

6.0 Biological Resources

This section of the EIR assesses potential impacts on biological resources from future development of the Town Center project. The discussion and analysis are based primarily on a reconnaissance field survey and a review of existing scientific literature, aerial photographs, technical background information, and policies applicable to projects located in the County of Humboldt.

Information in this section is derived primarily from the following sources:

- *Humboldt County General Plan Update Revised Draft Environmental Impact Report* (Humboldt County 2017a);
- *Humboldt County General Plan for the Areas Outside the Coastal Zone* (Humboldt County 2017b);
- *Humboldt County General Plan Community Plan Areas – McKinleyville Community Plan* (Humboldt County 2017c);
- *Humboldt County Code Streamside Management Areas and Wetlands Ordinance*;
- California Natural Diversity Database (California Department of Fish and Wildlife 2024);
- Inventory of Rare and Endangered Plants (California Native Plant Society 2024);
- Endangered Species Program (U.S. Fish and Wildlife Service 2024a);
- National Wetlands Inventory (U.S. Fish and Wildlife Service 2024b);
- *Wetland Delineation Report, McKinleyville Town Center Wetlands Mapping* (GHD October 19, 2023);
- *Aquatic Resources Delineation Report, L&A Enterprises Project* (GHD August 4, 2021);
- *Aquatic Resources Delineation Report, Life Plan Humboldt* (GHD March 8, 2023);
- *Botanical Survey and Report Memorandum, Life Plan Humboldt* (GHD July 13, 2023);
- *Wetland Habitat Mitigation and Monitoring Plan, Life Plan Humboldt* (GHD April 3, 2023);
and
- *Wooded Area Assessment, Life Plan Humboldt* (GHD January 26, 2023).

The six GHD reports are included in [Appendix D](#).

Comments on the NOP

Three comments on the NOP regarding biological resources were received, each of which is summarized below.

The California Department of Fish and Wildlife (CDFW) recommends that a biological assessment, a survey for western bumble bee, and a review of potential impacts to special-status plants, wetlands and sensitive natural communities be conducted. Life Plan Humboldt requested the inclusion of biological resource impacts of that planned, foreseeable project. Kelley Garrett requested clear descriptions of wetland impacts, including wetland preservation and mitigation.

The NOP and comment letters on the notice are included in [Appendix A](#).

6.1 Environmental Setting

The approximately 134-acre project site is centrally located within an urban setting and generally bounded on all sides by commercial and residential development. This biological resources analysis focuses primarily on the impacts of developing the undeveloped vacant areas within the site that are located west of Central Avenue. This focus is based on: 1) the noted area has potential to provide habitat for special-status plants and wildlife, contains wetlands and contains a sensitive biological community; 2) ninety percent of the projected new development capacity is assigned to this area; 3) and any future development that might occur east of Central Avenue on a limited number of vacant sites that are partially developed and not known to contain sensitive biological resources. [Figure 3-2, Existing Conditions](#), shows the site boundary, existing site features and uses, and adjacent land uses.

The approximately 50-acre portion of the project site located north of Hiller and west of Central Avenue is largely undeveloped. It contains mature trees interspersed with areas of shrub and wetland meadows. The approximately 15-acre vacant area south of Hiller Road and west of Central Avenue contains open pasture, wetland, and eucalyptus grove habitats.

The project site is located on the Arcata North U.S. Geological Survey (USGS) 7.5-minute quadrangle map, and has generally flat topography, with an elevation of about 120 feet above sea level in the western half, ranging up to about 140 feet above sea level in the eastern portion (USGS 2024).

Willow White Creek flows from east to west through McKinleyville approximately 0.5 miles north of the project site. Mill Creek flows from the nearby mountains along the southern boundary of McKinleyville, approximately 0.7 miles southeast of the project site, before merging with the Mad River located to the southwest and west of the project site.

Nearly all soils within the site are classified by the Natural Resources Conservation Service as Halfbluff-Tepona-Urban Land. These are moderately well-drained soils derived from sedimentary rock marine deposits (National Resource Conservation Service 2024).

McKinleyville is part of the Klamath/North Coast Bioregion. This bioregion extends roughly one-quarter of the way down the state's 1,100-mile coast and east across the Coast Range into the Cascades. The bioregion is famous for its rocky coastline, salmon fisheries, and mountain forests of ancient redwoods and Douglas fir. Redwood National Park and numerous state parks, rivers, wilderness areas, and four national forests are in this area. The bioregion also has coastal terraces, populated flood plains, off-shore islands, and coastal estuaries. Vegetation types include redwood, mixed evergreen and montane forests, oak woodlands, and coastal prairie scrub. Habitats such as forests on serpentine soils and coastal dune communities are not common, but are important biologically for the number of rare species they support (Western Ecological Research Center 2024).

The North Coast of California has the state's wettest climate, with annual rainfall varying from an average 38 inches at Fort Bragg to 80 or more inches in the King Range National Conservation Area. The coastal climate is cool, moist, and often foggy, with rainy winters at lower elevations and snow in the higher mountains. Inland from the coast, the climate is much drier with lower rainfall in the winter and hot, dry summers. Average annual precipitation in the McKinleyville area (Woodley Island) is around 39.5 inches. Average maximum temperatures range from 54.5 degrees Fahrenheit in January to 63.0 degrees Fahrenheit in September. Average minimum temperatures range from 41.3 degrees Fahrenheit in January to 53.1 degrees Fahrenheit in August (Western Regional Climate Center 2024).

Existing Biological Resource Conditions

EMC Planning Group biologist Patrick Furtado, M.S., conducted a reconnaissance-level biological survey of the project site on July 3, 2024, to document existing plant communities and wildlife habitats, and to evaluate the potential for special-status biological resources to occur on the site. Qualitative observations of plant cover, structure, and species composition were used to determine plant communities and wildlife habitats. Habitat quality and disturbance levels were documented.

Plant Communities – Undeveloped Area North of Hiller Road

Coniferous Forest and Alder Woodland

Portions of this area are wooded in a patchwork mosaic of red alder (*Alnus rubra*), coast redwood (*Sequoia sempervirens*), Douglas fir (*Pseudotsuga menziesii*), and Sitka spruce (*Picea sitchensis*).

Coastal Scrub and Willow Thickets

Portions of this area are comprised of a mosaic of blackberry brambles (*Rubus* spp.), willow thickets (*Salix* spp.), and western brackenfern (*Pteridium aquilinum*).

Wetlands

Wetlands with bog rush (*Juncus effusus*), toad rush (*Juncus bufonius*), umbrella sedge (*Cyperus eragrostis*), curly dock (*Rumex crispus*), silverweed (*Potentilla anserina*), and horsetail (*Equisetum* sp.) were found draining low lying areas throughout this northern portion of the project site.

Nonnative Invasive Plants

Patches of invasive nonnative Spanish broom (*Spartium junceum*) were found throughout the project site along with patches of blue gum (*Eucalyptus globulus*), Himalayan blackberry (*Rubus armeniacus*), cotoneaster (*Cotoneaster* sp.), English ivy (*Hedera helix*), wild radish (*Raphanus sativus*), and birdsfoot trefoil (*Lotus corniculatus*).

Plant Communities – Undeveloped Area South of Hiller Road

Grassland Pasture and Swale

The area south of Hiller Road is composed mostly of grassland pasture. A wetland swale dissects and drains this area in a northwesterly direction. Plant species observed here include redtop grass (*Agrostis rubra*), common velvetgrass (*Holcus lanatus*), Himalayan blackberry, bog rush, coast twinberry (*Lonicera involucrata*), birdsfoot trefoil, oxeye daisy (*Leucanthemum vulgare*), curly dock, wild radish, elderberry (*Sambucus* sp.), red alder, coastal willow (*Salix hookeriana*), and Sitka willow (*Salix sitchensis*) (GHD March 8, 2023; GHD July 13, 2023; EMC Planning Group July 3, 2024).

Coastal dune willow - Sitka willow - Douglas spiraea thickets

Coastal dune willow - Sitka willow - Douglas spiraea thickets Shrubland Alliance (*Salix hookeriana* - *Salix sitchensis* - *Spiraea douglasii*- S3/G4) plant community was observed and classified by GHD during focused plant surveys in this area (See Sensitive Natural Communities below).

Eucalyptus Woodland

A large stand of approximately 200 mature blue gum trees (*Eucalyptus globulus*) is adjacent to the grassland pasture.

Wildlife

Birds observed at the project site during the July 2024 biological survey include song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), American crow (*Corvus brachyrhynchos*), western flycatcher (*Empidonax difficilis*), western wood-pewee (*Contopus sordidulus*), red-shouldered hawk (*Buteo lineatus*), chestnut-backed chickadee (*Poecile*

rufescens), black-capped chickadee (*Poecile atricapillus*), Bewick's wren (*Thryomanes bewickii*), black phoebe (*Sayornis nigricans*), common raven (*Corvus corvax*), lesser goldfinch (*Spinus psaltria*), and turkey vulture (*Cathartes aura*). Black-tailed deer (*Odocoileus hemionus columbianus*) and active Botta's pocket gopher burrows (*Thomomys bottae*) were also observed.

Wetlands and Waterways

Wetlands and riparian habitats are considered jurisdictional by several regulatory agencies including the U.S. Army Corps of Engineers (USACE), CDFW, and/or the Regional Water Quality Control Board (RWQCB), meaning impacts to such resources are under the regulatory review of these agencies. CDFW has authority over wetlands when wetlands occur in or directly adjacent to the "bed and banks" of a stream or lake. CDFW also regulates wetlands under the California Endangered Species Act when endangered species habitats are present. Project site wetlands, both to the north and south of Hiller Road, were mapped in 2021 and 2023 with results found in the following documents found in [Appendix D](#).

- *Aquatic Resources Delineation Report, L&A Enterprises Project* (GHD August 4, 2021);
- *Aquatic Resources Delineation Report, Life Plan Humboldt* (GHD March 8, 2023); and
- *Wetland Delineation Report, McKinleyville Town Center Wetlands Mapping* (GHD October 19, 2023).

Wetlands are delineated using parameters that are related to hydrology, soil, and vegetation characteristics. Some regulatory agencies, primarily the California Coastal Commission, use a "one-parameter" approach to defining the extent of wetlands, meaning only one of parameters that may be used to define wetlands would be required to establish the presence of wetlands. Other agencies, such as the USACE, require that all three parameters be met ("three-parameter" approach) to define the extent of wetlands. In McKinleyville, a one-parameter definition of wetlands was defined in the McKinleyville Community Plan. As described in Section 4.0, Project Description, the proposed Q-Zone regulations would modify this Community Plan requirement by requiring that the USACE three criteria definition be used to define wetlands solely within the Town Center site.

The combined results of the three wetland/aquatic resources reports prepared by GHG listed above show approximately 6.11 acres of wetlands within the project boundary (5.47 acres of three-parameter and an additional 0.644 acres of one-parameter wetlands) located both north and south of Hiller Road. The three-parameter wetlands likely fall under the jurisdiction of the USACE, RWQCB, and/or potentially CDFW. [Figure 6-1, Aquatic Features](#), shows the location and extent of wetlands, both three-parameter ("3-Par") and one-parameter ("1-Par").

Sensitive Natural Communities

Sensitive natural communities are those that are considered rare in the region, support special-status plant or animal species, or receive regulatory protection (i.e., wetlands under Section 404 of the Clean Water Act and/or Section 1600 of the California Fish and Game Code). In addition, the CDFW has designated a number of communities as rare; these communities are given the highest inventory priority. Special-status natural communities present on the site include wetlands and the Coastal dune willow - Sitka willow - Douglas spiraea thickets Shrubland Alliance (*Salix hookeriana* - *Salix sitchensis* - *Spiraea douglasii*- S3/G4) plant community observed and classified by GHD during focused plant surveys in the undeveloped area south of Hiller Road (*Botanical Survey and Report Memorandum, Life Plan Humboldt* GHD July 13, 2023).

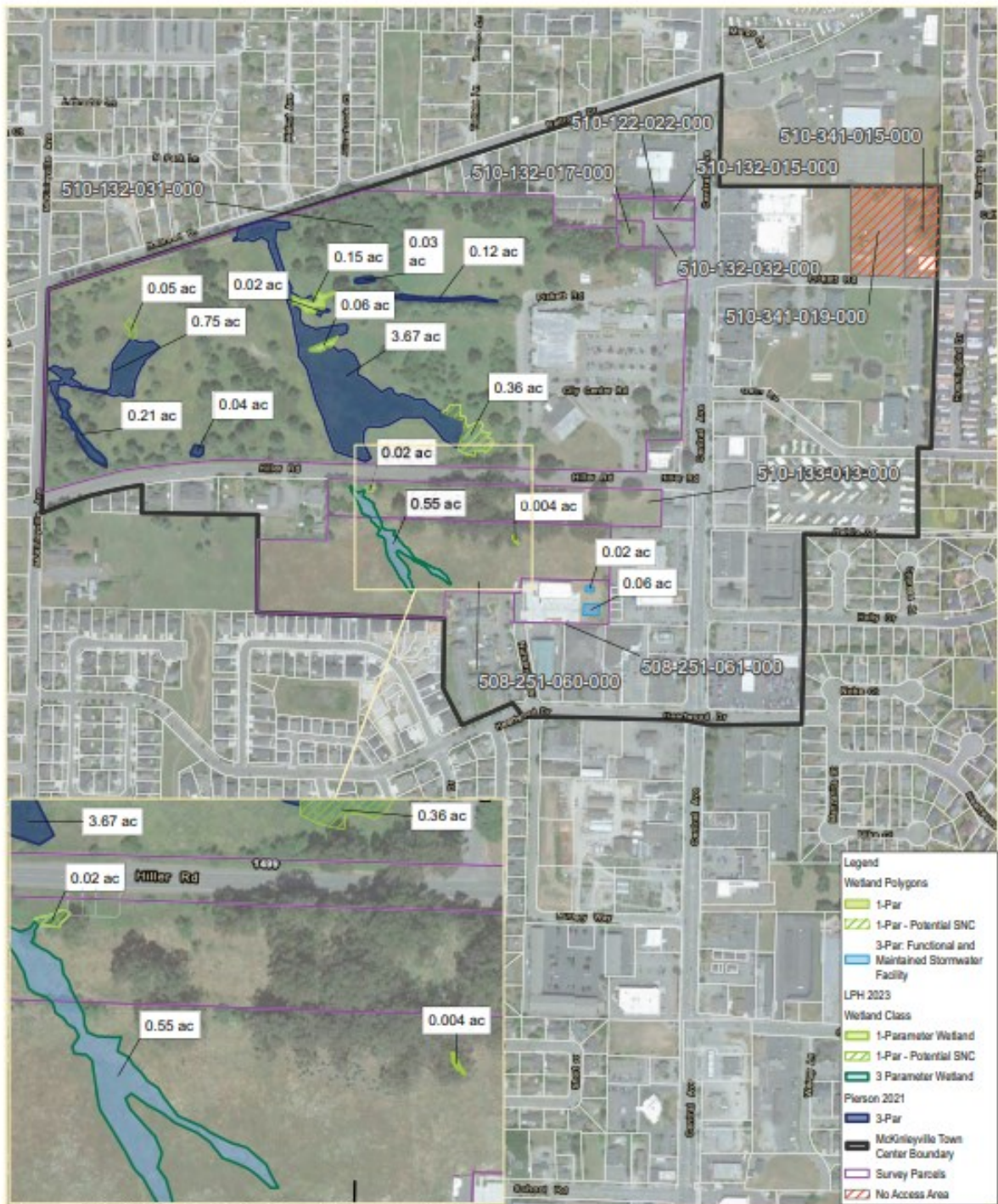
The Coastal dune willow - Sitka willow - Douglas spiraea thickets Shrubland Alliance plant community and sensitive natural community may also occur on the project site north of Hiller Road.

Special-Status Species with Potential to Occur

Special-status species are those listed as Endangered, Threatened, or Rare, or as Candidates for listing by the United States Fish and Wildlife Service (USFWS) or CDFW under the state and/or federal Endangered Species Acts. The special-status designation also includes CDFW Species of Special Concern and Fully Protected species, California Native Plant Society (CNPS) Rare Plant Rank 1B and 2B species, and other locally rare species that meet the criteria for listing as described in Section 15380 of CEQA Guidelines. Special-status species are generally rare, restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring.

A search of the CDFW California Natural Diversity Database (“CNDDDB”) was conducted for the Arcata North, Crannell, Panther Creek, Eureka, Arcata South, Korbel, Tyee City, and Blue Lake USGS quadrangles in order to evaluate potentially occurring special-status plant and wildlife species in the project vicinity. Records of occurrence for special-status plants were reviewed for the same USGS quadrangles in the CNPS Inventory of Rare and Endangered Plants (CNPS 2023). A USFWS Endangered Species Program threatened and endangered species list was also generated for Humboldt County (USFWS 2024a). [Figure 6-2, Special-Status Species with Potential to Occur in the Project Vicinity](#), shows the locations of special-status species recorded in the project vicinity.

[Table 6-1, Special-Status Plant Species with Potential to Occur in Vicinity](#), and [Table 6-2, Special-Status Wildlife Species with Potential to Occur in the Project Vicinity](#), include special-status species documented within the project vicinity, their listing status and suitable habitat description, and their potential to occur on the site.

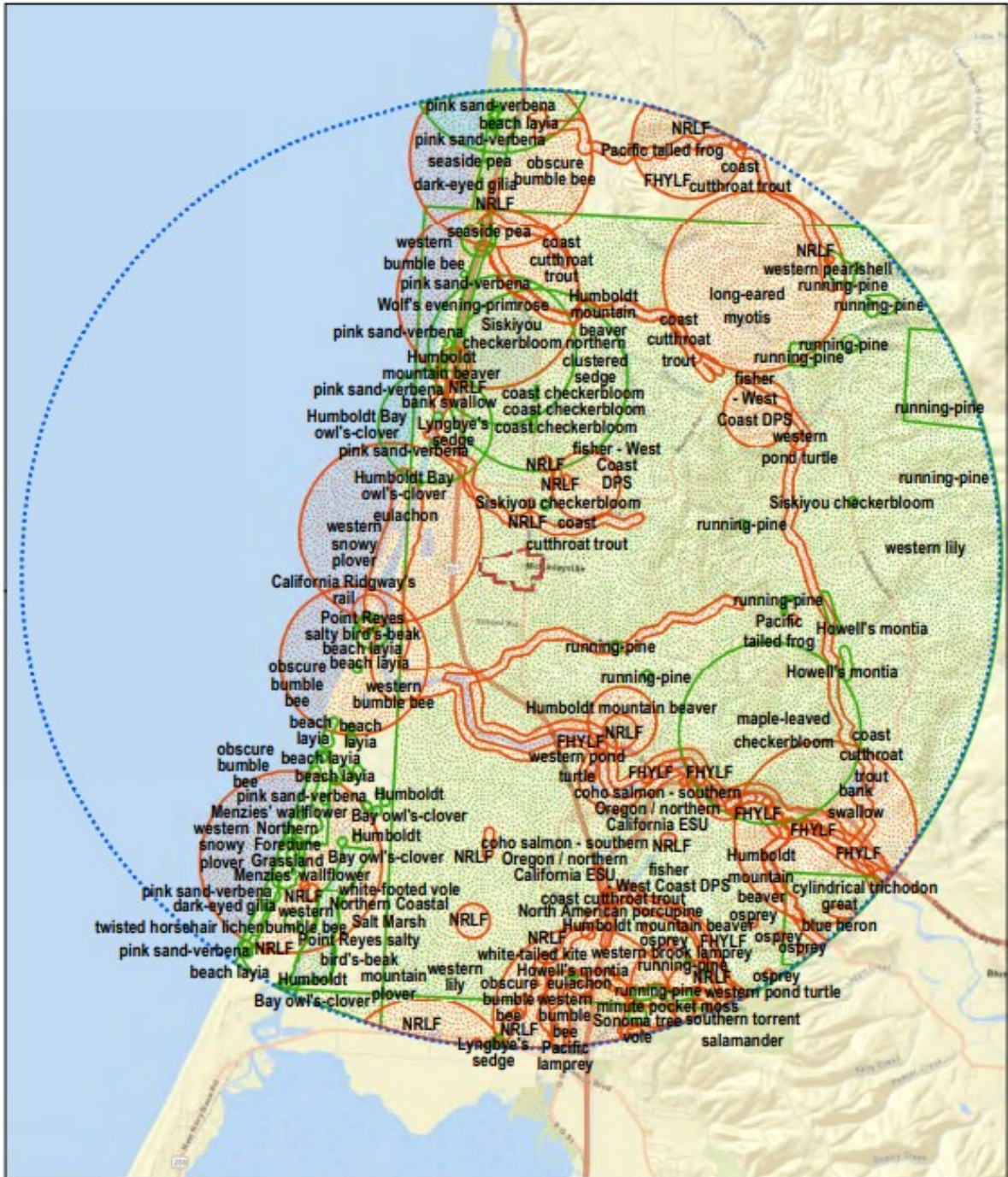


Source: GHD 2023

Figure 6-1
Aquatic Features

McKinleyville Town Center Zoning Amendment EIR

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Source: ESRI 2024, CDFW CNDDDB 2024

Figure 6-2



Special-Status Species with Potential to Occur in the Project Vicinity
 McKinleyville Town Center Zoning Amendment EIR

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Special-Status Plants

Database search results and the potential for special-status plants to occur within the project site and vicinity are presented in [Table 6-1, Special-Status Plant Species with Potential to Occur in the Project Vicinity](#), and are discussed in the Impacts and Mitigation Measures section, below.

No special-status plant species were observed during EMC Planning Group's July 2024 biological reconnaissance survey. However, this survey occurred outside of the blooming period when most special-status species are identifiable. Special-status plant species recorded as occurring in the vicinity of the project site include, bristle-stalked sedge (*Carex leptalea*), northern meadow sedge (*Carex praticola*), giant fawn lily (*Erythronium oregonum*), western lily (*Lilium occidentale*), , Howell's montia (*Montia howellii*), , Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*), coast checkerbloom (*Sidalcea oregana* ssp. *eximia*), Scouler's catchfly (*Silene scouleri* ssp. *scouleri*), and cylindrical trichodon (*Trichodon cylindricus*) (Botanical Survey and Report Memorandum, Life Plan Humboldt GHD July 13, 2023, CDFW 2024a). It is possible that one or more of these species could occur on the undeveloped portions of the project site located north of Hiller Road and east of Central Avenue.

Harlequin lotus (*Hosackia gracilis*; California Rare Plant Rank 4.2) was observed growing within the project site south of Hiller Road (Botanical Survey and Report Memorandum, Life Plan Humboldt GHD July 13, 2023).

Special-Status Wildlife

Special-status wildlife species potentially occurring in the project vicinity were evaluated for their potential to occur within the project site. Database search results and the potential for special-status wildlife to occur within the project site and vicinity are presented in [Table 6-2, Special-Status Wildlife Species with Potential to Occur in the Project Vicinity](#).

No special-status wildlife species were observed during EMC Planning Group's July 2024 biological reconnaissance survey. However, protocol surveys for special-status wildlife species were not conducted. Special-status wildlife species recorded as occurring in the vicinity of the project site and with the potential to occur on the project site include northern red-legged frog (*Rana aurora*). This species is discussed further in Section 6.4, Analysis, Impacts, and Mitigation Measures.

Table 6-1 Special-Status Plant Species with Potential to Occur in Vicinity

Species	Status (Federal/State/CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Alpine marsh violet (<i>Viola palustris</i>)	--/--/2B.2	Coastal scrub, bogs and fens. Swampy, shrubby places in coastal scrub or coastal bogs, elevation 0-150 m. Blooming Period: March – August.	Unlikely. Suitable habitat not found at the project site.
Beach layia (<i>Layia carnosa</i>)	FE/SE/1B.1	Coastal dunes, hugely reduced in range along California's north coast dunes, on sparsely vegetated semi-stabilized dunes, usually behind foredunes; elevation 0-75m. Blooming Period: March - July.	Unlikely. Suitable habitat not found at the project site.
Bolander's reed grass (<i>Calamagrostis bolanderi</i>)	--/--/4.2	Closed-cone coniferous forest, north coast coniferous forest, broad-leafed upland forest, coastal scrub, marshes and swamps, meadows and seeps, bogs and fens. Mesic sites, elevation 0-455 m. Blooming Period: May – August.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Bristle-stalked sedge (<i>Carex leptalea</i>)	--/--/2B.2	Bogs and fens, meadows and seeps, marshes and swamps. Mostly known from bogs and wet meadows, elevation 3-1395 m. Blooming Period: March – July.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
California globe mallow (<i>Iliamna latibracteata</i>)	--/--/1B.1	North coast coniferous forest, chaparral, lower montane coniferous forest, riparian scrub (streambanks). Seepage areas in silty clay loam, elevation 60-1655 m. Blooming Period: June – August.	Unlikely. Suitable habitat not found at the project site.
Coast checkerbloom (<i>Sidalcea oregana</i> ssp. <i>eximia</i>)	--/--/1B.2	Meadows and seeps, north coast coniferous forest, lower montane coniferous forest. Near meadows, in gravelly soil, elevation 5-1805 m. Blooming Period: June – August.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Coast fawn lily (<i>Erythronium revolutum</i>)	--/--/2B.2	Bogs and fens, broad-leafed upland forest, north coast coniferous forest. Mesic sites; streambanks, elevation 60-1405 m. Blooming Period: March – July.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Cylindrical trichodon (<i>Trichodon cylindricus</i>)	--/--/2B.2	Broad-leafed upland forest, upper montane coniferous forest, meadows and seeps. Moss growing in openings on sandy or clay soils on roadsides, stream banks, trails or in fields, elevation 35-2005 m.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Dark-eyed gilia (<i>Gilia millefoliata</i>)	--/--/1B.2	Coastal dunes; elevation 1-60 m. Blooming Period: April-July.	Unlikely. Suitable habitat not found at the project site.

Species	Status (Federal/State/CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Ghost-pipe (<i>Monotropa uniflora</i>)	--/--/2B.2	Broad-leaved upland forest, north coast coniferous forest. Often under redwoods or western hemlock, elevation 15-855 m. Blooming Period: June – August.	Unlikely. Suitable habitat not found at the project site.
Giant fawn lily (<i>Erythronium oregonum</i>)	--/--/2B.2	Cismontane woodland, meadows and seeps. Openings. Sometimes on serpentine; rocky sites, elevation 300-1435 m. Blooming Period: March – June.	Unlikely. Suitable habitat not found at the project site.
Harlequin lotus (<i>Hosackia gracilis</i>)	--/--/4.2	Broad-leaved upland forest, coast bluff scrub, coast prairie, cismontane woodland, coastal scrub, closed-cone coniferous forest, meadows and seeps, marshes and swamps, north coast coniferous forest, valley and foothill grassland. Wetlands and roadsides, elevation 0-700 m. Blooming Period: March – July.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Howell's montia (<i>Montia howellii</i>)	--/--/2B.2	Meadows and seeps, north coast coniferous forest, vernal pools. Vernal wet sites; often on compacted soil, elevation 10-1215 m. Blooming Period: March – May.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Humboldt Bay owl's-clover (<i>Castilleja ambigua</i> var. <i>humboldtiensis</i>)	--/--/1B.2	Marshes and swamps. In coastal saltmarsh with <i>Spartina</i> , <i>Distichlis</i> , <i>Salicornia</i> , <i>Jaumea</i> , elevation 0-20 m. Blooming Period: March – August.	Unlikely. Suitable habitat not found at the project site.
Leafy-stemmed miterwort (<i>Mitellastrum caulescens</i>)	--/--/4.2	Broad-leaved upland forest, lower montane coniferous forest, meadows and seeps, north coast coniferous forest. Mesic sites, elevation 5-1700 m. Blooming Period: May – July.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Lyngbye's sedge (<i>Carex lyngbyei</i>)	--/--/2B.2	Marshes and swamps (brackish or freshwater); elevation 0-200 m. Blooming Period: April - August.	Unlikely. Suitable habitat not found at the project site.
Maple-leaved checkerbloom (<i>Sidalcea malachroides</i>)	--/--/4.2	Broad-leaved upland forest, coastal prairie, coastal scrub, north coast coniferous forest, riparian forest. Woodlands and clearings near coast; often in disturbed areas, elevation 4-765 m. Blooming Period: April – August.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Marsh pea (<i>Lathyrus palustris</i>)	--/--/2B.2	Bogs and fens, lower montane coniferous forest, marshes and swamps, north coast coniferous forest, coastal prairie, coastal scrub. Moist coastal areas, elevation 2-140 m. Blooming Period: March – August.	Unlikely. Suitable habitat not found at the project site.
Menzies's wallflower (<i>Erysimum menziesii</i> ssp. <i>menziesii</i>)	FE/SE/1B.1	Coastal dunes. Known only from Mendocino and Monterey Counties, localized on dunes and coastal strand; elevation 0-35m. Blooming Period: March - June	Unlikely. Suitable habitat not found at the project site.

Species	Status (Federal/State/ CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Minute pocket moss (<i>Fissidens pauperculus</i>)	--/--/1B.2	North coast coniferous forest. Moss growing on damp soil along the coast; elevation 10-100m. Evergreen	Unlikely. Suitable habitat not found at the project site.
Nodding semaphore grass (<i>Pleuropogon refractus</i>)	--/--/4.2	Meadows and seeps, lower montane coniferous forest, north coast coniferous forest, riparian forest. Mesic sites along streams, grassy flats in shaded redwood groves, often on granite, elevation 0-1600 m. Blooming Period: April – August.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Northern clustered sedge (<i>Carex arcta</i>)	--/--/2B.2	Bogs and fens, north coast coniferous forest. Mesic sites, elevation 60-1405 m. Blooming Period: June – September.	Unlikely. Suitable habitat not found at the project site.
Northern meadow sedge (<i>Carex praticola</i>)	--/--/2B.2	Meadows and seeps. Moist to wet meadows; elevation 15-3200 m. Blooming Period: May - July.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Oregon coast paintbrush (<i>Castilleja littoralis</i>)	--/--/2B.2	Coastal bluff scrub, coastal dunes, coastal scrub. Sandy sites, elevation 5-255 m. Blooming Period: June.	Unlikely. Suitable habitat not found at the project site.
Oregon goldthread (<i>Coptis laciniata</i>)	--/--/4.2	North coast coniferous forest, meadows and seeps. Mesic sites such as moist streambanks, elevation 0-1000 m. Blooming Period: March – April.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Pacific gilia (<i>Gilia capitata</i> ssp. <i>pacifica</i>)	--/--/1B.2	Coastal bluff scrub, chaparral, coastal prairie, valley and foothill grassland, elevation 5-1345 m. Blooming Period: April – August.	Unlikely. Suitable habitat not found at the project site.
Perennial goldfields (<i>Lasthenia californica</i> ssp. <i>macrantha</i>)	--/--/1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; elevation 5-185 m. Blooming Period: January-November.	Unlikely. Suitable habitat not found at the project site.
Pink sand-verbena (<i>Abronia umbellata</i> var. <i>breviflora</i>)	--/--/1B.1	Coastal dunes and coastal strand. Foredunes and interdunes with sparse cover. <i>A. umbellata</i> var. <i>breviflora</i> is usually the plant closest to the ocean, elevation 0-75 m. Blooming Period: June – October.	Unlikely. Suitable habitat not found at the project site.
Point Reyes bird's-beak (<i>Chloropyron maritimum</i> ssp. <i>palustre</i>)	--/--/1B.2	Coastal salt marshes, usually with <i>Salicornia</i> , <i>Distichlis</i> , <i>Jaumea</i> , and <i>Spartina</i> ; elevation 0-15m. Blooming Period: June - October.	Unlikely. Suitable habitat not found at the project site.
Round-headed Collinsia (<i>Collinsia corymbosa</i>)	--/--/1B.2	Coastal dunes; elevation 0-30 m. Blooming Period: April-June.	Unlikely. Suitable habitat not found at the project site.
Scouler's catchfly (<i>Silene scouleri</i> ssp. <i>scouleri</i>)	--/--/2B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland; elevation 5-315 m. Blooming Period: June - August.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).

Species	Status (Federal/State/ CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Seacoast ragwort (<i>Packera bolanderi</i> var. <i>bolanderi</i>)	--/--/2B.2	Coastal scrub, north coast coniferous forest. Sometimes along roadsides, elevation 30-915 m. Blooming Period: April – May.	Unlikely. Suitable habitat not found at the project site.
Seaside bittercress (<i>Cardamine angulata</i>)	--/--/2B.1	North coast coniferous forest, lower montane coniferous forest. Wet areas, streambanks; elevation 5-515 m. Blooming Period: April - June.	Unlikely. Suitable habitat not found at the project site.
Seaside pea (<i>Lathyrus japonicus</i>)	--/--/2B.1	Coastal dunes, elevation 3-65 m. Blooming Period: May – August.	Unlikely. Suitable habitat not found at the project site.
Short-leaved evax (<i>Hesperexax sparsiflora</i> var. <i>brevifolia</i>)	--/--/1B.2	Coastal bluff scrub, coastal dunes, coastal prairie. Sandy bluffs and flats; elevation 0-640 m. Blooming Period: March-June.	Unlikely. Suitable habitat not found at the project site.
Siskiyou checkerbloom (<i>Sidalcea malviflora</i> ssp. <i>patula</i>)	--/--/1B.2	Coastal bluff scrub, coastal prairie, north coast coniferous forest. Open coastal forest; roadcuts, elevation 5-1255 m. Blooming Period: May – August.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
Western lily (<i>Lilium occidentale</i>)	FE/SE/1B.1	Coastal scrub, freshwater marsh, bogs and fens, coastal bluff scrub, coastal prairie, north coast coniferous forest, marshes and swamps. Usually near margins of Sitka spruce, elevation 3-110 m. Blooming Period: June – July.	Moderate to high potential to occur on project site as determined in project botanical survey report (GHD 2023).
White-flowered rein orchid (<i>Piperia candida</i>)	--/--/1B.2	Broadleaf upland forest, lower montane coniferous forest, and North Coast coniferous forest; sometimes serpentine; elevation 30-1310m. Blooming Period: May - September	Unlikely. Suitable habitat not found at the project site.
Wolf's evening-primrose (<i>Oenothera wolfii</i>)	--/--/1B.1	Coastal bluff scrub, coastal dunes, coastal prairie, lower montane coniferous forest. Sandy substrates; usually mesic sites, elevation 0-125 m. Blooming Period: May – October.	Unlikely. Suitable habitat not found at the project site.

SOURCE: CDFW 2024, CNPS 2024

NOTE: Status Codes:

Federal (USFWS)

FE: Listed as Endangered under the Federal Endangered Species Act.

FT: Listed as Threatened under the Federal Endangered Species Act.

FC: A Candidate for listing as Threatened or Endangered under the Federal Endangered Species Act.

FSC: Species of Special Concern.

FD: Delisted under the Federal Endangered Species Act.

State (CDFW)

SE: Listed as Endangered under the California Endangered Species Act.

ST: Listed as Threatened under the California Endangered Species Act.

SR: Listed as Rare under the California Endangered Species Act.

SC: A Candidate for listing as Threatened or Endangered under the California Endangered Species Act.

SSC: Species of Special Concern.

SFP: Fully Protected species under the California Fish and Game Code.

SD: Delisted under the California Endangered Species Act.

CNPS Rare Plant Ranks and Threat Code Extensions

1B: Plants that are considered Rare, Threatened, or Endangered in California and elsewhere.

2B: Plants that are considered Rare, Threatened, or Endangered in California, but more common elsewhere.

.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 or no current threats known).

Table 6-2 Special-Status Wildlife Species with Potential to Occur in the Project Vicinity

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
American peregrine falcon (<i>Falco peregrinus anatum</i>)	FD/SD, SFP	Occurs near wetlands, lakes, rivers, or other waters on cliffs, banks, dunes, mounds, and human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Unlikely. Some suitable habitat is present within the project site. However, suitable cliffs or building for nesting are absent. This species has been observed within one mile of the project site.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	FD/SE	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within one mile of water. Nests in large, old-growth, or dominant live tree with open branches.	Moderate Potential. Suitable habitat is present within the project site. This species has been observed in the project vicinity.
Bank swallow (<i>Riparia riparia</i>)	--/ST	Highly colonial species that nests in alluvial soils along rivers, streams, lakes, and ocean coasts. Nesting colonies only occur in vertical banks or bluffs of friable soils at least one meter tall, suitable for burrowing with some predator deterrence values. Breeding colony present in Salinas River.	Unlikely. Suitable habitat not found at the project site.
California Ridgway's rail (<i>Rallus obsoletus obsoletus</i>)	FE/SE	Found in saltwater and brackish marshes, traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	Unlikely. Suitable habitat not found at the project site.
Cooper's hawk (<i>Accipiter cooperii</i>)	--/SSC	Oak or riparian woodlands.	Moderate Potential. Suitable habitat is present within the project site. This species has been observed in the project vicinity.
Del Norte salamander (<i>Plethodon elongatus</i>)	WL	Old-growth associated species with optimum conditions in the mixed conifer/hardwood ancient forest ecosystem. Cool, moist, stable microclimate, a deep litter layer, closed multi-storied canopy, dominated by large, old trees.	Unlikely. Suitable habitat not found at the project site.
Double-crested cormorant (<i>Nannopterum auritum</i>)	WL	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	Unlikely. Suitable habitat not found at the project site.
Fisher (<i>Pekania pennanti</i>)	--/SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses	Unlikely. Suitable habitat not found at the project site.

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
		cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	
Foothill yellow-legged frog (<i>Rana boylei</i>)	--/SSC	Partly shaded, shallow streams and riffles with rocky substrate in a variety of habitats. Requires at least some cobble-sized substrate for egg-laying and 15 weeks of available water to attain metamorphosis.	Unlikely. Suitable habitat not found at the project site.
Mountain plover (<i>Charadrius montanus</i>)	--/SSC	Short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Prefers short vegetation, bare ground, and flat topography, such as grazed areas and areas with burrowing rodents.	Unlikely. Suitable habitat not found at the project site.
Northern harrier (<i>Circus cyaneus</i>)	--/SSC	Found near coastal salt and freshwater marshes. Nests and forages in grasslands. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Unlikely. Suitable habitat not found at the project site.
Northern red-legged frog (<i>Rana aurora</i>)	--/SSC	Humid forests, woodlands, grasslands, and streamsides in northwestern California, usually near dense riparian cover. Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	Moderate Potential. Suitable habitat is present within the project site. This species has been observed in the project vicinity.
Northwestern pond turtle (<i>Clemmys marmorata marmorata</i>)	--/SSC	Associated with permanent or nearly permanent water in a wide variety of habitats. Requires basking sites. Nest sites may be found up to 0.5 km from water.	Unlikely. Suitable habitat not present on the project site.
Osprey (<i>Pandion haliaetus</i>)	--/WL	Ocean shore, bays, fresh-water lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Moderate Potential. Suitable habitat is present within the project site. This species has been observed in the project vicinity.
Pacific tailed frog (<i>Ascaphus truei</i>)	--/SSC	Occurs in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine habitats. Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.	Unlikely. Suitable habitat not found at the project site.
Sonoma tree vole (<i>Arborimus pomo</i>)	--/SSC	North coast fog belt from Oregon border to Sonoma County. In Douglas-fir, redwood and montane hardwood-conifer forests. Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock or spruce.	Unlikely. Suitable habitat not present on the project site.

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
Southern torrent salamander (<i>Rhyacotriton variegatus</i>)	--/SSC	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old growth forest. Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rocks within trickling water.	Unlikely. Suitable habitat not found at the project site.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	--/SCT	Inhabits a wide variety of habitats including conifer and hard wood forests and riparian woodland, wetlands, and open spaces. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Moderate Potential. Suitable habitat is present within the project site. This species has been observed in the project vicinity.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT/--	Endemic to the grasslands of the Central Valley, Central Coast Mtns., and South Coast Mtns. in astatic rain-filled pools. Inhabits small, clear-water sandstone depression pools and grass swale, earth slump, or basalt-flow depression pools.	Unlikely. Suitable habitat not found at the project site.
Western bumble bee (<i>Bombus occidentalis</i>)	FC	Once common and widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Low Potential. Suitable habitat is potentially present within the project site.
White-footed vole (<i>Arborimus albipes</i>)	--/SSC	Mature coastal forests in Humboldt and Del Norte counties. Prefers areas near small, clear streams with dense alder and shrubs. Occupies the habitat from the ground surface to the canopy. Feeds in all layers and nests on the ground under logs or rock.	Unlikely. Suitable habitat not found at the project site.
White-tailed kite (<i>Elanus leucurus</i>)	--/SFP	Rolling foothills and valley margins with scattered oaks, and river bottomlands or marshes next to deciduous woodlands. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Unlikely. Suitable habitat not found at the project site.

SOURCE: CDFW 2024

NOTE: Status Codes:

Federal (USFWS)

FE: Listed as Endangered under the Federal Endangered Species Act.

FT: Listed as Threatened under the Federal Endangered Species Act.

FC: A Candidate for listing as Threatened or Endangered under the Federal Endangered Species Act.

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State (CDFW)

SE: Listed as Endangered under the California Endangered Species Act.

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SC: A Candidate for listing as Threatened or Endangered under the California Endangered Species Act.

SSC: Species of Special Concern.

SFP: Fully Protected species under the California Fish and Game Code.

SD: Delisted under the California Endangered Species Act.

WL: Watch List.

Wildlife Movement

Wildlife movement includes migration (usually movement one way per season), inter-population movement (long-term dispersal and genetic flow), and small travel pathways (daily movement within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities, such as foraging or escape from predators, they also provide connection between outlying populations and the main populations, permitting an increase in gene flow among populations. These habitat linkages can extend for miles and occur on a large scale throughout the greater region. Habitat linkages facilitate movement between populations located in discrete locales and populations located within larger habitat areas.

The project site is generally surrounded by development and does not function as a regional wildlife movement corridor or habitat linkage.

6.2 Regulatory Setting

Federal Regulations

Endangered Species Act

The federal Endangered Species Act of 1973 protects species that the USFWS has listed as Endangered or Threatened. Permits may be required from USFWS if activities associated with a proposed project would result in the “take” of a federally listed species or its habitat. Under the Act, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has also interpreted the definition of “harm” to include significant habitat modification that could result in take. “Take” of a listed species is prohibited unless (1) a Section 10(a) permit has been issued by the USFWS or (2) an Incidental Take Statement has been obtained through formal consultation between a federal agency and the USFWS pursuant to Section 7 of the Act.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 prohibits killing, possessing, or trading in migratory birds, and protects the nesting activities of native birds including common species, except in accordance with certain regulations prescribed by the Secretary of the Interior. Over 1,000 native nesting bird species are currently protected under the federal law. This Act encompasses whole birds, parts of birds, bird nests, and eggs.

The USFWS published a proposed rule to clarify prohibitions governing the "take" of birds under the Migratory Bird Treaty Act on February 3, 2020. This proposed rule clarifies that the scope of the Migratory Bird Treaty Act applies only to intentional injuring or killing of birds. Conduct that results in the unintentional (incidental) injury or death of migratory birds is not prohibited under the Act. On January 7, 2021, the final regulation defining the scope of the Migratory Bird Treaty Act was published in the Federal Register. The rule went into effect on February 8, 2021.

On October 4, 2021, the USFWS published a final rule revoking the January 7, 2021, regulation that limited the scope of the Migratory Bird Treaty Act. With this final and formal revocation of the January 7 rule, the USFWS returns to implementing the Migratory Bird Treaty Act as prohibiting incidental take and applying enforcement discretion, consistent with judicial precedent and long-standing agency practice prior to 2017. This final rule went into effect on December 3, 2021.

Clean Water Act

Section 404 of the Clean Water Act of 1972 regulates the discharge of dredge and fill material into “Waters of the U.S.”. “Waters of the U.S.” are waters such as oceans, rivers, streams, lakes, ponds, and wetlands subject to USACE Regulatory Program jurisdiction under Section 404 of the Clean Water Act. Certain artificial drainage channels and wetlands have also been considered jurisdictional “Waters of the U.S.”

The U.S. Environmental Protection Agency and the USACE are in receipt of the U.S. Supreme Court’s May 25, 2023, decision in the case of Sackett v. Environmental Protection Agency. In light of this decision, the agencies are interpreting the phrase “waters of the United States” consistent with the Supreme Court’s decision in Sackett. The agencies are developing a rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the Federal Register on January 18, 2023, consistent with the U.S. Supreme Court's May 25, 2023 decision in the case of Sackett v. Environmental Protection Agency.

The USACE determines the extent of its jurisdiction as defined by ordinary high-water marks on channel banks, wetland boundaries, and/or connectivity to a navigable water. Wetlands are habitats with soils that are intermittently or permanently saturated or inundated. The resulting anaerobic conditions naturally select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual and the 2008 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). Activities that involve the discharge of fill into jurisdictional wetlands or waters are subject to the permit requirements of the USACE. Discharge permits are typically issued on the condition that the project proponent agrees to provide compensatory mitigation which results in no net loss of area, function, or value, either through wetland creation, restoration, or the purchase of credits through an approved mitigation bank. In addition to individual discharge permits, the USACE also issues nationwide permits applicable for certain activities.

Pursuant to the USACE Manuals, key criteria for determining the presence of wetlands are:

- The presence of inundated or saturated soil conditions resulting from permanent or periodic inundation by ground water or surface water; and
- A prevalence of vegetation typically adapted for life in saturated soil conditions (hydrophytic vegetation).

Explicit in the definition is the consideration of three environmental parameters: hydrology, soil, and vegetation. Positive wetland indicators of all three parameters are normally present in wetlands. The assessment of all three parameters in normal circumstances enhances the technical accuracy, consistency, and credibility of a wetland determination and is required per the USACE Manuals.

State Regulations

California Endangered Species Act

Pursuant to the California Endangered Species Act and Section 2081 of the California Fish and Game Code, an Incidental Take Permit from CDFW is required for projects that could result in the “take” of a state-listed Threatened or Endangered species. “Take” is defined under the Act as an activity that would directly or indirectly kill an individual of a species; “take” is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." If a proposed project would result in the “take” of a state-listed species, then a CDFW Incidental Take Permit, including the preparation of a species conservation plan, would be required.

Nesting Birds and Birds of Prey

Sections 3505, 3503.5, and 3800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, including their nests or eggs. Birds of prey (the orders Falconiformes and Strigiformes) are specifically protected under provisions of the California Fish and Game Code, Section 3503.5. This section of the Code establishes that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this Code. Disturbance that causes nest abandonment and/or loss of reproductive effort, such as construction during the bird nesting season, is considered “take” by CDFW.

Lake or Streambed Alterations

CDFW has jurisdiction over the bed and bank of natural drainages according to provisions of Sections 1601 through 1603 of the California Fish and Game Code. Diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources and/or riparian vegetation are subject to CDFW regulations.

Activities that would disturb these drainages are regulated by CDFW; authorization is required in the form of a Streambed Alteration Agreement. Such an agreement typically stipulates certain measures that will protect the habitat values of the drainage in question.

CDFW also conducts all aspects of wetlands regulation, permitting, and mitigation in conjunction with other State and Federal government agencies that issue wetlands permits. This authority covers wetlands primarily when wetlands occur in or directly adjacent to the “bed and banks” of a stream or lake. CDFW also regulates wetlands under the California Endangered Species Act when endangered species habitats are present.

California Porter-Cologne Water Quality Control Act

Under the California Porter-Cologne Water Quality Control Act, the applicable Regional Water Quality Control Board (RWQCB) may necessitate Waste Discharge Requirements for the fill or alteration of “Waters of the State,” which according to California Water Code Section 13050 includes “any surface water or groundwater, including saline waters, within the boundaries of the state.” The RWQCB may, therefore, necessitate Waste Discharge Requirements even if the affected waters are not under USACE jurisdiction. Also, under Section 401 of the Clean Water Act, any activity requiring a USACE Section 404 permit must also obtain a state Water Quality Certification (or waiver thereof) to ensure that the proposed activity will meet state water quality standards. The applicable state RWQCB is responsible for administering the water quality certification program and enforcing National Pollutant Discharge Elimination System permits.

Regional/Local Regulations

Humboldt County General Plan

The General Plan Conservation and Open Space Element contains policies associated with biological resources that are applicable to the proposed project:

Biological Resources Policies

BR-P1. Compatible Land Uses. Area containing sensitive habitats shall be planned and zoned for uses compatible with the long-term sustainability of the habitat. Discretionary land uses and building activity in proximity to sensitive habitats shall be conditioned or otherwise permitted to prevent significant degradation of sensitive habitat, to the extent feasible consistent with California Department of Fish and Wildlife guidelines or recovery strategies.

BR-P2. Critical Habitat. Discretionary projects which use federal permits or federal funds on private lands that have the potential to impact critical habitat shall be conditioned to avoid significant habitat modification or destruction consistent with federally adopted Habitat Recovery Plans or interim recovery strategies.

BR-P4. Development within Stream Channels. Development within stream channels shall be permitted when there is no lesser environmentally damaging feasible alternative, and where the best feasible mitigation measures have been provided to minimize adverse environmental effects. Development shall be limited to essential, non-disruptive projects as listed in Standard BR-S6 - Development within Stream Channels.

BR-P5. Streamside Management Areas. To protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and interference with surface water flows, the County shall maintain Streamside Management Areas, along streams including intermittent streams that exhibit in-channel wetland characteristics and off-channel riparian vegetation.

BR-P6. Development within Streamside Management Areas. Development within Streamside Management Areas shall only be permitted where mitigation measures (Standards BR-S8 - Required Mitigation Measures, BR-S9 - Erosion Control, and BR-S10 - Development Standards for Wetlands) have been provided to minimize any adverse environmental effects, and shall be limited to uses as described in Standard BR-S7 - Development within Streamside Management Areas.

BR-P7. Wetland Identification. The presence of wetlands in the vicinity of a proposed project shall be determined during the review process for discretionary projects and for ministerial building and grading permit applications, when the proposed building development activity involves new construction or expansion of existing structures or grading activities. Wetland delineation by a qualified professional shall be required when wetland characterization and limits cannot be easily inventoried and identified by site inspection.

BR-P8. Wetlands Banking. The County supports the development of a wetlands banking system that minimizes potential conversion of prime agriculture lands to wetlands.

BR-P9. Oak Woodlands. Oak woodlands shall be conserved through the review and conditioning of discretionary projects to minimize avoidable impacts to functional capacity and aesthetics, consistent with state law.

BR-P10. Invasive Plant Species. The County shall cooperate with public and private efforts to manage and control noxious and exotic invasive plant species. The County shall recommend measures to minimize the introduction of noxious and exotic invasive plant species in landscaping, grading and major vegetation clearing activities.

BR-P11. Biological Resource Maps. Biological resource maps shall be consulted during the ministerial and discretionary permit review process in order to identify habitat concerns and to guide mitigation for discretionary projects that will reduce biological resource impacts to below levels of significance, consistent with CEQA.

BR-P12. Agency Review. The County shall request the California Department of Fish and Wildlife, as well as other appropriate trustee agencies and organizations, to review plans for development within Sensitive Habitat, including Streamside Management Areas. The County shall request NOAA Fisheries or U.S. Fish and Wildlife Service to review plans for development within critical habitat if the project includes federal permits or federal funding. Recommended mitigation measures to reduce impacts below levels of significance shall be considered during project approval, consistent with CEQA.

BR-P13. Landmark Trees. Establish a program to identify and protect landmark trees, including trees that exhibit notable characteristics in terms of their size, age, rarity, shape or location.

Sensitive and Critical Habitats

BR-S1. Development Excluded from Sensitive Habitat Policies. Proposed development occurring within areas containing sensitive habitats shall be subject to the conditions and requirements of this chapter except for these exclusions (which do not preempt other County regulations or those of other agencies):

- A. Timber management and harvest activities conducted under the California Forest Practice Act and Rules or activities exempt from local regulation as per California Public Resources Code 4516.5(d). These standards shall not be used to reduce buffers specified under the State Forest Practice Rules and mining activities pursuant to Surface Mining and Reclamation Act.
- B. Any area proposed for development, which upon examination of the biological resource maps and field inspection is not actually within or does not contain the indicated habitat.
- C. Agricultural practices which are principally permitted within the zone shall not be considered development for the purposes of this standard.

BR-S2. Agency Consultation. For discretionary projects with potential to impact critical, or sensitive habitats, the County will seek specific recommendations from the appropriate agencies, as applicable to the specific project location, class of development, or natural resource involved

BR-S3. Critical Habitat Defined. Critical habitats are habitats necessary for the protection of threatened or endangered species listed under the Federal Endangered Species Act. Designation, mapping and enforcement of critical habitat is the responsibility of federal agencies.

BR-S4. Sensitive Habitat Defined. Sensitive habitats are defined as a biologically unique, limited, or an especially valuable habitat type for a species whose habitat requirements, if significantly changed, would cause a threatening change to the species population across its range and may include the following:

- A. Habitat necessary for the protection of rare, threatened and endangered species as listed under the FESA or CESA.
- B. Migratory deer winter range.
- C. Roosevelt elk range.
- D. Sensitive avian species rookery and nest sites (e.g. osprey, great blue heron and egret).
- E. Streams and streamside areas.
- F. Wetlands Humboldt County General Plan Adopted October 23, 2017 Part 3, Chapter 10. Conservation and Open Space 10-18.
- G. Protected vascular plant communities as listed by the US Fish & Wildlife Service or the California Department of Fish and Wildlife.
- H. Other sensitive habitats and communities as may be currently, correctly and accurately listed in the California Department of Fish and Wildlife's California Natural Diversity Data Base, as amended periodically.

Wetlands and Other Wet Areas

BR-S10. Development Standards for Wetlands. Development standards for wetlands shall be consistent with the standards for Streamside Management Areas, as applicable except that the widths of the SMA for wetlands are as follows:

- seasonal wetlands = 50 ft.
- perennial wetlands = 150 ft.

and the setback begins at the edge of the delineated wetland. Buffers may be reduced based on site specific information and consultation with the California Department of Fish and Wildlife. No buffer shall be required for man-made wetlands except wetlands created for mitigation purposes.

BR-S11. Wetlands Defined. The County shall follow the US Army Corps of Engineers Wetland Delineation manual in the identification and classification of wetlands which considers wetlands as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Implementation Measures

BR-IM1. Biological Resource Maps. The County shall maintain the best available data in the form of GIS maps for the location and extent of wetlands, critical habitats, streamside management areas, Habitat Conservation Plan Areas, rookeries, and ranges of species identified in the California Natural Diversity Database.

BR-IM2. State and Federal Agency Permitting Coordination. The County shall maintain efficient and timely procedures for project referral to state and federal agencies for biological review and consultation.

BR-IM3. Biological Review and Referral. Building and Planning Division staff shall receive periodic training, and be encouraged to receive certification, related to the field identification of biological resources and mitigation of impacts.

BR-IM4. Wetlands Bank. The County shall assist in the development of a wetlands bank that minimizes potential conversion of prime agriculture lands to wetlands.

BR-IM5. Oak Woodlands Conservation Program. The County shall maintain an Oak Woodland Management Plan and attain eligibility for Oak Woodland Preservation Program funding (Fish and Game Code, Section 1360, Division 2, Chapter 4) to conserve and protect high-value oak woodlands.

BR-IM6. Modifications to the Streamside Management Area Ordinance. The County shall modify the SMA Ordinance for consistency with BR-S5 and to allow reductions to SMA widths through ministerial review in consultation with California Department of Fish and Wildlife. The SMA Ordinance shall provide exemptions for minor additions of up to 500 square feet aggregate for buildings or structures existing on April 25, 1995.

Humboldt County Streamside Management Areas and Wetlands Ordinance

Riparian and wetland habitats receive protection under the County's Streamside Management Areas and Wetlands Ordinance (SMAWO), as defined in Title 3, Section 314-61.1, of the Humboldt County Code. Development and work within Streamside Management Areas (SMAs) requires a special permit from the County, if those activities are not exempt.

61.1.5 Permit Required and Processing. All development as defined in the General Plan within or affecting SMAs, wetlands or other wet areas not exempted under Section 314-61.1.4 shall require a permit pursuant to an application for development within SMAs, wetlands or other wet areas and processed as a special permit pursuant to the Humboldt County Zoning Regulations (Section 312-3.1.1 et seq.).

61.1.7.6.6 Development standards for wetlands shall be consistent with the standards for streamside management areas, as applicable except that the widths of the SMA for wetlands are as follows:

- Seasonal wetlands = fifty (50) feet;
- Perennial wetlands = one hundred fifty (150) feet; and
- and the setback begins at the edge of the delineated wetland. Buffers may be reduced based on site-specific information and consultation with the California Department of Fish and Wildlife. No buffer shall be required for manmade wetlands except wetlands created for mitigation purposes.

61.1.10.1.4 Revegetation along channelized streams and other wet areas shall be required where the habitat has been converted to other uses. For development allowed within streamside management or other wet areas where the riparian habitat has been converted to other uses, the project shall be conditioned to require the development of new riparian or wetland habitat of an area equal to the area in which the development is to occur, or the area of an existing or proposed easement or right-of-way, whichever is larger.

61.1.10.1.5.1 During construction, land clearing and vegetation removal will be minimized, following the provisions of the Water Resources Element and the standards listed here;

61.1.10.1.5.2 Construction sites with at least one hundred (100) square feet of exposed soil will be planted or seeded as appropriate per mitigations as recommended in writing by the lead agency with native or noninvasive vegetation and mulched with natural or chemical stabilizers to aid in erosion control and ensure revegetation;

61.1.13 Biological Report Required. An application proposing development activities within a SMA or Other Wet Area shall include a site-specific biological report prepared consistent with these regulations.

The written report prepared by a qualified biologist shall be referred to CDFG for review and comment. If no reply is received from CDFG within ten (10) working days of the date of the referral, it shall be assumed that the report satisfies CDFG requirements.

61.1.14 Incorporation of Recommendations as Conditions. The recommendations contained within the written report shall be incorporated into any development permit as conditions of approval by the Responsible Department.

61.1.15 Project Monitoring, Security, and Certificate of Completion. The monitoring of mitigation measures and reporting of monitoring activities made as conditions to any permit issued pursuant to this section shall be performed as specified in the project's adopted mitigation and monitoring plan.

No development permit final acceptance, certificate of compliance or certificate of occupancy, nor any further development permits shall be issued unless and until all initial mitigation measures are completed and accepted by the County...

McKinleyville Community Plan

Wetland Areas

7. Wetland Areas shall be defined according to the criteria utilized by the CA Dept. of Fish and Game (also included in the County's Open Space Implementation Standards). In summary, the definition requires that a given area satisfy at least one of the following three criteria:
 - the presence of at least periodic predominance of hydrophytic vegetation;
 - predominately hydric soils; or
 - periodic inundation for seven (7) consecutive days.
11. Wetland Areas shall be identified, mapped and managed as areas separate and distinct from the Streamside Management Areas.

Development Within Wetland Areas

13. New development within Wetland Areas shall be limited to the following uses:
 - A. Fish and wildlife management.
 - B. Nature study.
 - C. Wetland restoration.
 - D. Hunting and fishing including development of duck blinds and similar minor facilities.
 - E. Removal of trees for significant disease control and public safety purposes. Snags shall be retained unless felling is required by CAL-OSHA or State fire regulations. Heavy equipment shall be excluded from the designated natural resource area. Live or dead trees with visible evidence of use as nesting or roosting sites by hawks, owls, eagles, osprey, herons, egrets or any species known to be endangered or threatened shall be retained.

- F. Incidental public service purposes.
 - G. Aquaculture.
 - H. Wells in rural areas.
 - I. New fencing, so long as it would not impede the natural drainage or would not adversely affect the stream environment or wildlife.
14. On existing parcels, development within Wetland Areas shall be permitted where the least environmentally damaging alternative of development techniques is employed and where mitigation measures have been provided to fully offset any adverse effects. Mitigation measures for development within Wetland Areas shall, at a minimum, include those prescribed by the administration of the Open Space & Grading ordinance.
 15. No land use or development shall be permitted in Wetland Areas which degrade the wetland or detract from the natural resource value on newly created parcels. Wetland Buffer Areas
 16. A Wetland Buffer Area shall be defined as the area around a wetland where restrictions on development are required to protect the wetland from significant impact, as mapped or as identified through the Open Space Implementation Standards, or as identified through the CEQA process.
 17. If the entire parcel is within the Wetland Buffer Area, the buffer may be reduced to allow principally permitted uses when:
 - A. The prescribed buffer would prohibit development of the parcel for the principal permitted use for which it is designated; or
 - B. The applicant for the proposed development demonstrates, to the satisfaction of the County and to the Department of Fish and Game, that the principally permitted use will not result in significant adverse impacts to the wetland habitat and will be compatible with the continuance of such habitats. Any such buffer reduction may require mitigation measures, in addition to those specified below, to ensure new development does not adversely affect the wetland habitat values.

Development Within Wetland Buffer Areas

18. To prevent land uses or development which may degrade adjacent wetlands, all development within the wetland buffer shall include the following mitigation measures:

- A. No more than 25% of the lot surface shall be made effectively impervious by development activities.
 - B. The release rate of storm runoff to adjacent natural wetlands, in any size storm, shall not exceed the natural rate of storm runoff for a 50-year storm of 10-minute duration.
 - C. Stormwater outfalls, culverts, gutters, and other similar facilities, shall be dissipated.
 - D. Septic systems or alternative waste disposal systems must meet standards of the Humboldt-Del Norte Health Department and the Regional Water Quality Control Board.
 - E. Areas disturbed during construction, grading, or related activities within 100 feet of the boundary of the wetland in areas outside of the Urban Development Area, and 50 feet of the boundary of the wetland in areas within the Urban Development Area, shall be restored to original contours and sufficiently and promptly replanted with vegetation naturally occurring in the immediate area.
 - F. Development and construction shall minimize cut and fill operations and erosion and sedimentation potentials through construction of temporary and permanent sediment basins, seeding or planting bare soil, diversion of run-off away from graded areas and areas heavily used during construction, and avoidance of grading in the buffer areas during the rainy season (November to April).
19. No land use or development shall be permitted in Wetland Buffer Areas which degrade the wetland or detract from the natural resource value.
20. The County shall request the Department of Fish and Game to review plans for development within 200 feet of the boundary of the wetland.

Other Sensitive and Critical Habitats

In addition to the preceding policies for streams, adjacent streamside areas, wetlands, and buffer areas adjacent to wetlands, several other sensitive and critical habitat areas exist within the Community Planning Area. These include:

- Habitat for listed and candidate rare, unique, threatened, and endangered species in the federal and state Endangered Species Acts.

- Sensitive Avian Species Rookery and Nest Sites (e.g., Osprey, Great Blue Heron, Egret sp.).
 - Rare and endangered vascular plant communities as compiled by the California Native Plant Society.
 - Other sensitive habitats and communities as listed in the Department of Fish and Game’s California Natural Diversity Data Base, as amended periodically.
21. As part of the review of all discretionary development project applications within the Plan Area, the Planning & Building Department will consult with the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and other regional, state and federal resource and trustee agencies, as applicable to the specific project location, class of development, or natural resource involved.

Proposed McKinleyville Community Plan Amendment

As described in Section 4.0, Project Description, the project includes an amendment to Wetland Policy 7 in Section 3422 of the Community Plan. The amendment modifies this section by deferring to the Q-zone regulations solely for the area within the Town Center, where wetlands would be defined using three parameters instead of one. With this change, the Community Plan policy and the Q-Zone regulations regarding wetland definition, as described below, would be aligned.

Proposed McKinleyville Town Center Q-Zone Regulations and Wetland Zoning

Wetlands Regulations

Given the known presence of wetlands in the area of the project site located west of Central Avenue, the Q-Zone regulations provide important direction for preserving wetlands and mitigating for loss of wetlands that would occur with future development. Q-Zone Section 6.0, Protection and Conservation of Wetlands Areas, includes the following direction: 6.0 PROTECTION, AND CONSERVATION OF WETLAND AREAS

6.1 Wetlands are a valuable resource and shall be conserved through onsite protection of wetlands or through relocation and replacement of wetlands on a no net loss basis. Wetland Areas will continue to be an amenity of the Town Center through protection, enhancement, and relocation of wetlands.

6.2 The 14 acres of property south of Railroad, east of McKinleyville Avenue, north of Hiller Road and west of the spruce trees is envisioned as a wetland preservation and conservation area. Wetland areas within the Town Center may be filled and relocated to this area.

6.3 Prior to issuance of any permits or granting of any entitlements on property within the Town Center a wetland delineation shall be completed delineating all three parameter wetlands (HCC Section 314-61..1.7.6.5) which exist on the property. Previously developed property is exempt from this requirement. This exemption extends to storm drain ditches graded to transport storm water outside of a natural channel or wetland.

6.4 Prior to issuance of construction permits or as part of a subdivision approval, a plan must be reviewed and approved by the approving authority demonstrating that either the wetland areas will be protected in place in accordance with HCC section 61.1.7.6.6) or identifying how the wetland areas will be relocated and conserved.

6.5 Plans to relocate wetland areas shall include:

6.5.1 A mapped delineation of the wetlands to be impacted,

6.5.2 Wetlands to be filled shall be replaced on a 1.5:1 basis, where a minimum of 1.5 square feet of wetland shall be provided for each square foot of wetland impacted. This ratio is based upon equivalent wetland replacement. Credit may be given for wetland replacement which has a higher habitat value but in no case shall the replacement ratio be less than 1:1 and mitigation shall provide an equal value of wetland habitat impacted.

6.5.3. Grading plan showing how the site will be configured to ensure successful wetland creation,

6.5.4 Storm water shall not drain directly into retained or recreated wetlands but shall be subject to some passive treatment either through a bioswale or sheet flow across grassland.

6.5.5. The planting scheme and plant material proposed.

6.5.6. Success and Monitoring Criteria: Annual monitoring criteria to rate the success of the wetland creation or enhancement effort. The monitoring period shall be a minimum of 5 years but shall not be concluded until the success objectives have been achieved for three consecutive years. Each year a monitoring report shall be provided to the Planning and Building Department evaluating the success of the plan implementation and provide suggested remedial measures needed to achieve the success criteria.

6.5.7 The plan shall describe the long-term plan for ownership and maintenance of the wetland conservation area. Retained and relocated wetlands shall be protected from future development

through a permanent conservation easement or other instrument ensuring the biological resource values of the wetland areas will be maintained or enhanced in perpetuity.

6.5.8 The Planning and Building department shall consult with the California Department of Fish and Wildlife prior to approval of the plan.

6.5.9 Mitigation credit will be given for relocation of the drainage channel parallel to McKinleyville Avenue if it is moved to the east and regraded to support a riparian stream cross section in such a manner as to allow bicycle and pedestrian connectivity along McKinleyville Avenue.

Wetlands Zoning

The Q-Zone regulations apply Wetlands (WR) zoning to an approximately 14-acre portion of the site located north of Hiller Road. The purpose is to preserve important existing wetlands and provide an area for preserving wetlands as mitigation for loss of wetlands in other portions of the site. Refer back to Figure 4-3, Proposed Q-Zone Zoning Classifications, for the location of this area.

6.3 Thresholds or Standards of Significance

CEQA Guidelines Appendix G is a sample initial study checklist that includes a number of factual inquiries related to the subject of biological resources, as it does on a whole series of additional environmental topics. Lead agencies are under no obligation to use these inquiries in fashioning thresholds of significance on the subject of biological resources, or on any subject addressed in the checklist. (*Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068.) Rather, with few exceptions, “CEQA grants agencies discretion to develop their own thresholds of significance” (*Ibid.*). Even so, it is a common practice for lead agencies to take the language from the inquiries set forth in Appendix G and to use that language in fashioning thresholds.

The CEQA Guidelines indicate that a project may have a significant impact on biological resources if it would have any of the effects listed below:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means; or

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Checklist Questions Deemed Not Applicable

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

The proposed project site, bounded by development, does not provide suitable conditions to support wildlife migration or function as a regional wildlife movement corridor or habitat linkage.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

The project includes an amendment to the Community Plan that changes the definition of wetlands. The change in wetland acreage requiring mitigation resulting from the amendment is discussed in Section 6.4, Analysis, Impacts and Mitigation Measures, below.

Tree removal generally does not require a tree removal permit as long as the removal does not impact a sensitive resource. The project would not conflict with any local policies or ordinances protecting biological resources with implementation of mitigation measures identified in this section.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional or state habitat conservation plans that include the project site. The project would not conflict with the provisions of any plan.

6.4 Analysis, Impacts, and Mitigation Measures

Effects on Special-Status Plant and Wildlife Species

IMPACT 6-1	Potential Effects on Special-Status Plant Species	Less than Significant with Mitigation
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Focused plant surveys were conducted by GHD on the proposed Life Plan Humboldt site south of Hiller Road in May and June 2023. GHD identified fifteen special-status plant species with a moderate to high potential to occur within that site based on existing habitat. One special

status plant species, Harlequin lotus, a California Rare Plant Rank (CRPR) 4.2 species (limited distribution) was detected within that site boundary. However, CRPR 4 taxa do not clearly meet CEQA standards and thresholds for impact considerations and are not addressed in this assessment. Impacts to a CRPR 4 species are not typically analyzed in a CEQA document unless a species is considered rare for other reasons, including if the species is regionally rare, the occurrence is on the periphery of the species' geographic range, the species occurs on unusual substrates, or the species is associated with a habitat that is declining in California, such as wetlands (CNPS 2020).

Based on recorded observations of special-status plant species within the project vicinity, the special-status plant species described below have the potential to occur in the vacant area north of Hiller Road within which focused plant surveys have not been conducted.

Bristle-Stalked Sedge. Bristle-stalked sedge is listed by the CNPS as a 2B.2 species (considered Rare, Threatened, or Endangered in California, but more common elsewhere). This species can be found in bogs and fens, meadows and seeps, marshes and swamps. The blooming period is from March to July. The closest occurrence of this species is approximately 6.9 miles north of the project site (CNDDDB Occurrence Number 6, 1915). Potential habitat for this species is found within and adjacent to wetland habitats at the project site.

Northern Meadow Sedge. Northern meadow sedge is listed by the CNPS as a 2B.2 species (considered Rare, Threatened, or Endangered in California, but more common elsewhere). This species can be found in meadows, seeps, and moist to wet meadows. The blooming period is from May to July. The closest occurrence of this species is approximately 11.8 miles south of the project site (CNDDDB Occurrence Number 6, 1931). Potential habitat for this species is found within and adjacent to wetland habitats at the project site.

Giant Fawn Lily. Giant fawn lily is listed by the CNPS as a 2B.2 species (considered rare, threatened, or endangered in California, but more common elsewhere). This species can be found in openings within cismontane woodland, meadows and seeps. Can sometimes be found on serpentine or rocky sites. The blooming period is from March to June. The closest occurrence of this species is approximately 11.9 miles east of the project site (CNDDDB Occurrence Number 19, 1975). Potential habitat for this species is found within and adjacent to wetland habitats at the project site.

Western Lily. Western lily is federally- and state-listed as endangered and is also listed by the CNPS as a 1B.1 species (rare, threatened, or endangered in California and elsewhere). This species can be found in coastal scrub, freshwater marsh, bogs and fens, coastal bluff scrub, coastal prairie, north coast coniferous forest, marshes and swamps. Specific habitats include well-drained, old beach washes overlain with wind-blown alluvium and organic topsoil; usually near margins of Sitka spruce. The blooming period is from June to July. The closest occurrence

of this species is approximately 2.6 miles east of the project site (CNDDDB Occurrence Number 33, 2011). Potential habitat for this species is found within and adjacent to wetland habitats at the project site.

Howell's Montia. Howell's montia is listed by the CNPS as a 2B.2 species (considered Rare, Threatened, or Endangered in California, but more common elsewhere). This species can be found in meadows and seeps, north coast coniferous forest, and vernal pools. Prefers vernal wet sites; often on compacted soil. The blooming period is from March to May. The closest occurrence of this species is approximately 4.1 miles east of the project site (CNDDDB Occurrence Number 121, 2014). Potential habitat for this species is found within and adjacent to wetland habitats at the project site.

Siskiyou Checkerbloom. Siskiyou checkerbloom is listed by the CNPS as a 1B.2 species (rare, threatened, or endangered in California and elsewhere). This species can be found in coastal bluff scrub, coastal prairie, and north coast coniferous forest. Prefers open coastal forest and roadcuts. The blooming period is from May to August. The closest occurrence of this species is approximately 0.5 miles east of the project site (CNDDDB Occurrence Number 18, 2005). Potential habitat for this species is found in open grassland habitats at the project site.

Coast Checkerbloom. Coast checkerbloom is listed by the CNPS as a 1B.2 species (rare, threatened, or endangered in California and elsewhere). This species can be found in meadows and seeps, north coast coniferous forest, and lower montane coniferous forest. Prefers to be near meadows, in gravelly soil. The blooming period is from June to August. The closest occurrence of this species is approximately 0.6 miles northeast of the project site (CNDDDB Occurrence Number 5, 2001). Potential habitat for this species is found within and adjacent to wetland habitats at the project site.

Scouler's Catchfly. Scouler's catchfly is listed by the CNPS as a 2B.2 species (considered rare, threatened, or endangered in California, but more common elsewhere). This species can be found in coastal bluff scrub, coastal prairie, and valley and foothill grassland. The blooming period is from June to August. The closest occurrence of this species is 12.1 miles south of the project site (CNDDDB Occurrence Number 19, 1904). Potential habitat for this species is found in open grassland habitats at the project site.

Cylindrical Trichodon. Cylindrical trichodon is listed by the CNPS as a 2B.2 species (considered rare, threatened, or endangered in California, but more common elsewhere). This moss species can be found in broad-leafed upland forest, upper montane coniferous forest, meadows and seeps. Prefers growing in openings on sandy or clay soils on roadsides, stream banks, trails or in fields. The closest occurrence of this species is approximately 4.9 miles southeast of the project site (CNDDDB Occurrence Number 12, 1983). Potential habitat for this species is found within and adjacent to wetland habitats at the project site.

Conclusion

Special-status plant species may occur on in the area of the site north of Hiller Road and project implementation could cause direct loss of individual plants if they are present in the impact areas; this is considered a potentially significant environmental impact. Mitigation measure 6-1 would assure that this potentially significant impact is reduced to less than significant.

Mitigation Measures

6-1 **Focused Plant Surveys in Undeveloped Areas North of Hiller Road.** Prior to approval of grading permits for construction, tree removal, vegetation clearance, grading, or the initiation of any construction activity in any area of the project site north of Hiller Road, developers of future individual projects shall retain a biologist qualified in botany to conduct a focused survey for special-status plant species in accordance with current CDFW and CNPS rare plant survey protocols (CDFW 2018 and CNPS 2001). The survey shall occur during the peak blooming period for these species to determine their presence or absence. Some special-status plant species are only identifiable during their blooming periods and surveys are only considered valid if they occur when blooms are visible. Based on the known blooming periods of the special-status plant species potentially present, three surveys would be necessary to adequately survey the project site: the first in April, the second in June, and the third in August. If possible, known reference populations of the target species in the project vicinity shall first be visited to verify that the species is observable, and the focused survey shall be conducted within two weeks of observing the reference population in full bloom.

The biologist shall then prepare a report documenting the results of the surveys which will be submitted to the Humboldt County Planning and Building Department, where it will be kept on file, prior to issuance of a grading permit. If the focused surveys conclude that special-status plant species are not present within the project site boundary, or if they are present but impacts to them can be completely avoided, then no further mitigation would be required.

If the focused surveys identify special-status plant species within the subject area and they would be affected by the proposed project, then appropriate mitigation shall be developed by the biologist and implemented prior to issuance of a grading permit. Measures may include, but are not limited to:

- a. A qualified biologist shall identify an on-site or off-site mitigation area suitable for restoration of habitat and seed transplantation for any special-status plant species.

- b. Prior to approval of a grading permit, a qualified biologist or native plant specialist shall perform seed collection from all special-status plants located within the impact areas and implement seed installation at the mitigation area at the optimal time. Additionally, topsoil from the special-status species occurrence area(s) shall be salvaged (where practical) for use in the mitigation area.
- c. A maintenance and monitoring program shall be developed by a qualified biologist and established for a minimum of five years after mitigation area installation to verify that restoration activities have been successful. Maintenance activities may include, but not be limited to, watering during the plant establishment period, supplemental seed planting as needed, and removal of non-native plants. Monitoring shall include, at a minimum, quarterly monitoring reports for the first year and annual reports for the remaining four years. The performance standard for successful mitigation shall be a minimum 3:1 replacement ratio (i.e., three plants observed in mitigation area for each plant lost from the project site) achieved in at least one of the five years of monitoring.

Individual future project applicants will be responsible for implementation of this mitigation measure. Compliance with this measure shall be documented prior to approval of a grading permit by a letter report prepared by the biologist and submitted to the Humboldt County Planning and Building Department, where it will be kept on file.

IMPACT 6-2	Potential Effects on Special-Status Wildlife Species (Northern Red-Legged Frog)	Less than Significant with Mitigation
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The northern red-legged frog is listed as a state species of concern. This species is known to inhabit moist forests, woodlands, and along streams in northwestern California. Northern red-legged frogs are usually found near permanent water but can be found far from water in damp woods during non-breeding seasons.

There are four CNDDDB occurrences of northern red-legged frog recorded within two miles of the project site (Occurrence Numbers 7, 211, 210, 208 and 209). The damp woods and meadows observed on the project site could provide habitat for the northern red-legged frog. Northern red-legged frog may also disperse across drier upland areas, as well.

Conclusion

Northern red-legged frog is known to occur in the project vicinity and could be present in undeveloped areas of the site located west of Central Avenue. Development in this area could result in impacts to this species from injury or mortality during construction. Loss or harm to northern red-legged frog is considered a significant adverse impact. Implementation of the following mitigation measures would reduce potentially significant impacts to northern red-legged frog to a less than-significant-level.

Mitigation Measures

6-2a No more than one week prior to commencement of tree removal, vegetation clearance, grading, or the initiation of any construction activity in any undeveloped area of the project site located west of Central Avenue, developers of future individual projects shall retain a qualified wildlife biologist to conduct surveys for the presence of northern red-legged frog within 50 feet of suitable habitat (habitat suitability will be determined by a qualified biologist). If the survey results are negative, a letter report confirming absence will be prepared and submitted to the Humboldt County Planning and Building Department and no further mitigation is required.

If the survey is positive, a qualified biological monitor shall be retained to be present during initial grading to monitor activities. The monitor shall be authorized to move individual northern red-legged frogs out of harm's way if individual frogs do not move in a sufficient time as determined by the biologist.

6-2b No more than 24 hours prior to commencement of ground disturbing activities within the undeveloped portions of the project site located west of Central Avenue, a qualified biologist shall conduct an environmental awareness training session for all construction personnel. At a minimum, the training shall include a description of special-status species potentially occurring in the project vicinity, including, but not limited to, special-status plant species, northern red-legged frog, western bumble bee, roosting bats, and nesting birds and raptors. Their habitats, general measures that are being implemented to conserve species as they relate to the project, and the boundaries within which construction activities will occur will be explained. Informational handouts with photographs clearly illustrating the species' appearances shall be used in the training session. All new construction personnel shall undergo this mandatory environmental awareness training.

The qualified biologist will train biological monitors selected from the construction crew by the construction contractor (typically the project foreman). Before the start of work each day, the monitor will check for animals under any equipment such as vehicles and stored pipes within active construction zones. The monitor will also check all excavated steep-walled holes or trenches greater than one foot deep for trapped animals. If a special-status species is observed within an active construction zone, the qualified biologist will be notified immediately and all work within 50 feet of the individual will be halted and all equipment turned off until the individual has left the construction area.

Individual future project applicant(s) shall be responsible for submitting evidence of completion of this training to the Humboldt County Planning and Building Department, where it will be kept on file, prior to initiation of any ground disturbing activities.

IMPACT 6-3	Potential Effects on Special-Status Wildlife Species (Western Bumble Bee)	Less than Significant with Mitigation
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In 2019, western bumble bee was identified as a candidate species for an endangered species listing under CESA (California Fish and Game Commission 2019). Although not yet formally listed, species identified as “candidate” require consideration during CEQA analysis. This species was formerly common throughout much of its range, populations from central California to southern British Columbia and west of the Sierra-Cascade Ranges have declined sharply since the late 1990s. Western bumble bees primarily nest in underground cavities such as abandoned burrows or other animal nests on open west-southwest slopes. General habitat requirements include meadows and grasslands with flowering plants, and they may be found in some natural areas within urban environments. Western bumble bees require species that bloom and provide adequate nectar and pollen throughout the colony’s flight period from as early as February to late November.

Conclusion

If western bumble bee is present on or adjacent to the undeveloped portions of the project site, construction activities could result in the loss or disturbance of individual animals. This would be a significant adverse environmental impact. Implementation of mitigation measure 6-2b, presented above, which requires a training session on special-status species potentially present on the construction site for all personnel, and implementation of the following mitigation measure would reduce this potentially significant impact to less-than-significant.

Mitigation Measure

6-3 During the optimal flight period for the western bumblebee (April 1 – July 31) prior to tree removal, vegetation clearance, grading, or the initiation of any construction activity in any undeveloped area of the project site, developers of future individual projects shall hire a qualified biologist to conduct a pre-construction survey of small mammal burrows and thatched/bunch grasses. If the survey results are negative (i.e., no bumble bee activity observed), a letter report confirming absence shall be prepared and submitted to the Humboldt County Planning and Building Department, where it will be kept on file, and no further mitigation is required.

If bumble bee nests are detected and the area can be avoided, a qualified biologist shall supervise the installation of protective fencing/flagging a minimum of 50 feet around the nest area prior to construction. The fencing/flagging will be checked at least once per week by a biological monitor until construction is complete to ensure that the protective fencing/flagging remains intact. The qualified biologist can conduct the weekly checks or train a biological monitor selected from the construction crew by the construction contractor (typically the project foreman) to check the fencing/flagging and provide weekly updates. Documentation of the fencing/flagging installation shall be provided to the County prior to the start of ground disturbance activities. Documentation of the weekly checks and timely maintenance of fencing/flagging (if needed) shall be provided to the Humboldt County Planning and Building Department quarterly during construction.

If bumble bee nests are detected and the area cannot be avoided, the qualified biologist shall coordinate with the California Department of Fish and Wildlife to determine the appropriate method of relocation or eviction of the nests.

After it has been confirmed that the habitat area is no longer occupied, a letter report will be prepared and submitted to the Humboldt County Planning and Building Department. Individual project applicants shall be responsible for implementation of this mitigation measure with oversight by the Humboldt County Planning and Building Department.

IMPACT 6-4	Potential Adverse Effect on Special-Status Bat Species (Townsend’s Big-Eared Bat)	Less than Significant with Mitigation
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Townsend's big-eared bat is listed as a state species of special concern. This species is found throughout California, but the details of its distribution are not well known. This species can be found in all but subalpine and alpine habitats, and may be found at any season throughout its

range. Once considered common, Townsend's big-eared bat is now considered uncommon in California. It is most abundant in mesic habitats and prefers caves, mines, tunnels, buildings, or other human-made structures for roosting.

Conclusion

Potential habitat for special-status bat species occurs in mature, hollow trees and around residences and other structures present within and adjacent to the undeveloped areas of the project site. Bats that roost in buildings are usually in structural voids, the spaces between the exterior and interior envelopes of a building. Bats enter voids through openings on the exterior of buildings. A colony may remain unnoticed unless someone sees, hears, or smells them.

If special-status bats are present, tree removal, building demolition, and other construction activities could result in the loss of individual animals. This would be a potentially significant adverse environmental impact. Implementation of mitigation measure 6-2b, presented above, which requires a training session on special-status species potentially present on the construction site for all personnel, and implementation of the following mitigation measure would reduce this potentially significant impact to less than significant.

Mitigation Measure

6-4 Special-Status Bat Species. Approximately 15 days prior to tree removal, vegetation clearance, building demolition, grading, or the initiation of any construction activity in any area of the project site with potentially suitable habitat for special status bats, developers of future individual projects shall retain a qualified wildlife biologist to conduct a habitat assessment for bats and potential roosting sites in trees to be removed, in buildings and trees within 50 feet of the construction footprint, and surrounding structures situated within 50 feet of disturbance activities by the project. Bats potentially roosting on the exteriors of buildings on the project site may be disturbed by construction activities.

In the event that construction activities are suspended for 15 consecutive days or longer, including the time period between development activities at each respective lot or parcel, these surveys shall be repeated if disturbance is occurring in an area with potentially suitable habitat for special status bats. These surveys shall include a visual inspection of potential roosting features (bats need not be present) and a search for presence of guano within the project site, construction access routes, and 50 feet around these areas. Cavities, crevices, exfoliating bark, and bark fissures that could provide suitable potential nest or roost habitat for bats shall be surveyed. Potential roosting features found during the survey shall be flagged or marked. Locations off the site to which access is not available may be surveyed from within the site or from public areas.

If no roosting sites or bats are found, a letter report confirming absence shall be submitted by the biologist to the Humboldt County Planning and Building Department, where it will be kept on file, and no further mitigation is required.

If bats or roosting sites are found, a letter report and supplemental photos and documents detailing the location and species shall be provided by the biologist to the Humboldt County Planning and Building Department prior to ground disturbance activities and the following monitoring, exclusion, and habitat replacement measures shall be implemented:

- a. If bats are found roosting outside of the nursery season (May 1 through October 1), they shall be evicted as described under (b) below. If bats are found roosting during the nursery season, they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or by monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described under (b) below. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. Therefore, if a maternal roost is present, a 50-foot buffer zone (or different size if determined in consultation with the California Department of Fish and Wildlife) shall be established around the roosting site within which no construction activities including tree removal or structure disturbance shall occur until after the nursery season.
- b. If a non-breeding bat hibernaculum is found in a tree or snag scheduled for removal or on any structures within 50 feet of project disturbance activities, the individuals shall be safely evicted, under the direction of a qualified bat biologist. If pre-construction surveys determine that there are bats present in any trees or structures to be removed, exclusion structures (e.g., one-way doors or similar methods) shall be installed by a qualified biologist. The exclusion structures shall not be placed until the time of year in which young are able to fly, outside of the nursery season. Information on placement of exclusion structures shall be provided to the CDFW prior to construction. If needed, other removal methods could include: carefully opening the roosting area in a tree or snag by hand to expose the cavity and opening doors/windows on structures, or creating openings in walls to allow light into the structures. Removal of any trees or snags and disturbance within 50 feet of any structures shall be conducted no earlier than the following day (i.e., at least one night shall be provided between initial roost eviction disturbance and tree removal/disturbance activities). This action will allow bats to leave during dark hours, which increases their chance of finding new roosts with a minimum of potential predation.

Individual project applicants shall be responsible for implementation of this mitigation measure with oversight by the Humboldt County Planning and Building Department. Compliance with this measure shall also be documented and submitted to the Humboldt County Planning and Building Department.

IMPACT 6-5	Potential Adverse Effect on Nesting Migratory Birds and Raptors	Less than Significant with Mitigation
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Various bird species, including bald eagle (*Haliaeetus leucocephalus*), Cooper's hawk (*Accipiter cooperii*), and osprey (*Pandion haliaetus*) may nest throughout the project site, including on open ground, or in any type of vegetation. Many bird species are migratory and fall under jurisdiction of the Migratory Bird Treaty Act, protections for birds of prey, and/or are considered Fully Protected Species.

Protected nesting birds, including raptor species, have potential to nest on the ground or in vegetation or trees on or immediately adjacent to the project site during the nesting bird season (March 15 through August 15).

Conclusion

If nesting birds protected by state and federal regulations are present during soil-disturbing or construction activities associated with future individual projects, including vegetation removal and site preparation within the project site, such activities may directly result in loss of active nests, or indirectly result in nest abandonment and thereby cause loss of fertile eggs or nestlings. These impacts to nesting birds are considered significant adverse environmental impacts. The following mitigation measure requires that initial vegetation and ground-disturbing activities occur outside of the nesting season or, if this timing is not possible, require preconstruction surveys for nesting birds to ensure that this potentially significant impact is reduced to less than significant.

Mitigation Measure

- 6-5 To avoid impacts to nesting birds during the nesting season (March 15 through August 15), construction activities that include any tree removal, vegetation clearance, or ground disturbance (such as grading or grubbing), shall be conducted between 16 and March 14, which is outside of the bird nesting season. If construction activities must commence during the bird nesting season, then a qualified biologist shall conduct a pre-construction survey for nesting birds to ensure that no nests would be disturbed during project construction.

- a. A survey for active nests of such birds shall occur within 10 days prior to start of construction. Appropriate minimum survey radius surrounding the work area is typically 250 feet for passerines, 500 feet for smaller raptors, and 1,000 feet for larger raptors. Surveys shall be conducted at the appropriate times of day to observe nesting activities. Individual project developers shall submit evidence of completion of the preconstruction survey to the Humboldt County Planning and Building Department prior to initiation of ground disturbing activities.
- b. If the qualified biologist documents active nests at the project site, an appropriate buffer between each nest and active construction shall be established in coordination with CDFW. The buffer shall be clearly marked and maintained until the young have fledged and are foraging independently. Prior to construction, the qualified biologist shall conduct baseline monitoring of each nest to characterize “normal” bird behavior and establish a buffer distance, which allows the birds to exhibit normal behavior. The qualified biologist shall monitor the nesting birds daily during construction activities and increase the buffer if birds show signs of unusual or distressed behavior (e.g., defensive flights and vocalizations, standing up from a brooding position, and/or flying away from the nest). If buffer establishment is not possible, the qualified biologist shall have the authority to cease all construction work in the area until the young have fledged and the nest is no longer active. This measure shall be implemented by the project developer prior to initiation of ground disturbing activities.

Individual project applicants shall be responsible for implementation of this mitigation measure with oversight by the Humboldt County Planning and Building Department. Compliance with this measure shall also be documented and submitted to the Humboldt County Planning and Building Department.

Protected Wetlands or Waters

IMPACT 6-6	Loss or Damage to Federally- and State-Protected Wetlands or Waters of the U.S.	Less than Significant with Mitigation
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As described previously, wetlands are typically delineated as features based on the following key criteria:

- **Vegetation:** The dominant vegetation must consist of species that are typically adapted to grow, effectively compete, reproduce, and/or persist in anaerobic (low/no oxygen) soil conditions.

- Soil: Soils present are classified as hydric, or they possess characteristics that are associated with reducing soil conditions (saturated soils).
- Hydrology: The area is inundated either permanently or periodically, or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation.

Some jurisdictions and agencies use a “one-parameter” approach to defining wetlands, meaning only one of the above three criteria would define the presence of wetlands. Others, such as the USACE, require all three criteria (“three-parameter”) to be present to define the extent of wetlands. In McKinleyville, a one-parameter definition of wetlands was defined in the McKinleyville Community Plan. As described in Section 4.0, Project Description, the proposed Q-Zone regulations would modify this Community Plan requirement by requiring that the USACE three criteria definition be used to define wetlands solely within the Town Center site.

The combined results of the *Aquatic Resources Delineation Report, L&A Enterprises, Aquatic Resources Delineation Report Life Plan Humboldt*, and *McKinleyville Town Center Wetlands Mapping Project* prepared by GHD as previously described, show approximately 5.47 acres of three-parameter and an additional 0.64 acres of one-parameter wetlands delineated within the project boundary as shown in [Figure 6-1, Aquatic Features](#). If the Q-Zone regulations are adopted, 0.644 acres of one-parameter wetland within the project site would no longer be protected. The 5.47 acres of three-parameter wetlands would remain protected. The three-parameter wetlands likely fall under the jurisdiction of the USACE, RWQCB, and/or the CDFW.

Conclusion

In addition to federal and state regulations pertaining to development within or adjacent to wetlands, this issue is also addressed in the General Plan, County Code, and Community Plan. Filling wetlands and waterways is considered a significant environmental impact. The following mitigation measures would reduce this impact to a less-than-significant level.

Mitigation Measures

6-6a Prior to commencement of construction activities with the potential to impact project site wetlands regulated by the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, the Regional Water Quality Control Board, and/or Humboldt County, individual project applicants shall submit jurisdictional wetland delineation reports to the USACE for a jurisdictional determination.

If impacts to a federally jurisdictional features may occur, a Clean Water Act Section 404 Nationwide Permit may be needed. If the proposed activity would not otherwise qualify for a Nationwide Permit, individual project developers shall proceed with obtaining an Individual Permit from the USACE.

If impacts to a wetland not subject to federal jurisdiction, but subject to state jurisdiction may occur, fill authorization shall be sought from the North Coast Regional Water Quality Control Board.

For any wetland impacted by individual projects, the project developer shall comply with Humboldt County's Streamside Management Areas and Wetlands Ordinance (Title 3, Section 314-61.1); the McKinleyville Community Plan; and the Q-Zone wetlands regulations that require onsite protection of wetlands or through relocation and replacement of wetlands on a no net loss basis, wetlands to be replaced on a 1.5:1 basis (or minimum 1:1 basis for replacement of filled wetlands with higher value habitat), and identify other wetland planning and wetland creation and enhancement monitoring actions. Mitigation shall be sufficient to ensure no net loss of wetland area, function, or value, either through wetland creation, restoration, or the purchase of wetland credits through an approved wetland mitigation bank. The 14-acre area of the site proposed for wetland preservation may be used as mitigation for replacing wetlands in other locations of the Town Center site that are filled.

A Water Quality Certification (Section 401 of the Clean Water Act) from the North Coast Regional Water Quality Control Board must also be obtained if determined necessary through the wetland assessment and subsequent regulatory agency consultation.

- 6-6b In accordance with Humboldt County's Streamside Management Areas and Wetlands Ordinance (Title 3, Section 314-61.1) and McKinleyville Community Plan, a minimum 50-foot wetland buffer area as measured from the edge of site disturbance to the closest edge of defined wetlands shall be maintained to prevent degradation to wetland features or detract from the natural resource values. If disturbance within the buffer must occur, restrictions per the section on "Development Within Wetland Buffer Areas" in the Community Plan shall be implemented.
- 6-6c If impacts to jurisdictional wetlands are unavoidable, compensation for temporary and/or permanent impacts to jurisdictional wetlands shall be mitigated as required by the regulatory permits as informed by the Q-Zone regulations regarding protection, and conservation of wetland areas. Mitigation would be provided through one or more of the following mechanisms:
 - a. A Wetland Mitigation and Monitoring Plan shall be developed that outlines mitigation and monitoring obligations for impacts to wetlands and other waters as a result of construction activities. The Wetland Mitigation and Monitoring Plan would include thresholds of success, monitoring and reporting

requirements, and site-specific plans to compensate for wetland losses resulting from the project, consistent with Q-Zone wetland regulations. The Wetland Mitigation and Monitoring Plan shall be submitted to the appropriate regulatory agencies and County for review and approval during the permit application process.

- b. To compensate for permanent impacts, the purchase and/or dedication of land to provide suitable wetland restoration or creation shall ensure a no net loss of wetland values or functions. If restoration is available and feasible, wetlands shall be replaced on a 1.5:1 basis (or minimum 1:1 basis for replacement of filled wetlands with higher value habitat) consistent with Q-Zone regulations.

Individual project applicants shall comply with terms and conditions of the permits, including measures to protect and maintain water quality, restore work sites, and mitigation to offset temporary and/or permanent wetland impacts. Applicants shall be responsible for implementation of this mitigation measure prior to issuance of a building permit.

- 6-6d Prior to initiation of ground disturbance or construction activities, individual project applicants shall protect wetlands or waterways adjacent to disturbance areas through the use of best management practices for erosion control and vehicle/equipment fueling. This includes installing wildlife-friendly silt fencing between the project site and adjacent wetlands/waterways. Silt fencing will prevent soil from washing off project sites into wetlands/waterways and exclude construction activities from protected areas.

Potential fuel spills and leaks from construction vehicle/equipment fueling operations shall be prevented from entering wetlands/waterways. Designated fueling areas should be on a level grade and shall be at least 50 feet from any wetlands/waterways. The fueling area shall be protected by a berm to prevent runoff from leaving the fueling area.

Individual project applicants shall be responsible for implementing these mitigation measures with oversight by the Humboldt County Planning and Building Department as needed. Compliance with this measure shall be documented and submitted to the Planning Department Director prior to ground disturbance for any subject individual project.

Riparian Habitat or Other Sensitive Natural Community

IMPACT 6-7	Loss or Damage to Riparian Habitat or Other Sensitive Natural Community (Coastal Dune Willow - Sitka Willow - Douglas Spiraea Thickets Shrubland Alliance)	Less than Significant with Mitigation
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Sensitive natural communities include those that are listed in the CNDDDB as well those listed on CDFW's *List of California Sensitive Natural Communities* with State Rarity Ranks of S1 to S3 (CDFW 2024c). Surveys for sensitive natural communities were conducted on the Life Plan Humboldt site south of Hiller Road in May and June 2023. In addition to wetlands, which are addressed above, one sensitive natural community, Coastal dune willow - Sitka willow - Douglas spiraea thickets Shrubland Alliance (*Salix hookeriana* - *Salix sitchensis* - *Spiraea douglasii*-S3/G4), was detected within that site.

Conclusion

Coastal dune willow - Sitka willow - Douglas spiraea thickets Shrubland Alliance occurs on the project site south of Hiller Road and may occur on the project site north of Hiller Road (to be determined by the required focused plant survey above) and project implementation could cause direct loss of sensitive natural communities, if present in the impact areas; this is considered a significant adverse environmental impact.

One discontinuous community of Coastal dune willow- Sitka willow – Douglas spiraea (*Salix hookeriana* -*Salix sitchensis* - *Spiraea douglasii*) Shrubland Alliance comprising approximately 3,025 square feet is known to be present with the planned Life Plan Humboldt project site based on analysis conducted by GHD (GHD July 13, 2023). It is possible that this sensitive community may also occur in other undeveloped areas of the site north of Hiller Road. Loss of sensitive natural communities is considered a significant adverse environmental impact.

Mitigation measure 6-7 would assure that this potentially significant impact is reduced to less than significant.

Mitigation Measure

6-7 Prior to tree removal, vegetation clearance, grading, or the initiation of any construction activity within the undeveloped area north of Hiller Road, applicants for future individual projects shall retain a biologist qualified in botany to conduct a survey for sensitive natural communities, especially for the Coastal dune willow - Sitka willow - Douglas spiraea thickets Shrubland Alliance. The survey shall occur during late spring/early summer when species are identifiable. The biologist shall then prepare a report documenting the results of the survey, which will be submitted to the Humboldt County Planning and Building Department, where it will

be kept on file. If the survey concludes that sensitive natural communities are not present within an individual project site, or if they are present but impacts to them can be completely avoided, then no further mitigation would be required.

If sensitive natural communities are found and cannot be avoided, applicants shall follow one of the following mitigation strategies to protect and/or mitigate the loss of sensitive natural communities prior to ground disturbance. Given that this community is already known to exist on the Life Plan Humboldt project site, that project proponent will also be required to follow one of the mitigation strategies:

- Option 1. Avoid disturbance to the sensitive natural community found on the site.
- Option 2. If avoidance cannot be accommodated within project plans, on-site and/or off-site mitigation for the loss of sensitive natural communities is recommended. If off-site mitigation is preferred, similar habitat as that lost as a result of the project shall be protected in perpetuity through a conservation easement or similar instrument for conservation at a minimum 1:1 preserved to impacted acreage ratio.

If on-site mitigation is preferred, then applicants shall implement the following mitigation prior to the issuance of any grading permit. A habitat mitigation plan shall be designed by a qualified biologist and shall include the following:

- a. A qualified biologist shall oversee selection of an appropriate on-site mitigation area that shall be protected in perpetuity through a conservation easement. To mitigate impacts to sensitive natural communities, the mitigation area after restoration shall contain acreage at a minimum 1:1 replacement ratio for the habitat lost due to project implementation.
- b. A maintenance and monitoring program shall be established for a minimum of five years to implement restoration and verify that activities have been successful. Maintenance activities performed by a qualified restoration or native landscaping company may include irrigation, planting, and removal of non-native plants. Monitoring shall include quarterly reports for the first year and annual reports for the remaining four years.
- c. If site performance requirements are not met within five years, then remedial restoration measures and contingency planning shall be necessary along with additional maintenance and monitoring.

Individual project applicants will be responsible for implementing this mitigation measure with oversight by the Humboldt County Planning and Building Department as needed. Compliance with this measure shall be documented and submitted to the Planning Department Director prior to ground disturbance for any subject individual project.

Life Plan Humboldt

Life Plan Humboldt project impacts are addressed in the entire biological resources impact analysis presented above in relation to potential impacts of development in the area south of Hiller Road. The Life Plan Humboldt project would not result in new or more severe biological resources impacts than described in this section. Mitigation measures that are applicable to the project as a whole and to development planned south of Hiller Road are applicable to the Life Plan Humboldt project as a means to reduce its potentially significant impacts to less than significant.

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