----  | SSC  | Marginal habitat is present in and adjacent to Wolverton Gulch. Wolverton Gulch is a channelized low gradient stream with few vegetated low flow areas adjacent to the channel that could be utilized as breeding habitat.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <i>Rana boylei</i>         | foothill yellow-legged frog | ----  | SSC  | Suitable habitat for this species is absent in or near the project area. Wolverton Gulch is a channelized low gradient stream with a mostly embedded small particle substrate (silt, sand and fine gravel) and is effectively absent of larger cobble sized wetted substrate utilized by the foothill yellow-legged frog for breeding substrate.                                                                                                                                                                                                                                                                                                                                |
| <b>Birds</b>               |                             |       |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <i>Accipiter cooperii</i>  | Cooper's hawk               | ----  | WL   | Marginal foraging habitat is present along the willow scrub habitat areas where songbirds are most numerous. Marginal nesting habitat is present but more suitable nesting habitat is plentiful in the project's vicinity.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <i>Accipiter striatus</i>  | sharp-shinned hawk          | ----  | WL   | Suitable foraging habitat is present along the willow scrub habitat areas where songbirds are most numerous. Suitable nesting habitat is not present in or near the project area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <i>Agelaius tricolor</i>   | tricolored blackbird        | ----  | SSC  | Suitable habitat for this species is absent in or near the project area. This species is a colonial nester found almost exclusively in bulrush and cattail dominated wetlands.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                                     |                          |      |         |                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------|--------------------------|------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Athene cunicularia</i>           | Burrowing owl            | ---- | SSC     | There are limited records of this species in Humboldt County. Marginal habitat is present along the project edges and along the berm on site. Since the majority of the site is actively plowed habitat potential is low.                                                                                                      |
| <i>Brachyramphus marmoratus</i>     | marbled murrelet         | FT   | SE      | Suitable habitat for this species is absent in or near the project area. This species is an oceanic bird that nests in mature old-growth forest of northern California and southern Oregon. Nest trees will have a minimum diameter at breast height of 36-inches. Nest tree species include Douglas fir and coastal redwoods. |
| <i>Pandion haliaetus</i>            | osprey                   | ---- | WL      | Suitable habitat for this species is absent in or near the project area. This species may traverse the project area while taking prey from the Van Duzen or Eel Rivers to potential nesting sites north of the project area.                                                                                                   |
| <i>Riparia riparia</i>              | bank swallow             | ---- | ST      | Suitable habitat for this species is absent in or near the project area. A colonial nester found exclusively in riparian cliff habitats along streams, rivers and lakes.                                                                                                                                                       |
| <b>Fish</b>                         |                          |      |         |                                                                                                                                                                                                                                                                                                                                |
| <i>Oncorhynchus clarkii clarkii</i> | coast cutthroat trout    | ---- | SSC     | Present. Wolverton Gulch is known occupied habitat for the coast cutthroat trout. Several small salmonid fish ( $\leq 7.5\text{cm}$ ) were observed in the stream during the reconnaissance survey.                                                                                                                            |
| <i>Spirinchus thaleichthys</i>      | longfin smelt            | FC   | ST/SSC  | Suitable habitat for this species is absent in Wolverton Gulch. Closest recorded observation was at the mouth of the Van Duzen River recorded in 1956 (CNDDDB).                                                                                                                                                                |
| <b>Mammals</b>                      |                          |      |         |                                                                                                                                                                                                                                                                                                                                |
| <i>Arborimus pomo</i>               | Sonoma tree vole         | ---- | SSC     | Suitable habitat for this species is absent in the project area. Occupies Douglas fir dominated forest habitats.                                                                                                                                                                                                               |
| <i>Corynorhinus townsendii</i>      | Townsend's big-eared bat | ---- | SCT/SSC | Suitable habitat for this species is absent in the project area. Requires caves, mines, or manmade structures with little to no disturbance.                                                                                                                                                                                   |
| <i>Martes caurina humboldtensis</i> | Humboldt marten          | ---- | SCE/SSC | Project is outside of this species known current range. Only two occurrences were recorded within the 9-quadrangle CNDDDB query and with observation dates of 1913 and 1927.                                                                                                                                                   |
| <i>Pekania pennanti</i>             | fisher - West Coast DPS  | FPT  | SCT/SSC | Suitable habitat for this species is absent in the project area. Known only to occupy low to mid-elevation coniferous or mixed conifer and hardwood forests. Prefers these habitats with a high degree of seral heterogeneity.                                                                                                 |

**Table Key**

— = No listing

**FE** = Listed as Endangered under the Endangered Species Act

**FT** = Listed as Threatened under the Endangered Species Act

**FC** = Candidate for listing (Threatened or Endangered) under Endangered Species Act

**FD** = Delisted in accordance with the Endangered Species Act

**FPT** = Federally Proposed Threatened

---

**SE** = Listed as Endangered under the California Endangered Species Act

**ST** = Listed as Threatened under the California Endangered Species Act

**SSC** = Species of Special Concern as identified by CDFW

**WL** = Watch List

**FP** = Listed as Fully Protected under California Fish and Game Code

**SR** = Species identified as Rare by CDFW

**SCT** = State Candidate Threatened

**SCE** = State Candidate Endangered

Table 3: CNDDDB Results for Sensitive Habitat Types

| Sensitive Habitat Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Habitat Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Rarity (CA/Global) | Potential to Occur                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------|
| Northern Coastal Salt Marsh (52110)*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Salt-tolerant herbaceous and woody stemmed species forming moderate to dense stands up to 3 feet tall. Typically found along protected inland margins of bays, lagoons and estuaries. Soils are hydric and subject to regular tidal inundation by salt water. Representative species may include: salt grass ( <i>Distichlis spicata</i> ), dwarf spikerush ( <i>Eleocharis parvula</i> ), frankenia ( <i>Frankenia sp.</i> ), dune rush ( <i>Juncus lescurii</i> ), and glass wort ( <i>Salicornia pacifica</i> ). | G3/S3.2            | This habitat type is not present in the Project area. |
| Upland Douglas Fir Forest (82420)*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | A tall mixed aged forest dominated by Douglas fir ( <i>Pseudotsuga menziesii</i> ). Sites are sub-mesic to sub-xeric on moderately deep, well drained soils. Range extends from Mendocino County north to British Columbia in elevations up to 6,000 feet. Annual precipitation ranges from 23 to 120 inches.                                                                                                                                                                                                       | G4/S3.1            | This habitat type is not present in the Project area. |
| <p>G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind 5.</p> <p>G1 or S1 - Critically Imperiled Globally or Subnationally (state)</p> <p>G2 or S2 - Imperiled Globally or Subnationally (state)</p> <p>G3 or S3 - Vulnerable to extirpation or extinction Globally or Subnationally (state)</p> <p>G4 or S4 - Apparently secure Globally or Subnationally (state)</p> <p>G5 or S5 - Secure Globally or Subnationally (state)</p> <p>* - community codes per Holland (1986) as used in the CNDDDB.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |                                                       |

## Target Sensitive Species

### Special-status Plants

The project has the low potential to support 7 different special-status plant species that are known to occupy one of two different vegetation communities: coastal willow scrub and mixed riparian. Table 1 summarizes the potential for occurrence and rationale for each special-status plant species occurring in or near the project, based on the CNDDDB database search, the field survey results and expert knowledge of the species themselves.

### Special-status Wildlife

The project has the potential to support, either seasonally or year-round, 5 special-status wildlife species. Table 2 summarizes the potential for occurrence and rationale for each special-status wildlife species occurring in the vicinity of the project, based on the CNDDDB records search. The section below is a discussion of each potential target species' natural history.

#### Amphibians

##### **Northern red-legged frog**

The northern red-legged frog (*Rana aurora*) is a reddish brown medium sized frog with long legs and prominent dorsolateral ridges. The lower abdomen, legs and forearms are red with a speckled white abdomen on its ventral surface. During the non-breeding season, the northern red-legged frog is a habitat generalist and may venture far (>300 m) from standing water (Evelyn and Sweet, 2018). Breeding habitat is more specific with stagnant to low flow water with ample emergent vegetation on the margins of ponds, wetlands, rivers and streams. Seasonal water sources must hold water long enough during the breeding and maturation season for larvae to complete metamorphosis. Breeding season extends from January through March. Maturity, from the time of egg deposition to complete metamorphosis, may take up to 20 weeks. Eggs are laid in dense and sturdy vegetation such as cattails, rush and dense willow stands.

#### Reptiles

##### **Western pond turtle**

The western pond turtle (*Emys marmorata*) is a medium sized turtle that is somewhat common throughout most of California in suitable aquatic habitats. This species prefers perennial waters with adequate basking sites that may include mats of floating vegetation, partially submerged logs and boulders and stream banks that allow for quick escape to water. The western pond turtle is omnivorous. Female pond turtle may migrate up to 100 meters from a water source during its breeding season, March through August, to deposit its eggs in an earthen nest.

## **Birds**

### **Cooper's hawk**

The Cooper's hawk (*Accipiter cooperii*) is a medium sized hawk with lighter under parts and darker wings and cape. This species prefers riparian habitats with dense tree stands adjacent to open fields or shrubby habitats that have a higher density of song birds which are selected by the Cooper's hawk as prey. Nesting occurs in deciduous and conifer trees from 10 to 80 feet above ground level. The Cooper's hawk is typically a year round resident but may migrate to lower elevations during winter months and return in the spring. This species breeds March through August.

### **Sharp-shinned hawk**

The sharp-shinned hawk (*Accipiter striatus*) is a small, long tailed hawk with curved wings and a slight build. Like the Cooper's hawk, the sharp-shinned hawk primarily feeds on smaller birds yet will also prey upon small rodents, and insects and prefers dense forest habitats where it uses ambush tactics from tree to tree to capture prey. The sharp-shinned hawk is a year round resident of north coastal California. Nest are usually found in small stands of conifers near water at 6 to 80 feet above ground level. Breeds from April through August.

## **Fish**

### **Coast cutthroat trout**

The coastal cutthroat trout (*Oncorhynchus clarkii clarkii*) is unique among salmonid species in that it is plastic in its life strategies, taking on amphidromous, anadromous, potadromous and lacustrine behaviors. Their freshwater habitats include gravelly streams, in cool well-oxygenated waters with access to deep pools for hiding cover. Streams with large woody debris and undercut banks are preferred habitats also. Natal streams are typically small and have low velocities with dense overhead canopies and cool summer temperatures. The Wolverton Gulch is a documented natal stream for the coastal cutthroat trout (CDFG 2013).

## **Sensitive Habitats**

A pedestrian survey was performed to evaluate the current environmental setting of the project area. Weather conditions during the survey were sunny with temperatures of 58.5 degrees Fahrenheit with winds at 0-2 mph.

The project occurs within portions of five vegetation community types: ruderal, pasture, cropland, willow scrub and willow-alder riparian. The active pasture and cropland communities are co-dominant plant communities in the project area. The pasture areas are on the upper terrace of the survey area and north of the cropland. Whereas the cropland, currently planted as a mustard (*Brassica sp.*) crop, is located below the pasture areas on the relict Van Duzen

River floodplain. The willow scrub habitat is located within the historic railway parcel that extends from east to west through the survey area. The dominant species is the coastal willow (*Salix hookeriana*) with subdominant species including red elderberry (*Sambucus racemosa*) and blackberry (*Rubus sp.*). The willow-alder riparian vegetation community follows and comprises the riparian corridor of the Wolverton Gulch and is dominated by red alder (*Alnus rubra*), arroyo willow (*Salix lasiolepis*) and sandbar willow (*Salix exigua*). The ruderal vegetation type occurred in disturbed areas along Hwy 36 and the along the topographic break between the pasture and cropland areas. Of these five different plant communities there were no signs of either the Northern Coastal Salt Marsh or Upland Douglas Fir Forest communities. Riparian communities in California, however, they are a protected habitat type under Section 1600 *et seq.* of the California Fish and Game Code.

### **Wildlife Corridors**

Wolverton Gulch provides adequate cover and habitat areas within the project area to be utilized as a wildlife corridor for the migration of fish, reptiles, amphibian and mammal species.

### **Proximity to Conservation Areas:**

There is no designated critical habitat within the project area or in the vicinity of the project area. There are no other known conservation areas within the vicinity of the project area.

### **Jurisdictional Drainages:**

The U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) collectively regulate jurisdictional waters of the U.S. and state. Overton Gulch is a blue line stream that flows from north to south along the eastern margin of the survey area. This natural stream is a tributary of the Van Duzen and Eel Rivers. Overton Gulch is within the jurisdiction sections 401 and 404 of the US Clean Water Act and its channel and riparian area from outer drip line to outer drip line is under the jurisdiction of Section 1600 *et seq.* of the California Fish and Game Code.

### **Habitat Assessment Results:**

The results of the habitat assessment indicate that the site is situated within two farmed areas i.e. an active pasture and an active mustard crop area. Native but degraded habitats surround these areas to the north and east but based on the present layout plan these areas can largely be avoided.

The habitat assessment determined the potential for rare plants to exist on site within the non-cultivated, native communities and ruderal areas (Exhibit 4). A floristic level botanical survey is

required to determine presence/absence of sensitive plant species, prior to any ground disturbing activities, in the non-cultivated, native communities and ruderal areas found within the project area.

There is some nesting habitat on the site and foraging habitat may exist for passerine and raptor species. All nesting birds are covered under the Migratory Bird Treaty Act (MBTA). All potential bird species should be included in a pre-construction nesting bird survey, conducted within 30 days of ground disturbance, if the project occurs during the spring.

The reconnaissance level survey suggested that perennial waters of the US are located within the project area. A jurisdiction delineation survey has been conducted and will be available with this habitat assessment report.

**Table 4: Survey Recommendations:**

Below are survey recommendations based on the results of the habitat assessment.

| Species                                                              | Federal Status                        | State Status                             | Survey Requirements                                                                                                                                                                                                                   | Legal Authority     |
|----------------------------------------------------------------------|---------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b><u>Nesting Birds</u></b>                                          | Migratory Bird Treaty Act (MBTA)      | CESA, CA FGC                             | No ground disturbance to occur during nesting season (between February and August) without a clearance survey by a qualified biologist, conducted within 30 days of ground disturbance, to ensure that no nesting birds are impacted. | MBTA, CA FGC, CEQA  |
| <b><u>Wildlife</u></b>                                               | FESA                                  | CESA                                     | None                                                                                                                                                                                                                                  | FESA/CESA           |
| <b><u>Plants</u></b>                                                 | FESA                                  | CESA                                     | A general floristic botanical inventory in non-cultivated, native communities and ruderal areas prior to ground disturbing activities.                                                                                                | FESA/CESA           |
| <b><u>State and Federally Jurisdictional Waters and Wetlands</u></b> | Section 401/404 Clean Water Act (CWA) | Porter-Cologne Water Quality Control Act | Jurisdictional delineation                                                                                                                                                                                                            | CWA, Porter-Cologne |

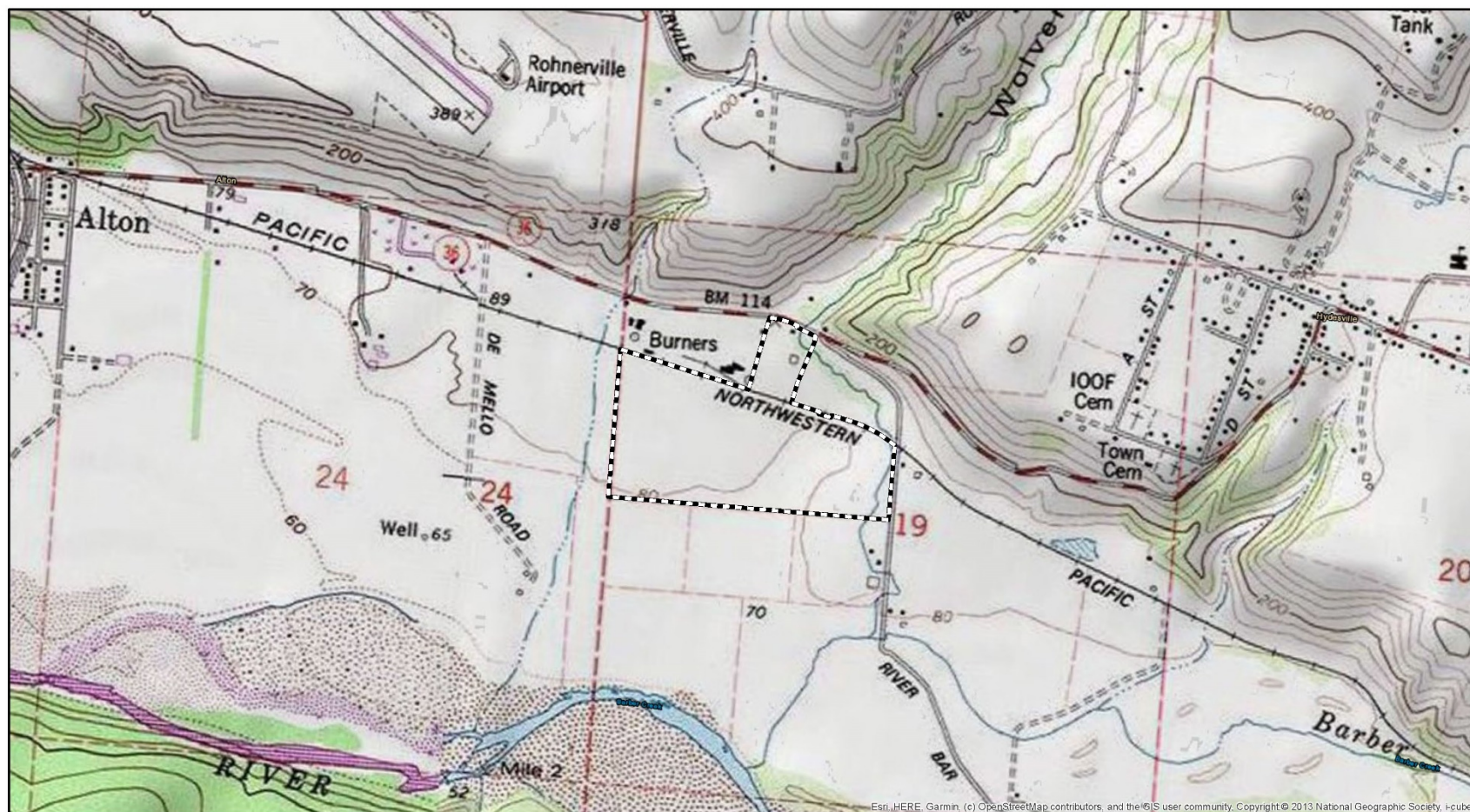
**Table 5: Mitigation Measures:**

| Mitigation Measures | Survey Description                                                                                                                                                                                           | Requirements                                                                                                                                                                                                  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BIO-1               | Floristic plant survey is required during the appropriate time of year, typically spring blooming period (April-June) in non-cultivated, native communities and ruderal areas found within the project area. | If the presence of rare plants is detected the project proponent will need to address avoidance measures with the lead agency. These may include avoidance, top soil preservation and/or off-site mitigation. |
| BIO-2               | 30 Day Preconstruction survey                                                                                                                                                                                | If nesting birds are observed, the location of the nest shall be marked with 100 foot offset flagging. The nest shall be monitored bi-weekly until the nest has fledged.                                      |
|                     |                                                                                                                                                                                                              |                                                                                                                                                                                                               |

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Exhibit 1: Topographic View



### Legend

----- 2023-0504-NC Project Area

### Topographic Map: Northcoast Solar Project Survey Area



PHOENIX BIOLOGICAL CONSULTING

Source: ESRI ArcGIS, EPD Solutions, CNDDB, March, 2020

0 1,000 2,000 4,000 6,000 Feet

## Exhibit 2: Regional View

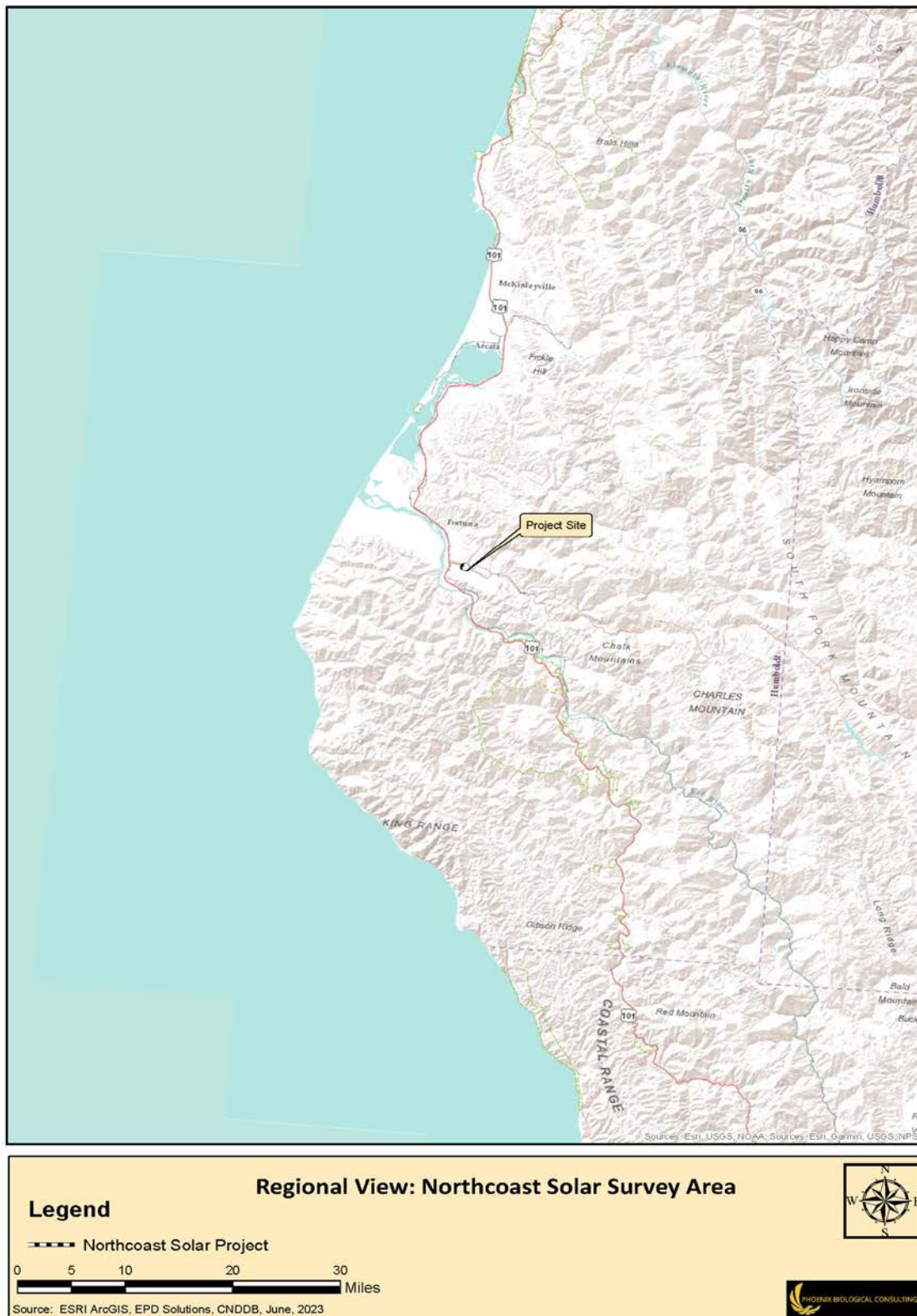
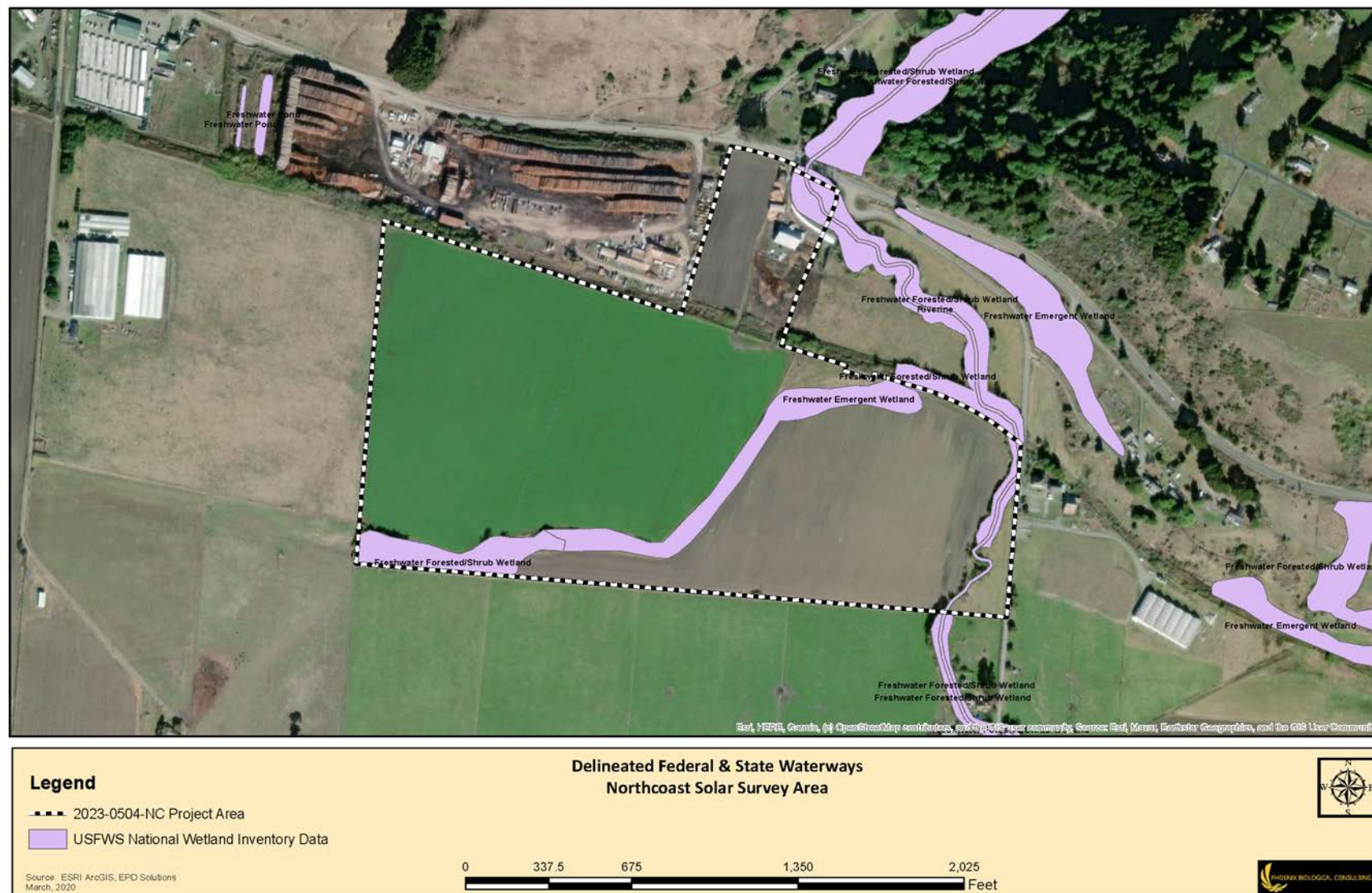


Exhibit 3: Aerial View – USFWS Drainage Database

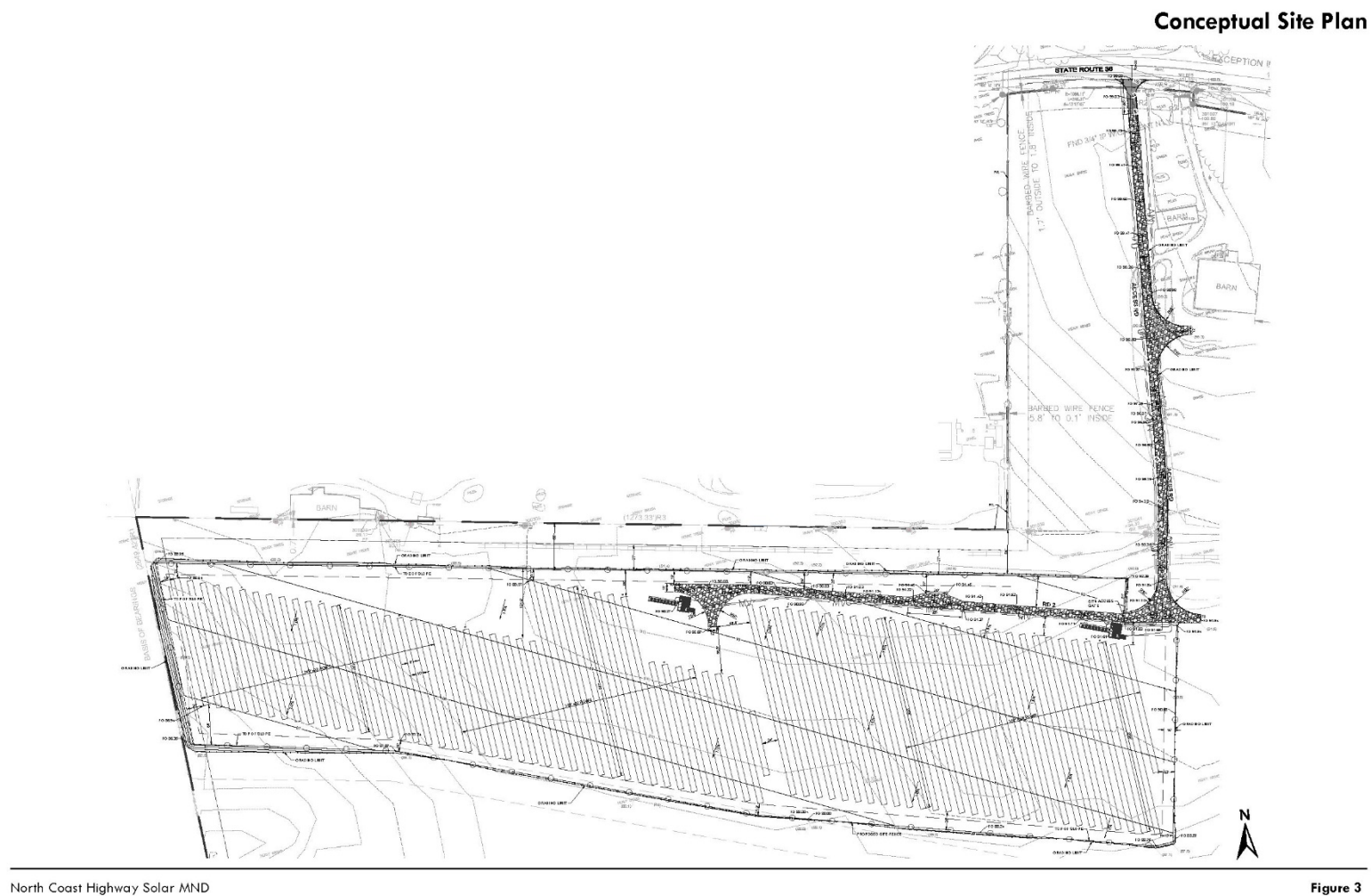


# Exhibit 4: Plant Communities





# Exhibit 6: Preliminary Site Plan



# Exhibit 7: Site Photos

|                                                                                     |                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------|
|  | <p>Property entrance. Facing south across Hwy 36.</p> |
|-------------------------------------------------------------------------------------|-------------------------------------------------------|



**Photo Point  
1 – At  
property  
entrance  
looking  
west.**



**Photo Point  
1 – At  
property  
entrance  
looking  
south.**



**Photo Point  
1 – At  
property  
entrance  
looking  
east. Hwy  
36 far left.**



**Photo Point  
2 – View  
south of  
cultivated  
corn field  
and access  
road.**



**Photo Point  
2 – View  
west of  
cultivated  
corn field.**



View south of access road from upper corn field to upper white clover field. Coastal willow, Himalayan blackberry, poison oak and poison hemlock in foreground.



**Photo Point  
3 – View  
west of  
cultivated  
white  
clover field  
and fence  
line. White  
clover,  
poison oak,  
poison  
hemlock  
and spike  
bentgrass  
in view.**



**Photo Point  
3 – View  
south of  
cultivated  
white  
clover field.**



**Photo Point  
3 – View  
east of  
cultivated  
white  
clover field,  
access road  
and fence  
line. White  
clover,  
poison  
hemlock  
and  
Himalayan  
blackberry  
in view.**



**Photo Point  
4 – View  
south of  
adjacent  
property at  
fence line.  
Coastal  
willow and  
poison  
hemlock in  
view.**



**Photo Point  
4 – View  
west of  
white  
clover field  
and  
adjacent  
property at  
fence line.**



**Photo Point  
4 – View  
east of  
hidden  
fence line  
and white  
clover field.  
Coastal  
willow and  
white  
clover in  
view.**



**Photo Point  
5 – View  
north of  
adjacent  
property  
(left) and  
white  
clover field.**



**Photo Point  
5 – View  
west of  
adjacent  
property  
corner at  
fence line.  
Poison  
hemlock  
and  
Himalayan  
blackberry  
in view.**



**Photo Point  
5 – View  
southeast  
of upper  
property  
corner.  
Coastal  
willow and  
Himalayan  
blackberry  
in view.**



**Photo Point  
5 – View  
east of  
white  
clover field  
and upper  
fence line  
(far right).**



**Photo Point  
6 – View  
west of  
upper  
fence line  
and white  
clover field  
(right).**



**Photo Point  
6 – View  
south of  
fence line,  
lower corn  
field and  
adjacent  
property.**



**Photo Point  
6 – View  
east of  
fence line,  
white  
clover field  
(left), lower  
corn field  
and  
adjacent  
property.**



**Photo Point  
7 – View  
west of  
fence line,  
and clover  
field (right).**



**Photo Point  
7 – View  
north of  
fence line,  
and clover  
field (left).**



**Photo Point  
7a - Access  
road from  
upper  
white  
clover field  
to lower  
corn field.**



**Photo Point  
8 - View  
west of  
previous  
well head  
site and  
corn field.**



**Photo Point  
8 - View  
east of  
southern  
fence line,  
corn field  
and  
adjacent  
property.**



**Photo Point  
9 - View  
east of  
Wolverton  
Gulch and  
access road  
to eastern  
field.**



**Photo Point  
9 - View  
north of  
west bank  
of  
Wolverton  
Gulch and  
adjacent  
corn field.  
Red alder  
riparian  
corridor in  
view.**



East of  
Photo Point  
9 - View  
north of  
east bank  
of  
Wolverton  
Gulch.



East of  
Photo Point  
9 - View  
north of  
east  
riparian  
margin of  
Wolverton  
Gulch and  
adjacent  
field.



**Photo Point  
10 - View  
north of  
fence line,  
River Bar  
Rd and  
adjacent  
property.  
Red alder,  
Himalayan  
blackberry  
in view.**



**Photo Point  
10 - View  
south of  
fence line,  
River Bar  
Rd,  
cultivated  
hay field  
and  
Wolverton  
Gulch  
riparian  
vegetation.**



**Photo Point  
11 - View  
south of  
fence line,  
lower corn  
fields (left)  
and upper  
white  
clover field.**



**Photo Point  
11 - View  
west of  
fence line  
and white  
clover field.  
Coastal  
willow and  
white  
clover in  
view.**



**Photo Point  
11 - View  
east of  
fence line  
(left),  
ruderal  
area and  
lower corn  
field.**

Table 5: Vertebrates Detected During Site Visit

| Common Name                 | Scientific Name                        |
|-----------------------------|----------------------------------------|
| <b>Amphibians</b>           |                                        |
| Sierran Treefrog            | <i>Pseudacris sierra</i>               |
| <b>Birds</b>                |                                        |
| American Crow               | <i>Corvus brachyrhynchos</i>           |
| American Robin              | <i>Turdus migratorius</i>              |
| Black Phoebe                | <i>Sayornis nigricans</i>              |
| Black-capped Chickadee      | <i>Poecile atricapillus</i>            |
| Bushtit                     | <i>Psaltiriparus minimus</i>           |
| California Towhee           | <i>Melospiza crissalis</i>             |
| Canada goose                | <i>Branta canadensis</i>               |
| Cedar Waxwing               | <i>Bombycilla cedrorum</i>             |
| European Starling           | <i>Sturnus vulgaris</i>                |
| Mourning Dove               | <i>Zenaidura macroura</i>              |
| Northern Flicker            | <i>Colaptes auratus</i>                |
| Northern Harrier            | <i>Circus hudsonius</i>                |
| Red-tailed Hawk             | <i>Buteo jamaicensis</i>               |
| Song Sparrow                | <i>Melospiza melodia</i>               |
| Tree Swallow                | <i>Tachycineta bicolor</i>             |
| White-crowned Sparrow       | <i>Zonotrichia leucophrys</i>          |
| Yellow Warbler              | <i>Setophaga petechia</i>              |
| <b>Fish</b>                 |                                        |
| Juvenile fish               | <i>Unkown</i>                          |
| <b>Mammals</b>              |                                        |
| Botta's Pocket Gopher       | <i>Thomomys bottae</i>                 |
| Columbian Black-tailed Deer | <i>Odocoileus hemionus columbianus</i> |
| Coyote                      | <i>Canis latrans</i>                   |

Table 6: Vascular Plants Detected During Site Visit

| Scientific Name                                     | Common Name            |
|-----------------------------------------------------|------------------------|
| <i>Achillea millefolium</i>                         | Yarrow                 |
| <i>Agrostis exarata</i>                             | Spike bentgrass        |
| <i>Alnus rubra</i>                                  | Red alder              |
| <i>Amaranthus retroflexus</i>                       | Rough pigweed          |
| <i>Anthriscus caucalis</i>                          | Bur chervil            |
| <i>Athyrium filix-femina</i> var. <i>cyclosorum</i> | Western lady fern      |
| <i>Avena fatua</i>                                  | Wild oat               |
| <i>Baccharis pilularis</i>                          | Coyote brush           |
| <i>Brassica rapa</i>                                | Common mustard         |
| <i>Bromus catharticus</i>                           | Rescue grass           |
| <i>Bromus diandrus</i>                              | Ripgut brome           |
| <i>Bromus sitchensis</i> var. <i>carinatus</i>      | California brome       |
| <i>Capsella bursa-pastoris</i>                      | Shepherd's purse       |
| <i>Cardamine oligosperma</i>                        | Bitter cress           |
| <i>Cerastium glomeratum</i>                         | Large mouse ears       |
| <i>Cerastium glomeratum</i>                         | Large mouse ears       |
| <i>Cicuta douglasii</i>                             | Western water hemlock  |
| <i>Cirsium vulgare</i>                              | Bull thistle           |
| <i>Conium maculatum</i>                             | Poison hemlock         |
| <i>Conium maculatum</i>                             | Poison hemlock         |
| <i>Convolvulus arvensis</i>                         | Field bindweed         |
| <i>Cortaderia jubata</i>                            | Andean pampas grass    |
| <i>Cyperus esculentus</i>                           | Yellow nutgrass        |
| <i>Datura stramonium</i>                            | Jimsonweed             |
| <i>Daucus carota</i>                                | Queen Anne's lace      |
| <i>Dipsacus fullonum</i>                            | Wild teasel            |
| <i>Dryopteris arguta</i>                            | California wood fern   |
| <i>Echinochloa crus-galli</i>                       | Barnyard grass         |
| <i>Elymus triticoides</i>                           | Beardless wild rye     |
| <i>Epilobium brachycarpum</i>                       | Tall annual willowherb |
| <i>Epilobium ciliatum</i>                           | Slender willow herb    |
| <i>Equisetum arvense</i>                            | Common horsetail       |
| <i>Equisetum hyemale</i> ssp. <i>affine</i>         | Giant scouring rush    |
| <i>Erigeron canadensis</i>                          | Canada horseweed       |
| <i>Erodium cicutarium</i>                           | Red stemmed filaree    |

|                                               |                           |
|-----------------------------------------------|---------------------------|
| <i>Euphorbia maculata</i>                     | Spotted spurge            |
| <i>Festuca perennis</i>                       | Italian rye grass         |
| <i>Galium porrigens</i> var. <i>porrigens</i> | Climbing bedstraw         |
| <i>Geranium molle</i>                         | Dovefoot geranium         |
| <i>Gnaphalium palustre</i>                    | Lowland cudweed           |
| <i>Hedera helix</i>                           | English ivy               |
| <i>Helminthotheca echioides</i>               | Bristly ox-tongue         |
| <i>Heuchera micrantha</i>                     | Alumroot                  |
| <i>Juncus bufonius</i> var. <i>bufonius</i>   | Toad rush                 |
| <i>Juncus effusus</i> ssp. <i>pacificus</i>   | Pacific rush              |
| <i>Juncus xiphioides</i>                      | Iris leaved rush          |
| <i>Kickxia elatine</i>                        | Fluellin                  |
| <i>Lamium amplexicaule</i>                    | Henbit deadnettle         |
| <i>Lemna minor</i>                            | Smaller duckweed          |
| <i>Leucanthemum vulgare</i>                   | Oxeye daisy               |
| <i>Ludwigia peploides</i>                     | Marsh purslane            |
| <i>Ludwigia</i> sp.                           | Water primrose            |
| <i>Malva parviflora</i>                       | Cheeseweed mallow         |
| <i>Marah oregana</i>                          | Coast man-root            |
| <i>Matricaria discoidea</i>                   | Pineapple weed            |
| <i>Mentha pulegium</i>                        | Pennyroyal                |
| <i>Nasturtium officinale</i>                  | Watercress                |
| <i>Plantago elongata</i>                      | Coastal plantain          |
| <i>Plantago lanceolata</i>                    | English plantain          |
| <i>Plantago major</i>                         | Common plantain           |
| <i>Poa annua</i>                              | Annual blue grass         |
| <i>Poa compressa</i>                          | Canada blue grass         |
| <i>Polygonum austinae</i>                     | Rebecca Austin's knotweed |
| <i>Polystichum munitum</i>                    | Western swordfern         |
| <i>Potamogeton epihydrus</i>                  | Creekgrass                |
| <i>Prunus avium</i>                           | Sweet cherry              |
| <i>Ranunculus aquatilis</i>                   | Whitewater crowfoot       |
| <i>Ranunculus muricatus</i>                   | Buttercup                 |
| <i>Ranunculus occidentalis</i>                | Western buttercup         |
| <i>Raphanus sativus</i>                       | Jointed charlock          |
| <i>Rosa californica</i>                       | California wild rose      |
| <i>Rubus armeniacus</i>                       | Himalayan blackberry      |
| <i>Rubus parviflorus</i>                      | Thimbleberry              |
| <i>Rubus ursinus</i>                          | California blackberry     |

|                                                    |                        |
|----------------------------------------------------|------------------------|
| <i>Rumex acetosella</i>                            | Common sheep sorrel    |
| <i>Rumex crispus</i>                               | Curly dock             |
| <i>Salix exigua</i>                                | Sandbar willow         |
| <i>Salix hookeriana</i>                            | Coastal willow         |
| <i>Salix lasiolepis</i>                            | Arroyo willow          |
| <i>Sambucus racemosa</i> var. <i>racemosa</i>      | Pacific red elderberry |
| <i>Silybum marianum</i>                            | Milk thistle           |
| <i>Solanum americanum</i>                          | White nightshade       |
| <i>Stachys ajugoides</i>                           | Hedge nettle           |
| <i>Stachys mexicana</i>                            | Mexican Hedge-nettle   |
| <i>Taraxacum officinale</i> ssp. <i>officinale</i> | Common dandelion       |
| <i>Toxicodendron diversilobum</i>                  | Poison oak             |
| <i>Trifolium dubium</i>                            | Shamrock clover        |
| <i>Trifolium hirtum</i>                            | Rose clover            |
| <i>Trifolium repens</i>                            | White clover           |
| <i>Umbellularia californica</i>                    | California bay         |
| <i>Urtica dioica</i>                               | Stinging nettle        |
| <i>Veronica persica</i>                            | Bird's eye speedwell   |
| <i>Vicia sativa</i>                                | Spring vetch           |
| <i>Xanthium spinosum</i>                           | Spiny cocklebur        |
| <i>Xanthium strumarium</i>                         | Rough cocklebur        |
| <i>Zea mays</i>                                    | Cultivated corn        |

## Appendix A: CNDDDB Results

| Scientific Name                   | Common Name        | Occurrence Number | Key Quad Name  | Federal Status | State Status | Global Rank    | State Rank | Rare Plant Rank | CDF W Stat |
|-----------------------------------|--------------------|-------------------|----------------|----------------|--------------|----------------|------------|-----------------|------------|
| Abronia umbellata var. breviflora | pink sand-verbena  | 64                | Fields Landing | None           | None         | G4<br>G5<br>T2 | S2         | 1B.1            |            |
| Abronia umbellata var. breviflora | pink sand-verbena  | 38                | Fields Landing | None           | None         | G4<br>G5<br>T2 | S2         | 1B.1            |            |
| Abronia umbellata var. breviflora | pink sand-verbena  | 16                | Fields Landing | None           | None         | G4<br>G5<br>T2 | S2         | 1B.1            |            |
| Accipiter cooperii                | Cooper's hawk      | 80                | Owl Creek      | None           | None         | G5             | S4         |                 | WL         |
| Accipiter cooperii                | Cooper's hawk      | 83                | Taylor Peak    | None           | None         | G5             | S4         |                 | WL         |
| Accipiter cooperii                | Cooper's hawk      | 76                | Redcrest       | None           | None         | G5             | S4         |                 | WL         |
| Accipiter cooperii                | Cooper's hawk      | 74                | Hydesville     | None           | None         | G5             | S4         |                 | WL         |
| Accipiter cooperii                | Cooper's hawk      | 79                | Redcrest       | None           | None         | G5             | S4         |                 | WL         |
| Accipiter cooperii                | Cooper's hawk      | 77                | Redcrest       | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 16                | Hydesville     | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 17                | Iaqua Buttes   | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 18                | Fields Landing | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 19                | Fields Landing | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 21                | Scotia         | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 20                | Scotia         | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 15                | Redcrest       | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 8                 | Scotia         | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 7                 | Iaqua Buttes   | None           | None         | G5             | S4         |                 | WL         |
| Accipiter striatus                | sharp-shinned hawk | 6                 | Iaqua Buttes   | None           | None         | G5             | S4         |                 | WL         |

|                              |                               |     |                 |            |            |         |      |        |
|------------------------------|-------------------------------|-----|-----------------|------------|------------|---------|------|--------|
| Acipenser medirostris pop. 1 | green sturgeon - southern DPS | 13  | Eureka          | Threatened | None       | G2 T1   | S1   |        |
| Agelaius tricolor            | tricolored blackbird          | 247 | Fortuna         | None       | Threatened | G1 G2   | S2   | SSC    |
| Ammodramus savannarum        | grasshopper sparrow           | 26  | Fortuna         | None       | None       | G5      | S3   | SSC    |
| Anodonta californiensis      | California floater            | 4   | Fields Landing  | None       | None       | G3 Q    | S2 ? |        |
| Antrozous pallidus           | pallid bat                    | 148 | Ferndale        | None       | None       | G4      | S3   | SSC    |
| Aplodontia rufa humboldtiana | Humboldt mountain beaver      | 5   | Scotia          | None       | None       | G5 TN R | SN R |        |
| Aplodontia rufa humboldtiana | Humboldt mountain beaver      | 8   | McWhinney Creek | None       | None       | G5 TN R | SN R |        |
| Aplodontia rufa humboldtiana | Humboldt mountain beaver      | 9   | Fields Landing  | None       | None       | G5 TN R | SN R |        |
| Aplodontia rufa humboldtiana | Humboldt mountain beaver      | 7   | McWhinney Creek | None       | None       | G5 TN R | SN R |        |
| Aplodontia rufa humboldtiana | Humboldt mountain beaver      | 6   | Hydesville      | None       | None       | G5 TN R | SN R |        |
| Aplodontia rufa humboldtiana | Humboldt mountain beaver      | 1   | Hydesville      | None       | None       | G5 TN R | SN R |        |
| Aquila chrysaetos            | golden eagle                  | 130 | Taylor Peak     | None       | None       | G5      | S3   | FP; WL |
| Aquila chrysaetos            | golden eagle                  | 131 | Taylor Peak     | None       | None       | G5      | S3   | FP; WL |
| Aquila chrysaetos            | golden eagle                  | 128 | Laqua Buttes    | None       | None       | G5      | S3   | FP; WL |
| Aquila chrysaetos            | golden eagle                  | 95  | Taylor Peak     | None       | None       | G5      | S3   | FP; WL |
| Aquila chrysaetos            | golden eagle                  | 88  | Taylor Peak     | None       | None       | G5      | S3   | FP; WL |
| Aquila chrysaetos            | golden eagle                  | 89  | Taylor Peak     | None       | None       | G5      | S3   | FP; WL |
| Aquila chrysaetos            | golden eagle                  | 92  | Taylor Peak     | None       | None       | G5      | S3   | FP; WL |
| Arborimus pomo               | Sonoma tree vole              | 203 | Redcrest        | None       | None       | G3      | S3   | SSC    |
| Arborimus pomo               | Sonoma tree vole              | 190 | Owl Creek       | None       | None       | G3      | S3   | SSC    |

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|                   |                     |    |                     |          |      |    |    |     |
|-------------------|---------------------|----|---------------------|----------|------|----|----|-----|
| Arborimus<br>pomo | Sonoma tree<br>vole | 84 | Mad River<br>Buttes | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 83 | Mad River<br>Buttes | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 85 | Owl Creek           | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 69 | Hydesville          | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 77 | Scotia              | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 70 | Hydesville          | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 72 | Taylor Peak         | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 74 | Taylor Peak         | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 73 | Taylor Peak         | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 75 | Taylor Peak         | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 71 | Hydesville          | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 76 | Scotia              | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 64 | McWhinney<br>Creek  | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 66 | Hydesville          | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 67 | Hydesville          | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 68 | Hydesville          | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 61 | Fields<br>Landing   | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 62 | McWhinney<br>Creek  | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 63 | McWhinney<br>Creek  | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 50 | Redcrest            | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 38 | Fortuna             | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 37 | Hydesville          | Non<br>e | None | G3 | S3 | SSC |
| Arborimus<br>pomo | Sonoma tree<br>vole | 43 | Korbel              | Non<br>e | None | G3 | S3 | SSC |

|                       |                        |     |                    |          |      |          |          |     |
|-----------------------|------------------------|-----|--------------------|----------|------|----------|----------|-----|
| Arborimus<br>pomo     | Sonoma tree<br>vole    | 8   | laqua Buttes       | Non<br>e | None | G3       | S3       | SSC |
| Ardea alba            | great egret            | 22  | Fields<br>Landing  | Non<br>e | None | G5       | S4       |     |
| Ardea alba            | great egret            | 39  | Fields<br>Landing  | Non<br>e | None | G5       | S4       |     |
| Ardea alba            | great egret            | 21  | Fields<br>Landing  | Non<br>e | None | G5       | S4       |     |
| Ardea<br>herodias     | great blue<br>heron    | 144 | Cannibal<br>Island | Non<br>e | None | G5       | S4       |     |
| Ardea<br>herodias     | great blue<br>heron    | 53  | Fields<br>Landing  | Non<br>e | None | G5       | S4       |     |
| Ardea<br>herodias     | great blue<br>heron    | 143 | Fields<br>Landing  | Non<br>e | None | G5       | S4       |     |
| Ardea<br>herodias     | great blue<br>heron    | 134 | Fortuna            | Non<br>e | None | G5       | S4       |     |
| Ardea<br>herodias     | great blue<br>heron    | 56  | Fortuna            | Non<br>e | None | G5       | S4       |     |
| Ardea<br>herodias     | great blue<br>heron    | 62  | Hydesville         | Non<br>e | None | G5       | S4       |     |
| Ardea<br>herodias     | great blue<br>heron    | 52  | Fields<br>Landing  | Non<br>e | None | G5       | S4       |     |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 211 | Redcrest           | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 414 | Weott              | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 204 | Arcata South       | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 381 | McWhinney<br>Creek | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 382 | McWhinney<br>Creek | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 6   | Fields<br>Landing  | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 190 | McWhinney<br>Creek | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Ascaphus<br>truei     | Pacific tailed<br>frog | 125 | Scotia             | Non<br>e | None | G4       | S3<br>S4 | SSC |
| Bombus<br>caliginosus | obscure<br>bumble bee  | 30  | Korbel             | Non<br>e | None | G2<br>G3 | S1<br>S2 |     |
| Bombus<br>caliginosus | obscure<br>bumble bee  | 31  | laqua Buttes       | Non<br>e | None | G2<br>G3 | S1<br>S2 |     |
| Bombus<br>caliginosus | obscure<br>bumble bee  | 34  | Redcrest           | Non<br>e | None | G2<br>G3 | S1<br>S2 |     |
| Bombus<br>caliginosus | obscure<br>bumble bee  | 33  | Ferndale           | Non<br>e | None | G2<br>G3 | S1<br>S2 |     |

|                          |                    |    |                 |            |                      |          |          |
|--------------------------|--------------------|----|-----------------|------------|----------------------|----------|----------|
| Bombus caliginosus       | obscure bumble bee | 28 | Fields Landing  | None       | None                 | G2<br>G3 | S1<br>S2 |
| Bombus caliginosus       | obscure bumble bee | 29 | Fields Landing  | None       | None                 | G2<br>G3 | S1<br>S2 |
| Bombus occidentalis      | western bumble bee | 43 | Korbel          | None       | Candidate Endangered | G3       | S1       |
| Bombus occidentalis      | western bumble bee | 45 | Ferndale        | None       | Candidate Endangered | G3       | S1       |
| Bombus occidentalis      | western bumble bee | 48 | Scotia          | None       | Candidate Endangered | G3       | S1       |
| Bombus occidentalis      | western bumble bee | 44 | Fields Landing  | None       | Candidate Endangered | G3       | S1       |
| Bombus occidentalis      | western bumble bee | 47 | Fortuna         | None       | Candidate Endangered | G3       | S1       |
| Brachyramphus marmoratus | marbled murrelet   | 72 | McWhinney Creek | Threatened | Endangered           | G3       | S2       |
| Brachyramphus marmoratus | marbled murrelet   | 73 | McWhinney Creek | Threatened | Endangered           | G3       | S2       |
| Brachyramphus marmoratus | marbled murrelet   | 62 | Laqua Buttes    | Threatened | Endangered           | G3       | S2       |
| Brachyramphus marmoratus | marbled murrelet   | 70 | Hydesville      | Threatened | Endangered           | G3       | S2       |
| Brachyramphus marmoratus | marbled murrelet   | 69 | Scotia          | Threatened | Endangered           | G3       | S2       |
| Brachyramphus marmoratus | marbled murrelet   | 65 | Laqua Buttes    | Threatened | Endangered           | G3       | S2       |
| Brachyramphus marmoratus | marbled murrelet   | 64 | Laqua Buttes    | Threatened | Endangered           | G3       | S2       |

|                          |                  |    |              |            |            |    |    |
|--------------------------|------------------|----|--------------|------------|------------|----|----|
| Brachyramphus marmoratus | marbled murrelet | 67 | Scotia       | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 66 | Laqua Buttes | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 68 | Scotia       | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 71 | Hydesville   | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 63 | Laqua Buttes | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 54 | Owl Creek    | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 60 | Owl Creek    | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 59 | Owl Creek    | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 57 | Owl Creek    | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 55 | Owl Creek    | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 50 | Redcrest     | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 52 | Redcrest     | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 56 | Owl Creek    | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 58 | Owl Creek    | Threatened | Endangered | G3 | S2 |
| Brachyramphus marmoratus | marbled murrelet | 53 | Redcrest     | Threatened | Endangered | G3 | S2 |

|                                       |                               |     |                 |            |            |           |          |      |
|---------------------------------------|-------------------------------|-----|-----------------|------------|------------|-----------|----------|------|
| Brachyramphus marmoratus              | marbled murrelet              | 61  | Laquea Buttes   | Threatened | Endangered | G3        | S2       |      |
| Brachyramphus marmoratus              | marbled murrelet              | 49  | Redcrest        | Threatened | Endangered | G3        | S2       |      |
| Brachyramphus marmoratus              | marbled murrelet              | 51  | Redcrest        | Threatened | Endangered | G3        | S2       |      |
| Cardamine angulata                    | seaside bittercress           | 2   | Arcata South    | None       | None       | G4<br>G5  | S3       | 2B.1 |
| Carex arcta                           | northern clustered sedge      | 9   | Owl Creek       | None       | None       | G5        | S1       | 2B.2 |
| Carex arcta                           | northern clustered sedge      | 3   | Owl Creek       | None       | None       | G5        | S1       | 2B.2 |
| Carex arcta                           | northern clustered sedge      | 8   | Redcrest        | None       | None       | G5        | S1       | 2B.2 |
| Carex leptalea                        | bristle-stalked sedge         | 3   | Fields Landing  | None       | None       | G5        | S1       | 2B.2 |
| Carex lyngbyei                        | Lyngbye's sedge               | 9   | Eureka          | None       | None       | G5        | S3       | 2B.2 |
| Castilleja ambigua var. humboldtensis | Humboldt Bay owl's-clover     | 34  | Fields Landing  | None       | None       | G4<br>T2  | S2       | 1B.2 |
| Castilleja litoralis                  | Oregon coast paintbrush       | 17  | Fields Landing  | None       | None       | G3        | S3       | 2B.2 |
| Charadrius montanus                   | mountain plover               | 96  | Fields Landing  | None       | None       | G3        | S2<br>S3 | SSC  |
| Charadrius nivosus                    | western snowy plover          | 78  | Cannibal Island | Threatened | None       | G3<br>T3  | S3       | SSC  |
| Chloropyron maritimum ssp. palustre   | Point Reyes salty bird's-beak | 15  | Fields Landing  | None       | None       | G4?<br>T2 | S2       | 1B.2 |
| Chloropyron maritimum ssp. palustre   | Point Reyes salty bird's-beak | 16  | Fields Landing  | None       | None       | G4?<br>T2 | S2       | 1B.2 |
| Clarkia amoena ssp. whitneyi          | Whitney's farewell-to-spring  | 8   | Fortuna         | None       | None       | G5<br>T1  | S1       | 1B.1 |
| Coptis laciniata                      | Oregon goldthread             | 113 | Laquea Buttes   | None       | None       | G4?       | S3<br>?  | 4.2  |

|                          |                          |       |                 |       |      |     |      |      |
|--------------------------|--------------------------|-------|-----------------|-------|------|-----|------|------|
| Coptis laciniata         | Oregon goldthread        | 59    | laqua Buttes    | Non e | None | G4? | S3 ? | 4.2  |
| Coptis laciniata         | Oregon goldthread        | 7     | Owl Creek       | Non e | None | G4? | S3 ? | 4.2  |
| Corynorhinus townsendii  | Townsend's big-eared bat | 568   | McWhinney Creek | Non e | None | G4  | S2   | SSC  |
| Corynorhinus townsendii  | Townsend's big-eared bat | 567   | Hydesville      | Non e | None | G4  | S2   | SSC  |
| Corynorhinus townsendii  | Townsend's big-eared bat | 146   | Redcrest        | Non e | None | G4  | S2   | SSC  |
| Corynorhinus townsendii  | Townsend's big-eared bat | 139   | Redcrest        | Non e | None | G4  | S2   | SSC  |
| Corynorhinus townsendii  | Townsend's big-eared bat | 124   | Scotia          | Non e | None | G4  | S2   | SSC  |
| Downingia willamettensis | Cascade downingia        | 5     | Fortuna         | Non e | None | G4  | S2   | 2B.2 |
| Downingia willamettensis | Cascade downingia        | 6     | Fortuna         | Non e | None | G4  | S2   | 2B.2 |
| Downingia willamettensis | Cascade downingia        | 7     | Fortuna         | Non e | None | G4  | S2   | 2B.2 |
| Downingia willamettensis | Cascade downingia        | 4     | Hydesville      | Non e | None | G4  | S2   | 2B.2 |
| Egretta thula            | snowy egret              | 6     | Fields Landing  | Non e | None | G5  | S4   |      |
| Emys marmorata           | western pond turtle      | 1,375 | Redcrest        | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 1,367 | Fields Landing  | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 560   | Redcrest        | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 740   | Hydesville      | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 738   | Redcrest        | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 737   | Redcrest        | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 739   | Hydesville      | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 742   | McWhinney Creek | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 743   | Fields Landing  | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 741   | Owl Creek       | Non e | None | G3  | S3   | SSC  |
| Emys marmorata           | western pond turtle      | 733   | Redcrest        | Non e | None | G3  | S3   | SSC  |

|                         |                          |     |                 |      |      |    |    |     |
|-------------------------|--------------------------|-----|-----------------|------|------|----|----|-----|
| Emys marmorata          | western pond turtle      | 734 | Redcrest        | None | None | G3 | S3 | SSC |
| Emys marmorata          | western pond turtle      | 735 | Redcrest        | None | None | G3 | S3 | SSC |
| Emys marmorata          | western pond turtle      | 732 | Redcrest        | None | None | G3 | S3 | SSC |
| Emys marmorata          | western pond turtle      | 522 | Redcrest        | None | None | G3 | S3 | SSC |
| Emys marmorata          | western pond turtle      | 419 | Hydesville      | None | None | G3 | S3 | SSC |
| Entosphenus tridentatus | Pacific lamprey          | 6   | Fields Landing  | None | None | G4 | S3 | SSC |
| Entosphenus tridentatus | Pacific lamprey          | 4   | Arcata South    | None | None | G4 | S3 | SSC |
| Entosphenus tridentatus | Pacific lamprey          | 5   | Fields Landing  | None | None | G4 | S3 | SSC |
| Erithizon dorsatum      | North American porcupine | 471 | Redcrest        | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 479 | Maple Creek     | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 474 | Scotia          | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 472 | Bridgeville     | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 191 | Redcrest        | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 182 | McWhinney Creek | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 189 | Fortuna         | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 181 | McWhinney Creek | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 190 | Scotia          | None | None | G5 | S3 |     |
| Erithizon dorsatum      | North American porcupine | 183 | Fields Landing  | None | None | G5 | S3 |     |

|                       |                          |     |                |      |      |          |    |      |
|-----------------------|--------------------------|-----|----------------|------|------|----------|----|------|
| Erethizon dorsatum    | North American porcupine | 180 | Fields Landing | None | None | G5       | S3 |      |
| Erythronium oregonum  | giant fawn lily          | 12  | Scotia         | None | None | G5       | S2 | 2B.2 |
| Erythronium oregonum  | giant fawn lily          | 7   | Taylor Peak    | None | None | G5       | S2 | 2B.2 |
| Erythronium oregonum  | giant fawn lily          | 8   | Iaqua Buttes   | None | None | G5       | S2 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 145 | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 179 | Yager Junction | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 116 | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 26  | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 8   | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 173 | Taylor Peak    | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 114 | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 84  | Scotia         | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 33  | Scotia         | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 153 | Owl Creek      | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 146 | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 149 | Scotia         | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 35  | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 42  | Taylor Peak    | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 98  | Owl Creek      | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 99  | Owl Creek      | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 97  | Owl Creek      | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 117 | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |
| Erythronium revolutum | coast fawn lily          | 115 | Iaqua Buttes   | None | None | G4<br>G5 | S3 | 2B.2 |

|                         |                           |     |                |            |          |          |          |      |    |
|-------------------------|---------------------------|-----|----------------|------------|----------|----------|----------|------|----|
| Erythronium revolutum   | coast fawn lily           | 66  | Iaqua Buttes   | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 41  | Taylor Peak    | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 83  | Scotia         | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 61  | Owl Creek      | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 43  | Taylor Peak    | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 60  | Taylor Peak    | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 39  | Taylor Peak    | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 38  | Taylor Peak    | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 40  | Taylor Peak    | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 12  | Owl Creek      | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Erythronium revolutum   | coast fawn lily           | 25  | Iaqua Buttes   | None       | None     | G4<br>G5 | S3       | 2B.2 |    |
| Eucyclogobius newberryi | tidewater goby            | 127 | Fields Landing | Endangered | None     | G3       | S3       |      |    |
| Eucyclogobius newberryi | tidewater goby            | 119 | Eureka         | Endangered | None     | G3       | S3       |      |    |
| Falco peregrinus anatum | American peregrine falcon | 77  | Fields Landing | Delisted   | Delisted | G4<br>T4 | S3<br>S4 |      | FP |
| Falco peregrinus anatum | American peregrine falcon | 59  | Redcrest       | Delisted   | Delisted | G4<br>T4 | S3<br>S4 |      | FP |
| Falco peregrinus anatum | American peregrine falcon | 76  | Redcrest       | Delisted   | Delisted | G4<br>T4 | S3<br>S4 |      | FP |
| Falco peregrinus anatum | American peregrine falcon | 75  | Redcrest       | Delisted   | Delisted | G4<br>T4 | S3<br>S4 |      | FP |
| Falco peregrinus anatum | American peregrine falcon | 71  | Hydesville     | Delisted   | Delisted | G4<br>T4 | S3<br>S4 |      | FP |
| Falco peregrinus anatum | American peregrine falcon | 74  | Fields Landing | Delisted   | Delisted | G4<br>T4 | S3<br>S4 |      | FP |

|                              |                           |    |                 |          |          |       |         |    |
|------------------------------|---------------------------|----|-----------------|----------|----------|-------|---------|----|
| Falco peregrinus anatum      | American peregrine falcon | 66 | Arcata South    | Delisted | Delisted | G4 T4 | S3 S4   | FP |
| Falco peregrinus anatum      | American peregrine falcon | 67 | Arcata South    | Delisted | Delisted | G4 T4 | S3 S4   | FP |
| Falco peregrinus anatum      | American peregrine falcon | 65 | McWhinney Creek | Delisted | Delisted | G4 T4 | S3 S4   | FP |
| Falco peregrinus anatum      | American peregrine falcon | 63 | Eureka          | Delisted | Delisted | G4 T4 | S3 S4   | FP |
| Falco peregrinus anatum      | American peregrine falcon | 64 | Eureka          | Delisted | Delisted | G4 T4 | S3 S4   | FP |
| Fissidens pauperculus        | minute pocket moss        | 17 | Fortuna         | None     | None     | G3?   | S2 1B.2 |    |
| Fissidens pauperculus        | minute pocket moss        | 18 | Arcata South    | None     | None     | G3?   | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 87 | Iaqua Buttes    | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 77 | Scotia          | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 24 | Taylor Peak     | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 53 | Iaqua Buttes    | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 75 | Scotia          | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 76 | Scotia          | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 23 | Scotia          | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 50 | Owl Creek       | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 63 | Hydesville      | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 62 | Taylor Peak     | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 61 | Taylor Peak     | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 54 | Iaqua Buttes    | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 10 | Iaqua Buttes    | None     | None     | G5 T3 | S2 1B.2 |    |
| Gilia capitata ssp. pacifica | Pacific gilia             | 37 | Iaqua Buttes    | None     | None     | G5 T3 | S2 1B.2 |    |

|                                                                   |                          |     |                    |                    |                |          |          |      |
|-------------------------------------------------------------------|--------------------------|-----|--------------------|--------------------|----------------|----------|----------|------|
| <i>Gilia capitata</i><br><i>ssp. pacifica</i>                     | Pacific gilia            | 34  | Taylor Peak        | Non<br>e           | None           | G5<br>T3 | S2       | 1B.2 |
| <i>Gilia capitata</i><br><i>ssp. pacifica</i>                     | Pacific gilia            | 36  | Hydesville         | Non<br>e           | None           | G5<br>T3 | S2       | 1B.2 |
| <i>Gilia capitata</i><br><i>ssp. pacifica</i>                     | Pacific gilia            | 12  | Fortuna            | Non<br>e           | None           | G5<br>T3 | S2       | 1B.2 |
| <i>Gilia capitata</i><br><i>ssp. pacifica</i>                     | Pacific gilia            | 25  | Taylor Peak        | Non<br>e           | None           | G5<br>T3 | S2       | 1B.2 |
| <i>Gilia capitata</i><br><i>ssp. pacifica</i>                     | Pacific gilia            | 26  | Taylor Peak        | Non<br>e           | None           | G5<br>T3 | S2       | 1B.2 |
| <i>Gilia</i><br><i>millefoliata</i>                               | dark-eyed gilia          | 51  | Fields<br>Landing  | Non<br>e           | None           | G2       | S2       | 1B.2 |
| <i>Gonidea</i><br><i>angulata</i>                                 | western ridged<br>mussel | 156 | Redcrest           | Non<br>e           | None           | G3       | S2       |      |
| <i>Haliaeetus</i><br><i>leucocephalus</i>                         | bald eagle               | 250 | Fields<br>Landing  | Delis<br>ted       | Endang<br>ered | G5       | S3       | FP   |
| <i>Hesperevax</i><br><i>sparsiflora</i><br>var. <i>brevifolia</i> | short-leaved<br>evax     | 34  | Taylor Peak        | Non<br>e           | None           | G4<br>T3 | S3       | 1B.2 |
| <i>Lampetra</i><br><i>richardsoni</i>                             | western brook<br>lamprey | 2   | McWhinney<br>Creek | Non<br>e           | None           | G4<br>G5 | S3<br>S4 | SSC  |
| <i>Lampetra</i><br><i>richardsoni</i>                             | western brook<br>lamprey | 4   | Fields<br>Landing  | Non<br>e           | None           | G4<br>G5 | S3<br>S4 | SSC  |
| <i>Lampetra</i><br><i>richardsoni</i>                             | western brook<br>lamprey | 1   | Arcata South       | Non<br>e           | None           | G4<br>G5 | S3<br>S4 | SSC  |
| <i>Lasiurus</i><br><i>cinereus</i>                                | hoary bat                | 29  | Ferndale           | Non<br>e           | None           | G3<br>G4 | S4       |      |
| <i>Lathyrus</i><br><i>japonicus</i>                               | seaside pea              | 1   | Eureka             | Non<br>e           | None           | G5       | S2       | 2B.1 |
| <i>Layia carnosa</i>                                              | beach layia              | 27  | Fields<br>Landing  | Thre<br>aten<br>ed | Endang<br>ered | G2       | S2       | 1B.1 |
| <i>Lilium</i><br><i>occidentale</i>                               | western lily             | 18  | Arcata South       | End<br>ange<br>red | Endang<br>ered | G1<br>G2 | S1       | 1B.1 |
| <i>Lilium</i><br><i>occidentale</i>                               | western lily             | 24  | Fields<br>Landing  | End<br>ange<br>red | Endang<br>ered | G1<br>G2 | S1       | 1B.1 |
| <i>Lilium</i><br><i>occidentale</i>                               | western lily             | 22  | Cannibal<br>Island | End<br>ange<br>red | Endang<br>ered | G1<br>G2 | S1       | 1B.1 |
| <i>Lilium</i><br><i>occidentale</i>                               | western lily             | 21  | Fields<br>Landing  | End<br>ange<br>red | Endang<br>ered | G1<br>G2 | S1       | 1B.1 |
| <i>Lilium</i><br><i>occidentale</i>                               | western lily             | 32  | Fields<br>Landing  | End<br>ange<br>red | Endang<br>ered | G1<br>G2 | S1       | 1B.1 |

|                     |              |     |                 |            |            |          |    |      |
|---------------------|--------------|-----|-----------------|------------|------------|----------|----|------|
| Lilium occidentale  | western lily | 10  | Fields Landing  | Endangered | Endangered | G1<br>G2 | S1 | 1B.1 |
| Lilium occidentale  | western lily | 14  | Arcata South    | Endangered | Endangered | G1<br>G2 | S1 | 1B.1 |
| Lilium occidentale  | western lily | 4   | Fields Landing  | Endangered | Endangered | G1<br>G2 | S1 | 1B.1 |
| Lycopodium clavatum | running-pine | 116 | Redcrest        | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 119 | Redcrest        | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 118 | Redcrest        | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 117 | Redcrest        | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 23  | Redcrest        | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 79  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 67  | Iaqua Buttes    | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 65  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 66  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 68  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 61  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 62  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 64  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 35  | Iaqua Buttes    | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 59  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 56  | Hydesville      | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 55  | Hydesville      | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 60  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |
| Lycopodium clavatum | running-pine | 58  | McWhinney Creek | None       | None       | G5       | S3 | 4.1  |

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|                              |                         |    |                 |            |            |    |    |      |
|------------------------------|-------------------------|----|-----------------|------------|------------|----|----|------|
| Lycopodium clavatum          | running-pine            | 57 | McWhinney Creek | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 53 | Scotia          | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 54 | Scotia          | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 34 | McWhinney Creek | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 30 | Owl Creek       | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 33 | Iaqua Buttes    | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 24 | Redcrest        | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 26 | Redcrest        | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 29 | Owl Creek       | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 32 | Iaqua Buttes    | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 27 | Owl Creek       | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 28 | Owl Creek       | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 25 | Redcrest        | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 31 | Owl Creek       | None       | None       | G5 | S3 | 4.1  |
| Lycopodium clavatum          | running-pine            | 22 | Bridgeville     | None       | None       | G5 | S3 | 4.1  |
| Margaritifera falcata        | western pearlshell      | 83 | Fields Landing  | None       | None       | G4 | S1 |      |
| Martes caurina humboldtensis | Humboldt marten         | 28 | Owl Creek       | Threatened | Endangered | G4 | S1 | SSC  |
| Martes caurina humboldtensis | Humboldt marten         | 29 | Hydesville      | Threatened | Endangered | G4 | S1 | SSC  |
| Mitellastraca caulescens     | leafy-stemmed mitrewort | 11 | Iaqua Buttes    | None       | None       | G5 | S4 | 4.2  |
| Montia howellii              | Howell's montia         | 49 | Fields Landing  | None       | None       | G3 | S2 | 2B.2 |
| Montia howellii              | Howell's montia         | 15 | Owl Creek       | None       | None       | G3 | S2 | 2B.2 |

|                 |                 |     |                 |      |      |          |    |      |
|-----------------|-----------------|-----|-----------------|------|------|----------|----|------|
| Montia howellii | Howell's montia | 14  | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 19  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 12  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 45  | Hydesville      | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 40  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 22  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 35  | Iaqua Buttes    | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 48  | Fields Landing  | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 76  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 10  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 11  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 30  | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 120 | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 107 | McWhinney Creek | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 118 | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 83  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 127 | McWhinney Creek | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 119 | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 92  | Iaqua Buttes    | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 63  | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 46  | Ferndale        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 32  | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 31  | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |

|                 |                 |     |                 |      |      |          |    |      |
|-----------------|-----------------|-----|-----------------|------|------|----------|----|------|
| Montia howellii | Howell's montia | 84  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 36  | Laqua Buttes    | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 41  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 122 | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 123 | Laqua Buttes    | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 85  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 17  | Owl Creek       | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 28  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 42  | Taylor Peak     | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 95  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 99  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 29  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 113 | Laqua Buttes    | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 82  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 94  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 27  | Redcrest        | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 20  | Scotia          | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 43  | Taylor Peak     | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 25  | Bridgeville     | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 34  | Laqua Buttes    | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 97  | McWhinney Creek | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 96  | McWhinney Creek | None | None | G3<br>G4 | S2 | 2B.2 |
| Montia howellii | Howell's montia | 55  | Arcata South    | None | None | G3<br>G4 | S2 | 2B.2 |

|                                     |                                 |    |                 |            |            |               |          |      |
|-------------------------------------|---------------------------------|----|-----------------|------------|------------|---------------|----------|------|
| Montia howellii                     | Howell's montia                 | 68 | McWhinney Creek | None       | None       | G3<br>G4      | S2       | 2B.2 |
| Montia howellii                     | Howell's montia                 | 70 | Fields Landing  | None       | None       | G3<br>G4      | S2       | 2B.2 |
| Montia howellii                     | Howell's montia                 | 53 | Fields Landing  | None       | None       | G3<br>G4      | S2       | 2B.2 |
| Myotis volans                       | long-legged myotis              | 44 | Redcrest        | None       | None       | G4<br>G5      | S3       |      |
| Myotis yumanensis                   | Yuma myotis                     | 35 | Scotia          | None       | None       | G5            | S4       |      |
| Myotis yumanensis                   | Yuma myotis                     | 34 | Redcrest        | None       | None       | G5            | S4       |      |
| Navarretia leucocephala ssp. bakeri | Baker's navarretia              | 68 | Yager Junction  | None       | None       | G4<br>T2      | S2       | 1B.1 |
| Noccaea fendleri ssp. californica   | Kneeland Prairie pennycress     | 1  | Laqua Buttes    | Endangered | None       | G5?<br>T1     | S1       | 1B.1 |
| Northern Coastal Salt Marsh         | Northern Coastal Salt Marsh     | 42 | Fields Landing  | None       | None       | G3            | S3.<br>2 |      |
| Northern Coastal Salt Marsh         | Northern Coastal Salt Marsh     | 39 | Eureka          | None       | None       | G3            | S3.<br>2 |      |
| Nycticorax nycticorax               | black-crowned night heron       | 34 | Cannibal Island | None       | None       | G5            | S4       |      |
| Nycticorax nycticorax               | black-crowned night heron       | 28 | Fields Landing  | None       | None       | G5            | S4       |      |
| Nycticorax nycticorax               | black-crowned night heron       | 5  | Fields Landing  | None       | None       | G5            | S4       |      |
| Oncorhynchus clarkii clarkii        | coast cutthroat trout           | 56 | Fields Landing  | None       | None       | G5<br>T4      | S3       | SSC  |
| Oncorhynchus clarkii clarkii        | coast cutthroat trout           | 59 | Arcata South    | None       | None       | G5<br>T4      | S3       | SSC  |
| Oncorhynchus clarkii clarkii        | coast cutthroat trout           | 15 | Arcata South    | None       | None       | G5<br>T4      | S3       | SSC  |
| Oncorhynchus clarkii clarkii        | coast cutthroat trout           | 80 | Owl Creek       | None       | None       | G5<br>T4      | S3       | SSC  |
| Oncorhynchus clarkii clarkii        | coast cutthroat trout           | 55 | Fields Landing  | None       | None       | G5<br>T4      | S3       | SSC  |
| Oncorhynchus clarkii clarkii        | coast cutthroat trout           | 42 | Eureka          | None       | None       | G5<br>T4      | S3       | SSC  |
| Oncorhynchus clarkii clarkii        | coast cutthroat trout           | 13 | Fortuna         | None       | None       | G5<br>T4      | S3       | SSC  |
| Oncorhynchus kisutch pop. 2         | coho salmon - southern Oregon / | 7  | Fields Landing  | Threatened | Threatened | G5<br>T2<br>Q | S2       |      |

|                                     |                                                         |    |                  |            |            |         |    |
|-------------------------------------|---------------------------------------------------------|----|------------------|------------|------------|---------|----|
|                                     | northern California ESU                                 |    |                  |            |            |         |    |
| Oncorhynchus kisutch pop. 2         | coho salmon - southern Oregon / northern California ESU | 8  | Arcata South     | Threatened | Threatened | G5 T2 Q | S2 |
| Oncorhynchus kisutch pop. 2         | coho salmon - southern Oregon / northern California ESU | 10 | Arcata South     | Threatened | Threatened | G5 T2 Q | S2 |
| Oncorhynchus kisutch pop. 2         | coho salmon - southern Oregon / northern California ESU | 6  | Fields Landing   | Threatened | Threatened | G5 T2 Q | S2 |
| Oncorhynchus mykiss irideus pop. 48 | steelhead - northern California DPS summer-run          | 8  | Blocksburg       | Threatened | Endangered | G5 T2 Q | S2 |
| Oncorhynchus mykiss irideus pop. 48 | steelhead - northern California DPS summer-run          | 3  | Bridgeville      | Threatened | Endangered | G5 T2 Q | S2 |
| Oncorhynchus mykiss irideus pop. 48 | steelhead - northern California DPS summer-run          | 2  | Mad River Buttes | Threatened | Endangered | G5 T2 Q | S2 |
| Oncorhynchus mykiss irideus pop. 48 | steelhead - northern California DPS summer-run          | 5  | Bridgeville      | Threatened | Endangered | G5 T2 Q | S2 |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run          | 19 | Bridgeville      | Threatened | None       | G5 T3 Q | S3 |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run          | 16 | Fortuna          | Threatened | None       | G5 T3 Q | S3 |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run          | 13 | Arcata South     | Threatened | None       | G5 T3 Q | S3 |

|                                     |                                                |    |                 |            |      |         |            |
|-------------------------------------|------------------------------------------------|----|-----------------|------------|------|---------|------------|
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run | 17 | Redcrest        | Threatened | None | G5 T3 Q | S3         |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run | 36 | Taylor Peak     | Threatened | None | G5 T3 Q | S3         |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run | 14 | McWhinney Creek | Threatened | None | G5 T3 Q | S3         |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run | 40 | Honeydew        | Threatened | None | G5 T3 Q | S3         |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run | 18 | Taylor Peak     | Threatened | None | G5 T3 Q | S3         |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run | 11 | Showers Mtn.    | Threatened | None | G5 T3 Q | S3         |
| Oncorhynchus mykiss irideus pop. 49 | steelhead - northern California DPS winter-run | 15 | Fields Landing  | Threatened | None | G5 T3 Q | S3         |
| Oncorhynchus tshawytscha pop. 17    | chinook salmon - California coastal ESU        | 1  | Owl Creek       | Threatened | None | G5 T2 Q | S2         |
| Packera bolanderi var. bolanderi    | seacoast ragwort                               | 62 | Owl Creek       | None       | None | G4 T4   | S2 S3 2B.2 |
| Packera bolanderi var. bolanderi    | seacoast ragwort                               | 59 | Owl Creek       | None       | None | G4 T4   | S2 S3 2B.2 |
| Packera bolanderi var. bolanderi    | seacoast ragwort                               | 12 | Owl Creek       | None       | None | G4 T4   | S2 S3 2B.2 |
| Packera bolanderi var. bolanderi    | seacoast ragwort                               | 19 | Scotia          | None       | None | G4 T4   | S2 S3 2B.2 |
| Packera bolanderi var. bolanderi    | seacoast ragwort                               | 54 | Scotia          | None       | None | G4 T4   | S2 S3 2B.2 |

|                                        |                     |    |              |          |      |          |          |      |
|----------------------------------------|---------------------|----|--------------|----------|------|----------|----------|------|
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 11 | Scotia       | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 55 | Redcrest     | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 35 | Redcrest     | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 76 | Redcrest     | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 73 | Redcrest     | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 42 | Owl Creek    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 63 | Iaqua Buttes | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 2  | Redcrest     | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 58 | Owl Creek    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 40 | Owl Creek    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 14 | Owl Creek    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 70 | Owl Creek    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 61 | Owl Creek    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 69 | Iaqua Buttes | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 68 | Owl Creek    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |

|                                        |                     |    |             |          |      |          |          |      |
|----------------------------------------|---------------------|----|-------------|----------|------|----------|----------|------|
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 66 | Scotia      | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 39 | Owl Creek   | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 67 | Owl Creek   | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 60 | Owl Creek   | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 37 | Taylor Peak | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 56 | Redcrest    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 57 | Owl Creek   | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 36 | Scotia      | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 9  | Redcrest    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 34 | Redcrest    | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 53 | Scotia      | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 38 | Taylor Peak | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 41 | Owl Creek   | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 43 | Hydesville  | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 44 | Hydesville  | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |

|                                        |                     |     |                    |          |      |          |          |      |
|----------------------------------------|---------------------|-----|--------------------|----------|------|----------|----------|------|
| Packera<br>bolanderi var.<br>bolanderi | seacoast<br>ragwort | 20  | Hydesville         | Non<br>e | None | G4<br>T4 | S2<br>S3 | 2B.2 |
| Pandion<br>haliaetus                   | osprey              | 85  | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 89  | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 352 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 90  | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 321 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 322 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 288 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 287 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 289 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 290 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 263 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 259 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 262 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 260 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 261 | McWhinney<br>Creek | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 178 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 258 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 253 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 257 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 246 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 245 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |
| Pandion<br>haliaetus                   | osprey              | 248 | Fields<br>Landing  | Non<br>e | None | G5       | S4       | WL   |

|                   |        |     |                |      |      |    |    |    |
|-------------------|--------|-----|----------------|------|------|----|----|----|
| Pandion haliaetus | osprey | 251 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 252 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 244 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 247 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 249 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 250 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 243 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 242 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 239 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 237 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 241 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 238 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 235 | Hydesville     | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 236 | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 93  | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 87  | Fields Landing | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 234 | Scotia         | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 232 | Scotia         | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 231 | Scotia         | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 233 | Scotia         | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 81  | Scotia         | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 79  | Scotia         | None | None | G5 | S4 | WL |
| Pandion haliaetus | osprey | 83  | Scotia         | None | None | G5 | S4 | WL |

|                   |        |     |                 |       |      |    |          |     |
|-------------------|--------|-----|-----------------|-------|------|----|----------|-----|
| Pandion haliaetus | osprey | 84  | Scotia          | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 76  | Redcrest        | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 210 | McWhinney Creek | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 73  | Redcrest        | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 100 | Hydesville      | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 185 | McWhinney Creek | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 174 | Eureka          | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 86  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 82  | Scotia          | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 75  | Redcrest        | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 80  | Scotia          | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 91  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 92  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 94  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 95  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 97  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 96  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 74  | Redcrest        | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 98  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 88  | Fields Landing  | Non e | None | G5 | S4       | WL  |
| Pandion haliaetus | osprey | 72  | Redcrest        | Non e | None | G5 | S4       | WL  |
| Pekania pennanti  | Fisher | 647 | Taylor Peak     | Non e | None | G5 | S2<br>S3 | SSC |
| Pekania pennanti  | Fisher | 611 | Hydesville      | Non e | None | G5 | S2<br>S3 | SSC |

|                      |                            |     |                 |      |      |          |    |      |
|----------------------|----------------------------|-----|-----------------|------|------|----------|----|------|
| Piperia candida      | white-flowered rein orchid | 75  | Iaqua Buttes    | None | None | G3?      | S3 | 1B.2 |
| Piperia candida      | white-flowered rein orchid | 117 | Scotia          | None | None | G3?      | S3 | 1B.2 |
| Piperia candida      | white-flowered rein orchid | 154 | Scotia          | None | None | G3?      | S3 | 1B.2 |
| Piperia candida      | white-flowered rein orchid | 118 | Scotia          | None | None | G3?      | S3 | 1B.2 |
| Piperia candida      | white-flowered rein orchid | 119 | Scotia          | None | None | G3?      | S3 | 1B.2 |
| Piperia candida      | white-flowered rein orchid | 51  | Scotia          | None | None | G3?      | S3 | 1B.2 |
| Piperia candida      | white-flowered rein orchid | 52  | Scotia          | None | None | G3?      | S3 | 1B.2 |
| Platismatia lacunosa | crinkled rag lichen        | 1   | Iaqua Buttes    | None | None | G4       | S1 | 2B.3 |
| Plethodon elongatus  | Del Norte salamander       | 44  | Iaqua Buttes    | None | None | G4       | S3 | WL   |
| Polemonium carneum   | Oregon polemonium          | 7   | Taylor Peak     | None | None | G3<br>G4 | S2 | 2B.2 |
| Rana aurora          | northern red-legged frog   | 293 | Fields Landing  | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 292 | McWhinney Creek | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 179 | Fields Landing  | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 178 | Fields Landing  | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 180 | Fields Landing  | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 90  | McWhinney Creek | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 176 | McWhinney Creek | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 168 | Fortuna         | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 177 | Fields Landing  | None | None | G4       | S3 | SSC  |
| Rana aurora          | northern red-legged frog   | 175 | McWhinney Creek | None | None | G4       | S3 | SSC  |

|                    |                                               |     |                 |      |      |          |    |     |
|--------------------|-----------------------------------------------|-----|-----------------|------|------|----------|----|-----|
| Rana aurora        | northern red-legged frog                      | 167 | Hydesville      | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 162 | Scotia          | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 165 | Hydesville      | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 163 | Scotia          | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 166 | Hydesville      | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 164 | Taylor Peak     | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 136 | Redcrest        | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 137 | Redcrest        | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 138 | Redcrest        | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 139 | Owl Creek       | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 140 | Owl Creek       | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 2   | Fields Landing  | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 4   | Iaqua Buttes    | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 40  | Fields Landing  | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 37  | Redcrest        | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 33  | Owl Creek       | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 28  | McWhinney Creek | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 27  | McWhinney Creek | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 26  | Scotia          | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 14  | Fields Landing  | None | None | G4       | S3 | SSC |
| Rana aurora        | northern red-legged frog                      | 13  | Hydesville      | None | None | G4       | S3 | SSC |
| Rana boylei pop. 1 | foothill yellow-legged frog - north coast DPS | 283 | Scotia          | None | None | G3<br>T4 | S4 | SSC |

|                       |                                                         |     |                    |          |      |          |    |     |
|-----------------------|---------------------------------------------------------|-----|--------------------|----------|------|----------|----|-----|
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 421 | Redcrest           | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 427 | Redcrest           | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 386 | Owl Creek          | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 385 | Owl Creek          | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 276 | Taylor Peak        | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 259 | Fields<br>Landing  | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 418 | Redcrest           | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 261 | McWhinney<br>Creek | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 387 | Owl Creek          | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 366 | Iaqua Buttes       | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 280 | Scotia             | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -                       | 278 | Scotia             | Non<br>e | None | G3<br>T4 | S4 | SSC |

|                       |                                                         |     |             |          |      |          |    |     |
|-----------------------|---------------------------------------------------------|-----|-------------|----------|------|----------|----|-----|
|                       | north coast<br>DPS                                      |     |             |          |      |          |    |     |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 425 | Redcrest    | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 428 | Redcrest    | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 388 | Owl Creek   | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 268 | Hydesville  | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 279 | Scotia      | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 277 | Taylor Peak | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 269 | Hydesville  | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 284 | Scotia      | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 265 | Fortuna     | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 426 | Redcrest    | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylei<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 424 | Redcrest    | Non<br>e | None | G3<br>T4 | S4 | SSC |

|                        |                                                         |     |            |          |      |          |    |     |
|------------------------|---------------------------------------------------------|-----|------------|----------|------|----------|----|-----|
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 282 | Scotia     | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 419 | Redcrest   | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 422 | Redcrest   | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 281 | Scotia     | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 272 | Hydesville | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 420 | Redcrest   | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 271 | Hydesville | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 417 | Redcrest   | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 273 | Hydesville | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 266 | Hydesville | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 416 | Redcrest   | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boyllii<br>pop. 1 | foothill yellow-<br>legged frog -                       | 263 | Fortuna    | Non<br>e | None | G3<br>T4 | S4 | SSC |

|                       |                                                         |     |                   |          |      |          |    |     |
|-----------------------|---------------------------------------------------------|-----|-------------------|----------|------|----------|----|-----|
|                       | north coast<br>DPS                                      |     |                   |          |      |          |    |     |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 270 | Hydesville        | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 267 | Hydesville        | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 389 | Owl Creek         | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 365 | Iaqua Buttes      | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 264 | Fortuna           | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 262 | Fortuna           | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 341 | Korbel            | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 260 | Fields<br>Landing | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 258 | Fields<br>Landing | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 364 | Iaqua Buttes      | Non<br>e | None | G3<br>T4 | S4 | SSC |
| Rana boylli<br>pop. 1 | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 423 | Redcrest          | Non<br>e | None | G3<br>T4 | S4 | SSC |

|                            |                                                         |     |                    |          |      |          |          |     |
|----------------------------|---------------------------------------------------------|-----|--------------------|----------|------|----------|----------|-----|
| Rana boylli<br>pop. 1      | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 384 | Owl Creek          | Non<br>e | None | G3<br>T4 | S4       | SSC |
| Rana boylli<br>pop. 1      | foothill yellow-<br>legged frog -<br>north coast<br>DPS | 430 | Bridgeville        | Non<br>e | None | G3<br>T4 | S4       | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 274 | Scotia             | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 276 | Taylor Peak        | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 277 | McWhinney<br>Creek | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 278 | McWhinney<br>Creek | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 275 | Scotia             | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 273 | Scotia             | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 228 | Redcrest           | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 233 | Owl Creek          | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 230 | Redcrest           | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 232 | Owl Creek          | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 231 | Weott              | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 229 | Redcrest           | Non<br>e | None | G3?      | S2<br>S3 | SSC |
| Rhyacotriton<br>variegatus | southern<br>torrent<br>salamander                       | 227 | Redcrest           | Non<br>e | None | G3?      | S2<br>S3 | SSC |

|                         |                             |     |                 |      |            |     |          |     |
|-------------------------|-----------------------------|-----|-----------------|------|------------|-----|----------|-----|
| Rhyacotriton variegatus | southern torrent salamander | 239 | Iaqua Buttes    | None | None       | G3? | S2<br>S3 | SSC |
| Rhyacotriton variegatus | southern torrent salamander | 226 | Redcrest        | None | None       | G3? | S2<br>S3 | SSC |
| Rhyacotriton variegatus | southern torrent salamander | 140 | McWhinney Creek | None | None       | G3? | S2<br>S3 | SSC |
| Rhyacotriton variegatus | southern torrent salamander | 43  | Iaqua Buttes    | None | None       | G3? | S2<br>S3 | SSC |
| Riparia riparia         | bank swallow                | 235 | Fortuna         | None | Threatened | G5  | S3       |     |
| Riparia riparia         | bank swallow                | 333 | Fortuna         | None | Threatened | G5  | S3       |     |
| Riparia riparia         | bank swallow                | 234 | Fortuna         | None | Threatened | G5  | S3       |     |
| Riparia riparia         | bank swallow                | 297 | Hydesville      | None | Threatened | G5  | S3       |     |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 61  | Redcrest        | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 109 | Scotia          | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 81  | McWhinney Creek | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 26  | Hydesville      | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 43  | Hydesville      | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 92  | Redcrest        | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 50  | Redcrest        | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 64  | Owl Creek       | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 70  | Iaqua Buttes    | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 51  | Redcrest        | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 144 | Fields Landing  | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 71  | Iaqua Buttes    | None | None       | G3  | S3       | 4.2 |
| Sidalcea malachroides   | maple-leaved checkerbloom   | 110 | Redcrest        | None | None       | G3  | S3       | 4.2 |

|                       |                           |     |                 |      |      |    |    |     |
|-----------------------|---------------------------|-----|-----------------|------|------|----|----|-----|
| Sidalcea malachroides | maple-leaved checkerbloom | 91  | Arcata South    | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 73  | Scotia          | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 130 | Scotia          | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 136 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 131 | Taylor Peak     | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 132 | Taylor Peak     | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 133 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 135 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 134 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 129 | Iaqua Buttes    | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 127 | Iaqua Buttes    | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 126 | Iaqua Buttes    | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 114 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 115 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 112 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 105 | Eureka          | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 76  | Taylor Peak     | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 107 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 108 | Owl Creek       | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 103 | Fields Landing  | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 102 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 55  | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 99  | Redcrest        | None | None | G3 | S3 | 4.2 |

|                       |                           |    |                 |      |      |    |    |     |
|-----------------------|---------------------------|----|-----------------|------|------|----|----|-----|
| Sidalcea malachroides | maple-leaved checkerbloom | 19 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 82 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 79 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 77 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 75 | Taylor Peak     | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 78 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 80 | McWhinney Creek | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 74 | Scotia          | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 72 | Scotia          | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 65 | Owl Creek       | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 88 | Iaqua Buttes    | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 66 | Owl Creek       | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 68 | Owl Creek       | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 69 | Owl Creek       | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 67 | Owl Creek       | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 63 | Owl Creek       | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 60 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 57 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 53 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 52 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 54 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 59 | Redcrest        | None | None | G3 | S3 | 4.2 |
| Sidalcea malachroides | maple-leaved checkerbloom | 56 | Redcrest        | None | None | G3 | S3 | 4.2 |

|                                 |                           |    |                |       |      |       |    |      |
|---------------------------------|---------------------------|----|----------------|-------|------|-------|----|------|
| Sidalcea malachroides           | maple-leaved checkerbloom | 58 | Redcrest       | Non e | None | G3    | S3 | 4.2  |
| Sidalcea malachroides           | maple-leaved checkerbloom | 24 | Korbel         | Non e | None | G3    | S3 | 4.2  |
| Sidalcea malachroides           | maple-leaved checkerbloom | 41 | Scotia         | Non e | None | G3    | S3 | 4.2  |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 16 | Fortuna        | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 25 | Scotia         | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 38 | Taylor Peak    | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 1  | Owl Creek      | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 2  | Hydesville     | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 48 | Iaqua Buttes   | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 43 | Iaqua Buttes   | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 40 | Yager Junction | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 41 | Owl Creek      | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 32 | Capetown       | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 35 | Taylor Peak    | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 34 | Taylor Peak    | Non e | None | G5 T2 | S2 | 1B.2 |
| Sidalcea malviflora ssp. patula | Siskiyou checkerbloom     | 42 | Owl Creek      | Non e | None | G5 T2 | S2 | 1B.2 |

|                                                   |                                 |     |                   |                    |                |          |          |      |
|---------------------------------------------------|---------------------------------|-----|-------------------|--------------------|----------------|----------|----------|------|
| Sidalcea<br>malviflora ssp.<br>patula             | Siskiyou<br>checkerbloom        | 33  | Taylor Peak       | Non<br>e           | None           | G5<br>T2 | S2       | 1B.2 |
| Sidalcea<br>malviflora ssp.<br>patula             | Siskiyou<br>checkerbloom        | 17  | Fields<br>Landing | Non<br>e           | None           | G5<br>T2 | S2       | 1B.2 |
| Sidalcea<br>oregana ssp.<br>eximia                | coast<br>checkerbloom           | 4   | Fields<br>Landing | Non<br>e           | None           | G5<br>T1 | S1       | 1B.2 |
| Sidalcea<br>oregana ssp.<br>eximia                | coast<br>checkerbloom           | 17  | Fields<br>Landing | Non<br>e           | None           | G5<br>T1 | S1       | 1B.2 |
| Sidalcea<br>oregana ssp.<br>eximia                | coast<br>checkerbloom           | 3   | Fields<br>Landing | Non<br>e           | None           | G5<br>T1 | S1       | 1B.2 |
| Sidalcea<br>oregana ssp.<br>eximia                | coast<br>checkerbloom           | 11  | laqua Buttes      | Non<br>e           | None           | G5<br>T1 | S1       | 1B.2 |
| Spergularia<br>canadensis<br>var.<br>occidentalis | western sand-<br>spurrey        | 3   | Fields<br>Landing | Non<br>e           | None           | G5<br>T4 | S1       | 2B.1 |
| Spirinchus<br>thaleichthys                        | longfin smelt                   | 4   | Fields<br>Landing | Can<br>dida<br>te  | Threate<br>ned | G5       | S1       |      |
| Spirinchus<br>thaleichthys                        | longfin smelt                   | 2   | Eureka            | Can<br>dida<br>te  | Threate<br>ned | G5       | S1       |      |
| Spirinchus<br>thaleichthys                        | longfin smelt                   | 9   | Fields<br>Landing | Can<br>dida<br>te  | Threate<br>ned | G5       | S1       |      |
| Spirinchus<br>thaleichthys                        | longfin smelt                   | 8   | Eureka            | Can<br>dida<br>te  | Threate<br>ned | G5       | S1       |      |
| Spirinchus<br>thaleichthys                        | longfin smelt                   | 5   | Fortuna           | Can<br>dida<br>te  | Threate<br>ned | G5       | S1       |      |
| Thaleichthys<br>pacificus                         | eulachon                        | 4   | Arcata South      | Thre<br>aten<br>ed | None           | G5       | S1       |      |
| Upland<br>Douglas Fir<br>Forest                   | Upland<br>Douglas Fir<br>Forest | 11  | laqua Buttes      | Non<br>e           | None           | G4       | S3.<br>1 |      |
| Usnea<br>longissima                               | Methuselah's<br>beard lichen    | 15  | Redcrest          | Non<br>e           | None           | G4       | S4       | 4.2  |
| Usnea<br>longissima                               | Methuselah's<br>beard lichen    | 192 | Taylor Peak       | Non<br>e           | None           | G4       | S4       | 4.2  |

|                  |                           |     |                 |      |      |    |    |     |
|------------------|---------------------------|-----|-----------------|------|------|----|----|-----|
| Usnea longissima | Methuselah's beard lichen | 211 | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 104 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 171 | Yager Junction  | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 194 | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 199 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 198 | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 210 | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 172 | Owl Creek       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 88  | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 82  | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 84  | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 86  | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 75  | Scotia          | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 200 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 72  | Scotia          | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 193 | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 94  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 90  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 196 | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 195 | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 191 | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 68  | Scotia          | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 197 | Hydesville      | None | None | G4 | S4 | 4.2 |

|                  |                           |     |                 |      |      |    |    |     |
|------------------|---------------------------|-----|-----------------|------|------|----|----|-----|
| Usnea longissima | Methuselah's beard lichen | 58  | Iaqua Buttes    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 55  | Iaqua Buttes    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 188 | Scotia          | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 186 | Scotia          | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 187 | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 168 | Redcrest        | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 57  | Iaqua Buttes    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 56  | Iaqua Buttes    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 189 | Scotia          | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 160 | Bridgeville     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 184 | Buckeye Mtn.    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 166 | Redcrest        | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 169 | Redcrest        | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 174 | Owl Creek       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 170 | Redcrest        | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 173 | Owl Creek       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 167 | Redcrest        | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 132 | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 42  | Owl Creek       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 124 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 127 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 123 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 121 | Hydesville      | None | None | G4 | S4 | 4.2 |

|                  |                           |     |                 |      |      |    |    |     |
|------------------|---------------------------|-----|-----------------|------|------|----|----|-----|
| Usnea longissima | Methuselah's beard lichen | 125 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 122 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 126 | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 19  | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 110 | Redcrest        | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 93  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 109 | Scotia          | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 101 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 103 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 106 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 102 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 105 | McWhinney Creek | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 100 | Arcata South    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 95  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 91  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 96  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 97  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 92  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 99  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 98  | Hydesville      | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 89  | Owl Creek       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 85  | Taylor Peak     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 87  | Taylor Peak     | None | None | G4 | S4 | 4.2 |

|                  |                           |    |              |      |      |    |    |     |
|------------------|---------------------------|----|--------------|------|------|----|----|-----|
| Usnea longissima | Methuselah's beard lichen | 83 | Taylor Peak  | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 80 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 76 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 73 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 78 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 61 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 79 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 74 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 77 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 81 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 67 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 64 | Redcrest     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 69 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 66 | Hydesville   | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 71 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 65 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 70 | Scotia       | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 63 | Redcrest     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 50 | Iaqua Buttes | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 53 | Iaqua Buttes | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 54 | Iaqua Buttes | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 59 | Iaqua Buttes | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 60 | Iaqua Buttes | None | None | G4 | S4 | 4.2 |

|                  |                           |    |              |      |      |    |    |     |
|------------------|---------------------------|----|--------------|------|------|----|----|-----|
| Usnea longissima | Methuselah's beard lichen | 51 | laqua Buttes | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 52 | laqua Buttes | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 49 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 43 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 41 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 48 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 45 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 46 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 47 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 44 | Owl Creek    | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 39 | Redcrest     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 25 | Bridgeville  | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 40 | Redcrest     | None | None | G4 | S4 | 4.2 |
| Usnea longissima | Methuselah's beard lichen | 37 | Redcrest     | None | None | G4 | S4 | 4.2 |

## Appendix B: IPAC Report

**IPaC**

**U.S. Fish & Wildlife Service**

# IPaC resource list

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

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

## Location

Humboldt County, California



## Local office

Arcata Fish And Wildlife Office

☎ (707) 822-7201

📅 (707) 822-8411

## Endangered species

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

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

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

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

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

## Mammals

| NAME                                                                                                                                                                                                                                                                                                            | STATUS     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Pacific Marten, Coastal Distinct Population Segment<br><i>Martes caurina</i><br>Wherever found<br>There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/9081">https://ecos.fws.gov/ecp/species/9081</a> | Threatened |

## Birds

| NAME                                                                                                                                                                                                                                                                                   | STATUS     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Marbled Murrelet <i>Brachyramphus marmoratus</i><br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a>                         | Threatened |
| Northern Spotted Owl <i>Strix occidentalis caurina</i><br>Wherever found<br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/1123">https://ecos.fws.gov/ecp/species/1123</a> | Threatened |
| Western Snowy Plover <i>Charadrius nivosus nivosus</i><br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>                   | Threatened |
| Yellow-billed Cuckoo <i>Coccyzus americanus</i><br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br><a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>                          | Threatened |

## Insects

| NAME | STATUS |
|------|--------|
|------|--------|

**Monarch Butterfly** *Danaus plexippus*  
Wherever found

**Candidate**

No critical habitat has been designated for this species.  
<https://ecos.fws.gov/ecp/species/9743>

## Flowering Plants

NAME

STATUS

**Western Lily** *Lilium occidentale*  
Wherever found

**Endangered**

No critical habitat has been designated for this species.  
<https://ecos.fws.gov/ecp/species/998>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation->

[measures.pdf](#)

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

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

| NAME                                                                                                                                                                                                                                                                     | BREEDING SEASON         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Allen's Hummingbird</b> <i>Selasphorus sasin</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9637">https://ecos.fws.gov/ecp/species/9637</a>                 | Breeds Feb 1 to Jul 15  |
| <b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i><br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. | Breeds Jan 1 to Sep 30  |
| <b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>               | Breeds May 20 to Aug 31 |
| <b>Rufous Hummingbird</b> <i>Selasphorus rufus</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/8002">https://ecos.fws.gov/ecp/species/8002</a>                  | Breeds Apr 15 to Jul 15 |

**Western Grebe** *aechmophorus occidentalis***Breeds Jun 1 to Aug 31**

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

<https://ecos.fws.gov/ecp/species/6743>

**Wrentit** *Chamaea fasciata***Breeds Mar 15 to Aug 10**

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

## Probability of Presence Summary

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

### Probability of Presence (■)

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

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

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

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

### Breeding Season (🐣)

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

### Survey Effort (📊)

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

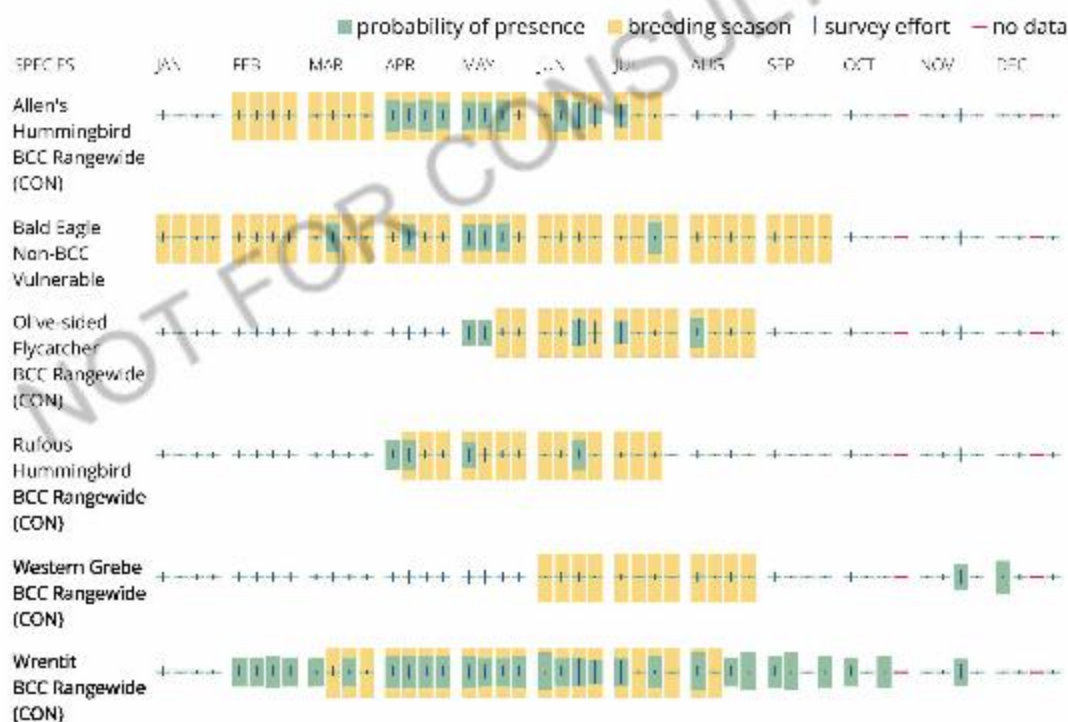
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

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

### Survey Timeframe

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



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

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

#### **What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

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

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

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

#### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

#### **What are the levels of concern for migratory birds?**

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

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin

Islands);

2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

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

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

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

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

#### Proper Interpretation and Use of Your Migratory Bird Report

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

more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

### Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact [CBRA@fws.gov](mailto:CBRA@fws.gov).

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

## Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[Palustrine](#)

RIVERINE

[Riverine](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.