

Pacific Coast Bicycle Connectivity North Project City of Half Moon Bay

Biological Report

April 17, 2020



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Prepared for
Alta Planning + Design
Attn: Brian Burchfield

Prepared by:

Biotic Resources Group
Kathleen Lyons, Plant Ecologist
and
Dana Bland & Associates
Dana Bland, Wildlife Biologist

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Biotic Resources Group

2551 S. Rodeo Gulch Road #12, ♦ Soquel, California 95073 ♦ (831) 476-4803 ♦ brg@cruzio.com

1.0 INTRODUCTION

Biotic Resources Group, with Dana Bland & Associates, documented and evaluated the biotic resources of a trail extension project located in the City of Half Moon Bay, San Mateo County. A Biological Assessment report has been prepared to document current site conditions and to evaluate the proposed trail project.

Specific tasks conducted for this study include:

- Characterize and map the major plant communities within the proposed project area.
- Identify sensitive biotic resources, including habitats, plant or wildlife species of concern.
- Evaluate the potential effects of the proposed project activities on sensitive biotic resources and recommend measures to avoid or reduce such impacts.

1.1 PROPOSED PROJECT

The project is located along the east side of State Highway 1 in the northern portion of the City of Half Moon Bay. The project is a 0.3-mile long extension of the existing Naomi Patridge bicycle pathway, to be located within the State of California Highway 1 right-of-way. The proposed pathway extension is located east of the highway, from approximately Roosevelt Boulevard north to Mirada Road, as shown on Figure 1.

The project is construction of a 10-foot wide multi-use trail, with 2-foot shoulders. The project includes clearing and grubbing, excavation of the structurally unsuitable material, and constructing the 0.3-mile long trail. The project includes a bridge over a creek; the creek is not named on the U.S.G.S. maps but is known locally as the Roosevelt Ditch or Naples Creek (for clarity it will be referred to as Roosevelt Ditch throughout this report), and raised boardwalks/puncheons through low-lying willow scrub. The project also includes erosion control and revegetation.

Most of the project will be constructed within ruderal (weedy) herbaceous vegetation that is routinely maintained by Caltrans; however, in some locations the trail will be in willow scrub. The project has been designed to avoid impacts to the creek and minimize impacts to the associated riparian vegetation. The plan includes a spanning bridge over Roosevelt Ditch and raised boardwalk/puncheons in other low-lying areas; however, trail construction will impact approximately 6,125 square feet (0.14 acre) of willow scrub. Approximately 3,675 square feet (0.008 acre) of this area will be temporarily affected during the construction period and this area can be revegetated on-site. The trail will permanently impact approximately 2,450 square feet (0.056 acre) of willow scrub (footprint of trail and bridge). There will be no direct impact to the bed or bank of Roosevelt Ditch or the areas of coastal freshwater marsh growing in adjacent roadside drainage ditches. Construction staging will be within the Caltrans right-of-way and in a nearby existing roadway pullout area. The work area encompasses approximately 2.0 acres. Figure 2 displays the trail footprint and areas adjacent to the trail that will be temporarily affected by construction.

In February 2020 the Sewer Authority Mid-Coastside (SAM) began implementation of a directional-drilling project within the project area. The project resulted in unauthorized clearing of a 15 to 20-foot wide area extending approximately 1,000 feet north of the designated work area. Work included clearing a portion of the Roosevelt Ditch bank, a swath of riparian scrub, and operating heavy equipment in several unnamed drainage ditches. Portions of the unauthorized work were located along the proposed alignment of the Pacific Coast Bicycle Connectivity North Project. SAM will be required to apply for an after the fact Coastal Development Permit, any other resource agency permits, and mitigate the environmental impacts caused by the unauthorized work. In this biological report the author documents the pre-clearing site conditions and the impact analysis assumes the length of the Pacific Coast Bicycle Connectivity North Project supports vegetation as documented prior to February 2020. However, the baseline that will be used in the CEQA evaluation for this project will be based on the existing conditions at the time the CEQA evaluation is initiated.



Figure 1. Location of Project Site on USGS Topographic Map (Half Moon Bay)

2.0 EXISTING BIOTIC RESOURCES

2.1 METHODOLOGY

The biotic resources of the project site were assessed through literature review and field observations. Site observations were made on May 29, June 9, July 18, August 6, and October 14, 2019. Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist) conducted the review. The study area extends from the eastern edge of State Highway 1 eastward to the limits of the California Department of Transportation (Caltrans) right-of-way (ROW), a study area that is approximately 1,600 feet long and 90 feet wide. (3.3 acres).

Vegetation mapping of the study area was conducted from review of a topographic map, project plans and field observations. The major plant communities within the project area, based on the classification system developed by *California Terrestrial Natural Communities* (California Department of Fish and Game, October 2018), *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995) and as amended to reflect site conditions, and a review of the *Half Moon Bay Bicycle and Pedestrian Master Plan Project, Initial Study/Mitigated Negative Declaration, MIG*, (September 2019) were identified. Modifications to the classification system's nomenclature were made, as necessary, to accurately describe the site's resources. The plant communities were mapped onto an aerial photo. All plant species observed were recorded and identified to a level sufficient to determine their rarity. Plant nomenclature follows *The Jepson Manual* (2012).

To assess the potential occurrence of special status biotic resources, two electronic databases were accessed to determine recorded occurrences of sensitive plant communities and sensitive species. Information was obtained from the California Native Plant Society's (CNPS) Electronic Inventory (2019) and California Department of Fish & Wildlife (CDFW) RareFind 5 database (CDFW, 2019) for the Half Moon Bay USGS quadrangle and surrounding quadrangles. In addition, the Environmentally Sensitive Habitat Area (ESHA) maps prepared for the Local Coastal LUP update were reviewed (Figure 6.1 Habitat Types in the LCP Planning Area, Sheet 1 of 3; Figure 6.2 Habitat ESHAs, Sheet 1 of 3; Figure 6.3 Special Status Species ESHAs, Sheet 1 of 3), dated 10-30-18.

This report summarizes the findings of the biotic evaluation for the proposed project. The potential impacts of the trail extension project on sensitive resources are discussed below. Measures to reduce environmental impacts are recommended, as applicable.

2.2 ENVIRONMENTAL SETTING

2.2.1 Geographic Setting

The project is located at the northern end of the City of Half Moon Bay within San Mateo County (see Figure 1). The project is located eastward of State Highway 1 within the Caltrans ROW. The project area is undeveloped except for three paved driveways that traverse the ROW to reach inland properties.

Agricultural land uses are located east of the project site. Commercial development is located westward of State Highway 1. The project area supports one perennial stream (Roosevelt Ditch), two seasonal drainages and two roadside drainage swales, as depicted on Figure 2. The site is located within the City of Half Moon Bay. All of the City is within the Coastal Zone.

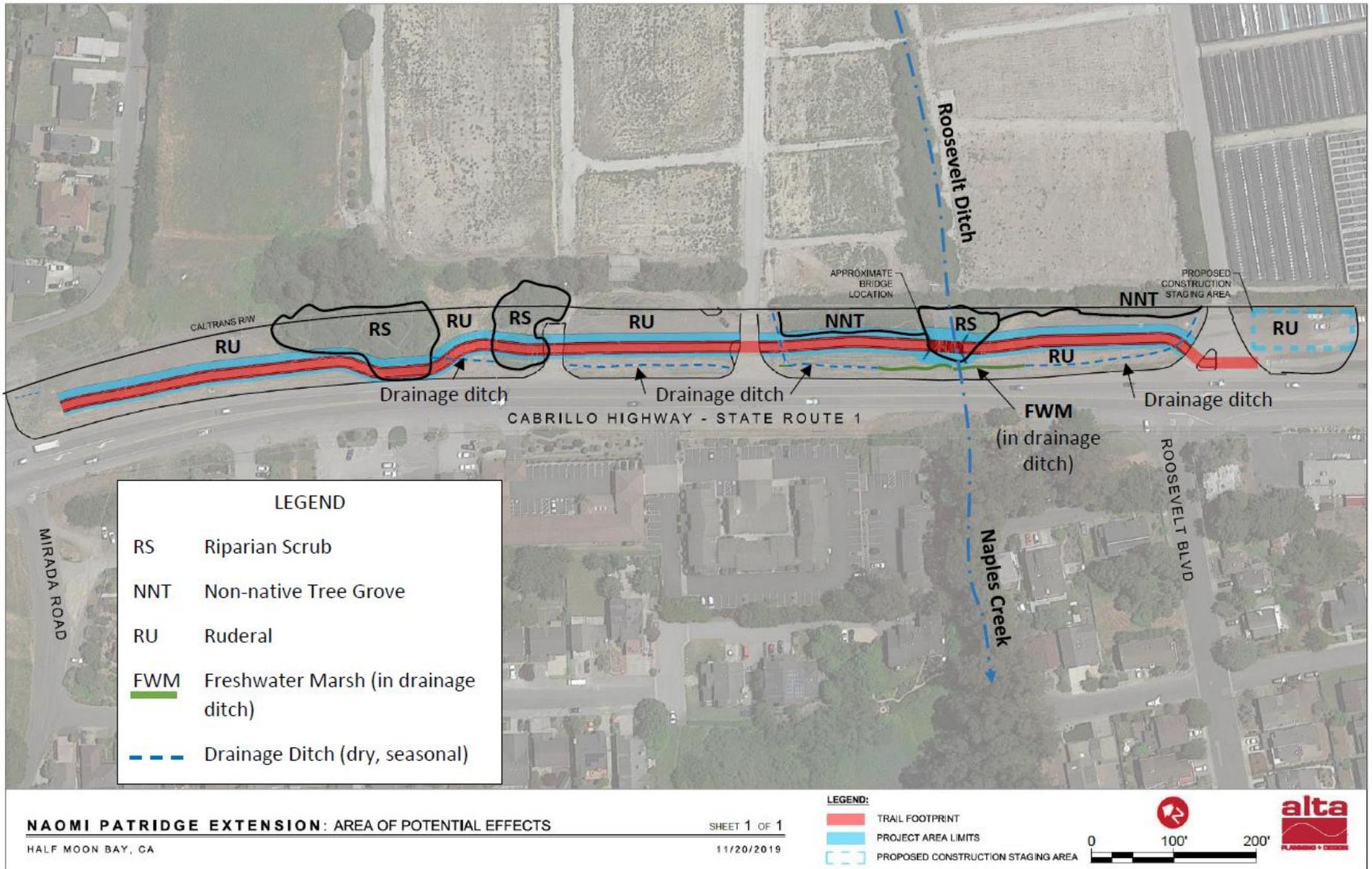


Figure 2. Distribution of Vegetation Types in Project Area

The project site supports four plant community types: central coast riparian scrub, coastal freshwater marsh, Monterey cypress tree groves, and ruderal (weedy) grassland, as listed on Table 1. The ruderal grassland provides the most land cover within the study area. The riparian scrub is associated with the three drainages that cross the ROW. The Monterey cypress grove consists of an evenly spaced row of landscaping trees that occur along the eastern edge of the ROW. Roosevelt Ditch had surface water during all site visits; however, all other ditches were dry when viewed between May and October 2019. Figure 2 depicts the distribution of these vegetation types.

Table 1. Vegetation Types, Pacific Coast Bicycle Connectivity North Project Study Area

CaCode ¹	Vegetation Type (CA Alliance)	Plant Association	State Ranking ²	City of HMB Status
61.201.03	Central Coast Riparian Scrub (Arroyo Willow Thickets)	Willow / California Blackberry – Stinging Nettle – California Aster - Poison Hemlock	Sensitive (S3)	Sensitive
52.119.01	Coastal Freshwater Marsh (Water Parsley Marsh)	Water Parsley – Bog Rush - Nutgrass – Aster – Water Knotweed	Sensitive (S3)	Sensitive
None	Ruderal	Wild Oat -Bull Mallow – Bristly Ox-tongue – Wild Radish – Bull Thistle – Italian Thistle Poison Hemlock	None	None
81. 604.00	Monterey Cypress Grove/Tree Row (Monterey Cypress Stands)	Monterey Cypress - Eucalyptus	None (only natural stands considered sensitive)	Significant

¹ – California vegetation code and alliance as per CDFG/CNDDDB (2018); ² - Vegetation types are ranked between S1 and S5. CDFW identifies vegetation types that are considered to be highly imperiled/sensitive, typically those ranked S1-S3. (CDFW, 2018).

The soil survey identifies three soil types in the project area: Farallone coarse sandy loam, gently sloping (FcB), Farallone coarse sandy loam, over coarse sands, gently sloping, seeped (FsB, and Denison loam, gently sloping (DmB).

2.2.2 Vegetation and Wildlife Habitats

Central Coast Riparian Scrub. The willow scrub consists of thickets of arroyo willow (*Salix lasiolepis*) that are associated with Roosevelt Ditch and seasonal drainages. The willows provide a dense woody plant cover. The understory is mostly comprised of California blackberry (*Rubus ursinus*), stinging nettle (*Urtica dioica*), California aster (*Symphotrichum chilense*), and poison hemlock (*Conium maculatum*). Other plant species include hedgenettle (*Stachys sp.*), horseweed (*Erigeron canadensis*), yarrow (*Achillea millefolium*), bristly ox-tongue (*Helminthotheca echioides*), coast tarweed (*Madia sativa*), rabbitsfoot grass (*Polypogon monspeliensis*), and Cape ivy (*Delearea odorata*). Figure 3 depicts the character of the willow riparian woodland along Roosevelt Ditch.



Figure 3. Character of willow scrub along Roosevelt Ditch, October 2019

The riparian habitat is one of the highest value habitats for wildlife species diversity and abundance in California. Factors which contribute to the high wildlife value include the presence of surface water, the variety of niches provided by the high structural complexity of the habitat, and the abundance of plant growth. Riparian habitat along the project site may be used by a diversity of wildlife species for food, water, escape cover, nesting, migration and dispersal corridors, and thermal cover.

Common wildlife species that are expected to inhabit the riparian habitat include Sierran treefrog (*Pseudacris sierra*), bullfrog (*Rana catesbeiana*), western aquatic garter snake (*Thamnophis couchii*), Wilson's warbler (*Wilsonia pusilla*), Bewick's wren (*Thryomanes bewickii*), several swallow species, raccoon (*Procyon lotor*), and opossum (*Didelphis virginiana*).

Coastal Freshwater Marsh. Plant species typical to areas of high seasonal moisture grow within the bed of Roosevelt Ditch and in portions of the two drainage ditches, as depicted on Figure 2. Water parsley (*Oenanthe sarmentosa*) grows with bog rush (*Juncus effusus*), nutgrass (*Cyperus sp.*), California aster, and water knotweed (*Persicaria punctata*). These plants are wetland indicator species. Other species growing in these areas include canary grass (*Phalaris sp.*), stinging nettle, common monkeyflower (*Erythranthe guttata*), kikuyu grass (*Pennisetum clandestinum*), white goosefoot (*Chenopodium album*), and bristly ox-tongue.

The small drainage ditches join Roosevelt Ditch just prior to it travelling under State Highway 1 in a concrete culvert. Roosevelt Ditch and a short portion of two ditches displayed surface water during the 2019 site survey. The Ordinary High Water Mark (OHWM) on the perennial creek was observed at approximately 0.5-foot (6 inches) above the thalweg (lowest point of channel). Figure 4 depicts the character of Roosevelt Ditch near the culvert at Highway 1.

The freshwater marsh habitat provides a drinking source for wildlife. Wildlife use of the marsh habitat is similar to that described for the riparian scrub.



Figure 4. View of Roosevelt Ditch upstream of Highway 1 culvert

Ruderal Grassland. The majority of the project area supports weedy ruderal vegetation that is typical of previously disturbed areas. The cover is comprised of herbaceous species, primarily non-native grasses and forbs. Species providing the most cover include wild oat (*Avena fatua*), bull mallow (*Malva neglecta*), wild radish (*Raphanus sativa*), bristly ox-tongue, perennial ryegrass (*Festuca perennis*), horseweed, willow lettuce (*Lactuca saligna*), sow thistle (*Sonchus oleraceus*), mayweed (*Anthemis sp.*), Italian thistle (*Carduus pycnocephalus*), bull thistle (*Cirsium vulgare*), poison hemlock, common morning glory (*Convolvulus arvensis*), Mediterranean clover (*Trifolium angustifolium*), cat's ear (*Hypochaeris spp.*), fennel (*Foeniculum vulgare*), and cut-leaved plantain (*Plantago coronopus*). Native plant species were limited, but include California poppy (*Eschscholzia californica*), California aster, and coast tarweed. Figure 5 depicts the character of the ruderal area. In general, herbaceous ruderal areas provide a foraging resource for a several wildlife species.

The value of the ruderal habitat in the project area is moderated by the predominance of non-native plants. The grasses and forbs produce an abundance of seeds and attract numerous insects, providing food for granivorous and insectivorous wildlife. Sparrows, rabbits and rodents are commonly found in this habitat. Consequently, these areas can be foraging sites for raptors such as hawks and owls, and other predators including coyote, fox, skunk and snakes. Aerial foraging species that occur over these habitats include bats and swallows.



Figure 5. View of ruderal vegetation and Monterey cypress tree row, October 2019

Monterey Cypress Tree Row. A row of planted Monterey cypress (*Hesperocyparis macrocarpa*) grows east of the State Highway 1 ROW; a portion of the tree row is located within the project study area. The closely-planted trees provide a tight closed canopy and there is little understory vegetation. California blackberry was observed in some areas. Figure 5 depicts the character of the Monterey cypress tree row.

2.3 SENSITIVE BIOTIC RESOURCES

2.3.1 Regulated Habitats

California Department of Fish and Wildlife (CDFW) is a trustee agency that has jurisdiction under Section 1600 et seq. of the CDFW Code. Under Sections 1600-1603 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife. CDFW also regulates alterations to ponds and impoundments. CDFW jurisdictional limits typically extend to the top of bank or to the edge of riparian habitat if such habitat extends beyond top of bank (outer drip line), whichever is greater. A portion of the proposed project (trail in riparian scrub and over unnamed creek and drainage ditches with a defined bed and bank) is located within CDFW's jurisdiction. A permit (Streambed Alteration Agreement) from this agency will be required (pending confirmation by this agency).

Water quality in California is governed by the Porter-Cologne Water Quality Control Act and certification authority under Section 401 of the Clean Water Act, as administered by the Regional Water Quality Control Board (RWQCB). The Section 401 water quality certification program allows the State to ensure that activities requiring a Federal permit or license comply with State water quality standards. Water quality certification must be based on a finding that the proposed discharge will comply with water quality standards which are in the regional board's basin plans. The Porter-Cologne Act requires any person discharging waste or proposing to discharge waste in any region that could affect the quality of the waters of the state to file a report of waste discharge. The RWQCB issues a permit or waiver that includes implementing water quality control plans that take into account the beneficial uses to be protected. Waters of the State subject to RWQCB regulation extend to the top of bank (or to the edge of riparian vegetation, whichever is greater), as well as isolated water/wetland features and saline waters. Should there be no Section 404 nexus (i.e., isolated feature not subject to USACE jurisdiction), a report of waste discharge (ROWD) is filed with the RWQCB. The RWQCB interprets waste to include fill placed into water bodies. A portion of the proposed project (trail crossing over creek in riparian scrub and boardwalk/puncheons in riparian scrub) are within RWQCB jurisdiction. A permit from this agency will be required (pending confirmation by this agency).

The US Army Corps of Engineers (USACE) regulates activities within waters of the United States pursuant to congressional acts: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (1977, as amended). Section 10 of the Rivers and Harbors Act requires a permit for any work in, over, or under navigable waters of the United States. Navigable waters are defined as those waters subject to the ebb and flow of the tide to the Mean High Water mark (tidal areas) or below the Ordinary High Water mark (freshwater areas). In January 2020 the USACE finalized the Navigable Water Protection Rule, which established a new definition of Waters of the U.S. The Rule removed the requirement for a "significant nexus" to determine if potential tributaries have a significant effect of downstream navigable waters and clarified that adjacent wetlands must have a direct hydrological surface connection to a traditional navigable waterway. In addition, the Rule excluded "ephemeral streams and other ephemeral features from being subject to the Clean Water Act. The Rule is schedule to go into effect in March 2020. A portion of the proposed project area supports Waters of the U.S. Roosevelt Ditch and the smaller drainage ditches that connect to Roosevelt Ditch and support freshwater marsh vegetation

are likely jurisdictional features. Some low-lying areas within the riparian scrub may also meet the definition of wetlands and may be under USACE jurisdiction. The proposed project will occur above the Ordinary High Water Mark (OHWM) of Roosevelt Ditch (bridge will span the creek) and the trail will avoid affecting the drainage ditches that support freshwater marsh. The proposed raised boardwalk/puncheon supports through riparian scrub areas may be placed within USACE's jurisdiction. A permit from USACE for the placement of trail supports in the riparian scrub may be required, pending confirmation by this agency.

2.3.2 Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity.

CDFW classifies and ranks the State's natural communities to assist in the determining the level of rarity and imperilment. Vegetation types are ranked between S1 and S5. For vegetation types with ranks of S1- S3, all associations within the type are considered to be highly imperiled. If a vegetation alliance is ranked as S4 or S5, these alliances are generally considered common enough to not be of concern; however, it does not mean that certain associations contained within them are not rare (CDFW, 2007 and 2018). The willow scrub and freshwater marsh are ranked S3 (sensitive) (CDFW, 2018).

The project area is located within the City of Half Moon Bay within the coastal zone. The project site includes a portion of Roosevelt Ditch, a perennial creek, as well as coastal freshwater marsh (in adjacent drainage ditches) and willow scrub areas. Chapter 3 of the Half Moon Bay LCP prohibits any land use or development that would have significant adverse impact on sensitive habitat areas. Development in areas adjacent to sensitive habitats shall be sited and designated to prevent impacts that could significantly degrade the sensitive habitats. The LCP defines sensitive habitats as any area in which plant or animal life or their habitats are either rare or especially valuable and any area that meets one of the following criteria:

- Habitats containing or supporting rare and endangered species as defined by the State Fish and Game Commission
- All perennial and intermittent streams and their tributaries
- Coastal tide lands and marshes
- Coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding
- Areas used for scientific study and research concerning fish and wildlife
- Lakes and ponds and adjacent shore habitat
- Existing game and wildlife refuges and reserves
- Sand dunes

Sensitive habitat areas include, but are not limited to, riparian areas, wetlands, sand dunes, and habitats supporting rare, endangered, and unique species. In Appendix A, the LCP adopts the following definition of a wetland:

“Wetland is an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. Such wetlands can include mudflats (barren of vegetation), marshes, and swamps. Such wetlands can be either fresh or saltwater, along streams (riparian), in tidally influenced areas (near the ocean and usually below extreme high water of spring tides), marginal to lakes, ponds, and man-made impoundments. Wetlands do not include areas which in normal rainfall years are permanently submerged (streams, lakes, ponds and impoundments), nor marine or estuarine areas below

extreme low water of spring tides, nor vernally wet areas where the soils are not hydric.”

The LCP defines "riparian area" as any area of land bordering a stream or lake, including its banks. It includes land at least up to the highest point (in cross section) of an obvious channel or enclosure of a body of water and extends to the outer edge of appropriate indicator plant species. It defines a riparian corridor as a line determined by the association of plant and animal species normally found near streams, lakes, and other bodies of fresh water: red alder, jaumea, pickleweed, big leaf maple, narrowleaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder. Such a corridor must contain at least a 50 percent cover of some combination of the plants listed. The LCP includes many measures to protect riparian habitat in Chapter 3 (3-7 to 3-13) and defines a buffer of 50 feet outward from the limit of riparian vegetation along perennial streams (3-11 (a)). Along lakes, ponds, and other wet areas, the LCP extends the buffer zone to 100 feet from the high-water point (3-11(c)). Half Moon Bay Municipal Code Chapter 18.38 identifies riparian and wetland areas as environmentally sensitive areas. City Code requires the preparation of a biological report for any development within 100 feet of any sensitive habitat. In addition, the project is located within the coastal zone. The project area is subject to the one parameter jurisdictional wetland criterion under the Coastal Act. Both the willow scrub and portions of the drainage ditches that support coastal freshwater marsh plant species meet the wetland criterion and are considered to meet the requirement of coastal review wetlands. The remainder of the drainage ditches occur in otherwise upland areas and do not support wetland features.

According to City Municipal Code, impacts to sensitive habitat should be avoided. If development occurs within any sensitive habitat area the City requires projects mitigate significant environmental impacts.

2.3.3 Special Status Plant Species

Plant species of concern include those listed by either the Federal or State resource agencies as well as those identified as rare by CNPS (List 1B). The search of the CNPS and CNDDDB inventories identified the special status plant species with potential to occur in the project area.

No special status plant species have been recorded in the CNDDDB for the project vicinity (CNDDDB BIOS, 2019) and none were observed in the immediate project area during field visits between May and October 2019. In addition, no special status plant species are identified from the project area on the updated ESHA maps for the City’s LUP. The field visits were conducted within the blooming period for many species and no special status plant species were observed. Due to a lack of suitable microhabitats required for species listed in Table 2, the probability for the occurrence of special status plant species is considered very low.

Table 2. Special Status Plant Species and Their Predicted Occurrence Within the Pacific Coast Bicycle Connectivity North Project Study Area, City of Half Moon Bay.

Common Name	Scientific Name	Status	General Habitat Description Growth	Present/ Absent	Rationale
San Mateo thornmint	<i>Acanthomintha duttonii</i>	CNPS List 1B.1	Serpentine chaparral and grassland Annual herb	A	Work area lacks suitable habitat.
Blasdale’s bent grass	<i>Agrostis blasdalei</i>	CNPS List 1B.2	Grassland, scrub Perennial herb	A	Work area lacks suitable habitat.
Franciscan onion	<i>Allium peninsulare var. francisanum</i>	CNPS List 1B.2	Grassland, scrub Perennial bulb, herb	A	Work area lacks suitable habitat.

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Common Name	Scientific Name	Status	General Habitat Description Growth	Present/Absent	Rationale
Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	CNPS List 1B.2	Grassland, scrub Annual herb	A	Work area lacks suitable habitat.
Santa Cruz manzanita	<i>Arctostaphylos andersonii</i>	CNPS List 1B.2	Broadleaf upland forest, chaparral, coniferous forests; open sites Perennial shrub	A	Not observed within site; Work area lacks suitable habitat.
Montara manzanita	<i>Arctostaphylos montaraensis</i>	CNPS List 1B.2	Broadleaf upland forest, chaparral, coniferous forests; open sites Perennial shrub	A	Not observed within site; Work area lacks suitable habitat.
Kings Mountain manzanita	<i>Arctostaphylos regismontana</i>	CNPS List 1B.2	Broadleaf upland forest, chaparral, coniferous forests; open sites Perennial shrub	A	Not observed within site; Work area lacks suitable habitat.
Coastal marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>	CNPS List 1B.2	Mesic coastal dunes, scrub, and marshes Perennial herb	A	Work area lacks suitable habitat.
Pappose tarplant	<i>Centromadia parryi</i> ssp. <i>parryi</i>	CNPS List 1B.2	Alkali prairie, meadows, and seeps, Annual herb	A	Work area has marginal habitat; not observed.
Point Reyes birds-beak	<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	CNPS List 1B.2	Marshes and swamps Annual herb	A	Work has marginal habitat; not observed
San Francisco spineflower	<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	CNPS List 1B.2	Sandy coastal dunes, bluff and scrub Annual herb	A	Site lacks suitable habitat.
Franciscan thistle	<i>Cirsium andrewsii</i>	CNPS List 1B.2	Serpentine seeps, moist grassland Perennial herb	A	Site lacks suitable habitat.
Crystal Springs fountain thistle	<i>Cirsium fontinale</i> var. <i>fontinale</i>	CNPS List 1B.1 FE CE	Serpentine seeps, moist grassland, woodland Perennial herb	A	Site lacks suitable habitat.
San Francisco collinsia	<i>Collinsia multicolor</i>	CNPS List 1B.2	Moist shady woodland Annual herb	A	Site lacks suitable microhabitat.
Western leatherwood	<i>Dirca occidentalis</i>	CNPS List 1B.2	Broadleaf upland forest, chaparral, open sites Perennial shrub	A	Not observed within site; Work area lacks suitable habitat.

Table 2. Special Status Plant Species and Their Predicted Occurrence Within the Pacific Coast Bicycle Connectivity North Project Study Area, City of Half Moon Bay.

Common Name	Scientific Name	Status	General Habitat Description Growth	Present/Absent	Rationale
San Mateo woolly sunflower	<i>Eriophyllum latilobum</i>	CNPS List 1B.1 FE CE	Serpentine woodland and scrub Perennial herb	A	Not observed within site; Work area lacks suitable habitat.
Minute pocket moss	<i>Fissidens pauperculus</i>	CNPS List 1B.2	Redwood forest on limestone outcrops moss	A	Site lacks suitable microhabitat; no suitable outcrops.
Hillsborough chocolate lily	<i>Fritillaria biflora</i> <i>var. ineziana</i>	CNPS List 1B.1	Serpentine woodland and grassland Perennial bulb	A	Site lacks suitable microhabitat
Marin checker lily	<i>Fritillaria lanceolata</i> <i>var. tristulis</i>	CNPS List 1B.2	Coastal bluff scrub, prairie, scrub Perennial bulb	A	Site lacks suitable microhabitat
Fragrant fritillary	<i>Fritillaria liliacea</i>	CNPS List 1B.2	Ultramafic talus in chaparral and foothill woodland Perennial bulb	A	Site lacks suitable microhabitat; no serpentine.
Short-leaved evax	<i>Hesperevax sparsiflora</i> <i>var. brevifolia</i>	CNPS List 1B.2	Coastal bluff scrub, dunes and coastal prairie Annual herb	A	Site lacks suitable habitat.
Marin western flax	<i>Hesperolinum congestum</i>	CNPS List 1B.1 FT CT	Serpentine chaparral and grassland Annual herb	A	Site lacks suitable microhabitat
Kellogg's horkelia	<i>Horkelia cuneata</i> <i>ssp. sericea</i>	CNPS List 1B.1	Openings on old dunes and coastal sandhills Perennial herb	A	No suitable habitat on site.
Point Reyes horkelia	<i>Horkelia marinensis</i>	CNPS List 1B.2	Coastal dunes, prairies, scrub Perennial herb	A	No suitable habitat on site.
Smooth lessingia	<i>Lessingia micradenia</i> <i>var. glabrata</i>	CNPS List 1B.2	Serpentine soils in chaparral and grasslands	A	No suitable habitat on site.
Perennial goldfields	<i>Lasthenia californica</i> <i>ssp. macrantha</i>	CNPS List 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub Perennial herb	A	Area lacks suitable habitat.
Coast yellow leptosiphon	<i>Leptosiphon croceus</i>	CNPS List 1B.1 CC (candidate)	Coastal bluff scrub, coastal prairie Annual herb	A	Area lacks suitable habitat

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Common Name	Scientific Name	Status	General Habitat Description Growth	Present/Absent	Rationale
Rose leptosiphon	<i>Leptosiphon rosaceus</i>	CNPS List 1B.1	Coastal bluff scrub Annual herb	A	Area lacks suitable habitat
Crystal Springs lessingia	<i>Lessingia arachnoidea</i>	CNPS List 1B.2	Serpentine woodland, scrub, grassland Annual herb	A	Area lacks suitable habitat
Coast lily	<i>Lilium maritimum</i>	CNPS List 1B.1	Upland forest, coniferous forest, prairie, scrub Perennial bulb	A	Area lacks suitable habitat
Ornduff's meadowfoam	<i>Limnanthes douglasii ssp. ornduff</i>	CNPS List 1B.1	Meadows and seeps Annual herb	A	Area has marginal habitat; not observed
Indian Valley bush- mallow	<i>Malacothamnus aboriginum</i>	CNPS List 1B.2	Rocky, granitic chaparral and woodland Perennial shrub	A	No suitable habitat on site.
Arcuate bush- mallow	<i>Malacothamnus arcuatus</i>	CNPS List 1B.2	Serpentine chaparral Perennial shrub	A	No suitable habitat on site.
Davidson's bush- mallow	<i>Malacothamnus davidsonii</i>	CNPS List 1B.2	Riparian scrub, chaparral, woodland Perennial	A	Not observed.
Hall's bush- mallow	<i>Malacothamnus hallii</i>	CNPS List 1B.2	Chaparral and coastal scrub Perennial shrub	A	No suitable habitat on sit; not observed
Marsh microseris	<i>Microseris paludosa</i>	CNPS List 1B.2	Coastal grassy habitats (mesic) Perennial herb	A	No suitable habitat on site.
Woodland woollythreads	<i>Monolopia gracilens</i>	CNPS List 1B.2	Openings in redwood and mixed evergreen forests Annual herb	A	Work area lacks suitable habitat.
Dudley's lousewort	<i>Pedicularis dudleyi</i>	CR CNPS List 1B.2	Redwood forest, moist areas near streams Perennial herb	A	Low to marginal microhabitat; none observed.

Table 2. Special Status Plant Species and Their Predicted Occurrence Within the Pacific Coast Bicycle Connectivity North Project Study Area, City of Half Moon Bay.

Common Name	Scientific Name	Status	General Habitat Description Growth	Present/Absent	Rationale
White-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>	FE CE CNPS List 1B.1	Valley and foothill grassland, open dry rocky slopes, often on serpentine bedrock Annual herb	A	Work area lacks suitable habitat.
Choris' popcorn-flower	<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	CNPS List 1B.2	Chaparral, coastal scrub, coastal prairie (mesic areas) Annual herb	A	Work area lacks suitable habitat; not observed.
San Francisco campion	<i>Silene verecunda</i> ssp. <i>verecunda</i>	CNPS List 1B.2	Sand hills and rocky soils in coastal prairie and scrub Perennial herb	A	No suitable habitat on site.
Santa Cruz microseris	<i>Stebbinoseris decipiens</i>	CNPS List 1B.2	Rocky soils in coastal prairie and scrub	A	No suitable habitat on site.
Saline clover	<i>Trifolium hydrophilum</i>	CNPS List 1B.2	Moist grasslands, alkaline Annual herb	A	No suitable habitat on site.
San Francisco owls-clover	<i>Triphysaria floribunda</i>	CNPS List 1B.2	Serpentine prairie, scrub, and grassland Annual herb	A	No suitable habitat on site.

Absent [A]- No habitat present and no further work needed. Habitat Present [HP]- Habitat is, or may be present. The species may be present. Present [P] - Species is present Critical Habitat [CH]- Project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: -Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); California State Endangered (CE); California State Threatened (CT); California Native Plant Society (CNPS)

2.3.4 Special Status Wildlife Species

Special status wildlife species include those listed, proposed or candidate species by the Federal or the State resource agencies as well as those identified as State species of special concern. In addition, California Fish and Game Code prohibits take of birds in California, including incidental take. Until recently, migratory bird nests were also protected by the Federal Migratory Bird Treaty Act; however, in December 2017 the Department of the Interior issued a memorandum that prohibitions of take of migratory birds applies only to actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs.

Special status wildlife species were evaluated for their potential presence in the project area as described in Table 3 below. Of all the special status species reviewed, as listed in Table 3, only two have the potential to occur at this work site: the California red-legged frog (CRLF) and San Francisco dusky-footed woodrat (SFDW). There is no breeding habitat for CRLF in the project area, but they are known from Frenchman’s Creek, which is located less than a mile to the south of the project area, and this frog does disperse from winter breeding areas to summer foraging sites such as perennial creeks. The only place along the project work area that woodrat houses may occur is in the dense willow scrub. Measures are listed in Section 3 to avoid and minimize any potential impacts to CRLF and SFDW from this project.

The project site does not contain suitable habitat for San Francisco garter snake due to the typical shallow water condition of Roosevelt Ditch. This species is typically associated with creeks with deeper water conditions, such as along Frenchman’s Creek and Pilarcitos Creek, there the species is known to occur. Likewise, the low flows in Roosevelt Ditch do not provide suitable habitat for steelhead, and there are no records of this fish there. There also is no habitat for Monarch butterflies in the work area, and no habitat for special status bats. The Species Status Species ESHA Map have no records of any special status species from the project area.

Table 3. Special Status Wildlife Species and their Predicted Occurrence Within the Pacific Bicycle Connectivity North Project Study Area, City of Half Moon Bay, Dec 2019 (Montara Mountain and Half Moon Bay Quads)

SPECIES	STATUS	HABITAT	POTENTIAL OCCURRENCE ON SITE
Invertebrates			
Western bumble bee <i>Bombus occidentalis</i>	CST	Nesting sites for colonies, flowers for pollen, and overwintering sites for queens	Considered extirpated in California except in Sierra Nevada
Monarch butterfly <i>Danaus plexippus</i>	*	Eucalyptus, cypress and pine trees groves provide winter habitat when they have adequate protection from wind and nearby source of water	None recorded near this project site; unlikely to occur.
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	FE	Grasslands with larval host plant <i>Sedum spathulifolium</i>	None. No suitable habitat on site.

Table 3. Special Status Wildlife Species and their Predicted Occurrence Within the Pacific Bicycle Connectivity North Project Study Area, City of Half Moon Bay, Dec 2019 (Montara Mountain and Half Moon Bay Quads)

SPECIES	STATUS	HABITAT	POTENTIAL OCCURRENCE ON SITE
Mission blue butterfly <i>Plebejust icarioides missionensis</i>	FE	Grasslands with <i>Lupinus albifrons</i> for larval foodplant	None; no suitable habitat on site.
Myrtle's silverspot butterfly <i>Speyeria zerene myrtleae</i>	FE	Coastal dunes/hills	None. Extirpated from San Mateo County
Fish			
Steelhead <i>Oncorhynchus mykiss</i>	FT, CH- A	Perennial creeks and rivers with gravels for spawning.	None known from this perennial creek, and low water levels in creek do not provide suitable habitat. Closest recorded site is Frenchmen Creek 0.7 mi to south.
Longfin smelt <i>Spirinchus thaleichthys</i>	FC, ST	Open waters of estuaries, at bottom of water	None; no suitable habitat on site.
Amphibians			
California giant salamander <i>Dicamptodon ensatus</i>	CSC	Adults utilize moist forests adjacent to perennial creeks and rivers; aquatic breeding	None, no suitable habitat on site.
California red-legged frog <i>Rana draytonii</i>	FT, CSC, CH-P	Breed from Dec to early April in marshes, estuaries, ponds, and off-channel areas of creeks with still water at least into June. Some adults may disperse into areas with moist, dense vegetation during non-breeding season.	No breeding habitat on site. May disperse during non-breeding season to dense vegetation in perennial and intermittent drainages. Closest known occurrence is in Frenchmen Creek 0.7 mi to south.
Reptiles			
Western pond turtle <i>Emys marmorata</i>	CSC	Creeks and ponds with water of sufficient depth for escape cover, and structure for basking; grasslands or bare areas for nesting.	None; no suitable habitat on site.
San Francisco garter snake <i>Thamnophis sirtalis tetrataenia</i>	FE, SE, FP	Creeks and ponds with adjacent open grasslands for upland refugia	No records known near project site; unlikely due to low water levels in creeks, lack of ponds.
Birds			
Ridgeway's rail <i>Rallus obsoletus obsoletus</i>	FE, SE, FP	Salt and brackish water marshes with sloughs in SF Bay	None. No suitable habitat on site.

Table 3. Special Status Wildlife Species and their Predicted Occurrence Within the Pacific Bicycle Connectivity North Project Study Area, City of Half Moon Bay, Dec 2019 (Montara Mountain and Half Moon Bay Quads)

SPECIES	STATUS	HABITAT	POTENTIAL OCCURRENCE ON SITE
Marbled murrelet <i>Brachyramphus marmoratus</i>	FT, SE	Nests in old growth forest of redwood or fir with large branches for nest platforms; forages on fish in ocean/large lake	None; no suitable habitat on site.
Burrowing owl <i>Athene cunicularia</i>	CSC	Open low growing grasslands with suitable burrows	None, no suitable habitat on project site.
Loggerhead shrike <i>Lanius ludovicianus</i>	CSC	Nests in shrub habitat with surrounding grasslands or open areas for foraging	No suitable habitat on project site.
Saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	CSC	Nests in dense vegetation at water's edge of ponds, estuaries, creeks	None; no suitable habitat on site. Closest known occurrence is lower Frenchman's Creek 1 mi south.
Alameda song sparrow <i>Melospiza melodia pusillula</i>	CSC	Nests in salt marshes of South SF Bay	None; no suitable habitat on site.
Mammals			
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CSC	Roosts in cave and man-made buildings; very sensitive to disturbance	None; no suitable habitat on site.
Pallid bat <i>Antrozous pallidus</i>	CSC	Roosts in caves, hollow trees, mines, buildings, bridges, rock outcroppings	None; no suitable habitat on site.
Big free-tailed bat <i>Nyctinomops macrotis</i>	CSC	High cliffs or rocky outcrops for roosting	None; no suitable habitat on site.
San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	CSC	Woodlands, scrub, riparian where sticks available to build their houses	May occur in vegetation adjacent to perennial creek.
American badger <i>Taxidea taxus</i>	CSC	Grasslands with friable soils	None; no suitable habitat on site.

¹ Key to status: FE=Federally listed as endangered species; FT=Federally listed as threatened species; FP=Fully protected species by State; SE= State listed as endangered species; ST=State listed as threatened species; SCT=State candidate for listing as threatened species; CSC=California species of special concern.

3.0 IMPACT AND MITIGATION DISCUSSION

The thresholds of significance presented in the CEQA Guidelines, updated December 2018, were used to evaluate project impacts and to determine if implementation of the proposed Project would pose significant impacts to botanical resources. For this analysis, significant impacts are those that substantially affect, either directly or through habitat modifications:

- a) A species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- b) Riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- c) State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- d) 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;
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation plan, or other approved local, regional, or state habitat conservation plan.

3.1 ENVIRONMENTAL IMPACTS OF THE PROJECT

The following impact and mitigation discussion use measures approved in the *City of Half Moon Bay Bicycle and Pedestrian Master Plan Project, Initial Study / Mitigated Negative Declaration*, approved by the City Council in September 2019. The Pacific Coast Bicycle Connectivity North Project is considered an “off- street project”, as per the City’s Bicycle and Pedestrian Master Plan. This biological assessment report was prepared as per the approved IS/MND which requires a biological report be prepared for any development with sensitive habitat or special-status plant species nearby. The biological report includes a map of sensitive natural communities, as well as measures to protect sensitive natural communities, as outlined below.

For the Pacific Coast Bicycle Connectivity North Project, the following special status species have potential to occur on site:

- California red-legged frog (CRLF)
- San Francisco dusky-footed woodrat (SFDW)
- Nesting Birds

The project area does not provide suitable habitat for roosting bats, Monarch butterfly, San Francisco garter snake, or special status plant species.

The project area supports the following sensitive/regulated habitats (ESHA):

- Central coast riparian scrub (arroyo willow thickets)
- Coastal freshwater marsh (within creek and drainage ditches)
- Roosevelt Ditch (perennial creek)

a) Special Status Reptiles, Amphibians, Birds, and Mammals

CRLF and SFDW could occur in the creek/riparian area. Due to the presence of riparian woodland the project would adhere to the Zoning Code 18.38.075 and LCP Policies 3-7 to 3-13 to ensure impacts to riparian associated species are minimized.

CRLF could be present in or move into the work area during construction activities near wetlands, watercourses and ditches, or other riparian areas. Direct impacts to CRLF could occur if individuals of these species travel or migrate into work areas and become trapped or crushed, or if harassment occurs resulting in altered behavioral patterns that impact survival. However, **Mitigation Measure BIO-1**, would be applied to this construction project within or adjacent to suitable CRLF habitat to reduce potentially significant impacts to this species.

Construction activities could result in indirect impacts to CRLF if stormwater carries pollutants or sediment into the creek and associated riparian habitat, as well as into the wetlands and drainages ditches within the project area. However, **Mitigation Measure BIO-1**, would be applied to this project to reduce potentially significant impacts to this species.

San Francisco dusky-footed woodrat (SFDW) houses could be present within the willow scrub. SFDW houses could be destroyed, and individuals could be injured or killed during construction if a woodrat house is present within the trail project work area. However, **Mitigation Measure BIO-1**, would be applied to this construction project to reduce potentially significant impacts to this species.

Impact BIO-1: Construction activities could result in direct or indirect impacts to CRLF and SFDW, two special-status animal species, that could occur in the trail extension work area.

Mitigation Measure BIO-1: Half Moon Bay Zoning Code 18.35.035 requires that a qualified biologist prepare a biological report prior to any project within 100 feet of any sensitive habitat area, riparian corridor, bluffs, sea cliffs, or wetlands. As a result, this biological report has been prepared for the proposed project.

To supplement the requirements of Zoning Code 18.35.035, **Mitigation Measure BIO-1** requires that the following measures be implemented prior to and during construction when the biological report identifies that BP Master Plan projects are within or adjacent to suitable habitat for special-status animal species to avoid harming special-status wildlife species. For this project, measures pertaining to the California red-legged frog (CRLF) and San Francisco dusky-footed woodrat (SFDW) are applicable. The project biologist will have some discretion on determining if all the mitigation measures listed below are applicable to the project, based on field conditions, professional judgement, species presence/absence and other site features, and in coordination/approval by the City.

All Species and CRLF

- a) Work Area Delineation. Prior to any construction activities, the work area and any staging areas shall be delineated with wildlife exclusion fencing and/or high-visibility orange construction fencing.
- b) Worker Environmental Awareness Training. A qualified biologist shall conduct an employee education program prior to any construction. The education program shall consist of a brief presentation to explain biological resources concerns to contractors, their employees, and any other personnel involved in construction of the project. The program shall include, at a minimum, the following: a description of relevant special-status species, nesting birds, and bats along with their habitat needs as they pertain to the project area; a report of the occurrence of these species in the project vicinity, as applicable; an explanation of the status of these species and their protection under the federal and state regulations; a list of measures being taken to reduce potential impacts to natural resources during project construction and implementation; instructions to follow in the case of observing a special-status species on the work site, and a summary of the penalties for violating local, state, and/or federal law regarding special-status species. A fact sheet conveying this information shall be prepared for

distribution to the above-mentioned people and anyone else who may enter the project area. Upon completion of training, employees shall sign a form stating that they attended the training and agree to all the conservation and protection measures.

- c) Flagging Sensitive Vegetation. Prior to initiation of any construction activities within the vicinity of sensitive habitat, a qualified biologist shall clearly delineate the sensitive habitat areas.
- d) Pre-construction Survey for Special-Status Species. A qualified biologist shall conduct a pre-construction survey within the construction area for the presence of CRLF and SFDW (within a 50-foot buffer from the project area boundary, if possible). The survey will be conducted immediately prior to the initial onset of construction activities. If any of these, or other special-status, species are found, work will not commence until the appropriate state and/or federal resource agencies are contacted and avoidance and mitigation measures are in place.
- e) Construction Site Sanitation. Food items may attract wildlife into the construction site, which will expose them to construction-related hazards. The construction site shall be maintained in a clean condition. All trash (e.g., food scraps, cans, bottles, containers, wrappers, and other discarded items) will be placed in closed containers and properly disposed of.
- f) Species Discovery. If an animal is found at the work site and is believed to be a protected species, work shall be halted, and a qualified biologist shall be contacted for guidance. Care must be taken not to harm or harass the species. No wildlife species shall be handled and/or removed from the construction area by anyone except agency-approved biologists.
- g) Wildlife Exclusion Fence. In areas where suitable habitat is present for CRLF (e.g., creeks, wetlands, watercourses and ditches), prior to any ground disturbance in the project area, an agency approved temporary wildlife exclusion barrier shall be installed along the limits of disturbance. An agency-approved biologist shall inspect the area prior to installation of the barrier. The barrier shall be designed to allow the CRLF to leave the impact area and prevent them from entering the impact area, and will remain in place until all development activities have been completed. This barrier shall be inspected daily and maintained and repaired as necessary to ensure that it is functional and is not a hazard to CRLF on the outer side of the barrier. The fence shall be a minimum of three feet in height, buried in the soil at least four inches, and the base backfilled to form a tight seal to discourage CRLF from crawling under and entering the work area. If the fence cannot be buried, the base shall be weighed down and sealed with gravel bags.
- h) Silt Fencing. As work will disturb soil, silt fencing shall be installed between any waterbodies (e.g., creeks, watercourses and ditches, wetlands) and the trail work area. A silt barrier can be added to the wildlife exclusion fence instead to minimize the amount of fencing installed. During construction, the fence shall be checked every day for damage or breaks before construction activities commence. Any damage to the fence shall be repaired in a timely manner.
- i) Daily Fence Inspections. While any wildlife exclusion fencing is present in the project area, a qualified biologist shall inspect the area inside of the exclusion fence for CRLF every day before construction activities commence. If CRLF are found, construction activities shall not be allowed to start until the USFWS and/or CDFW are consulted and have approved an appropriate course of action. Such action could include leaving the animal alone to move away on its own or the relocation of the animal to outside of the work area by an agency-approved biologist.
- j) Wildlife Entrapment. The contractor shall avoid the use of monofilament netting, including its use in temporary and permanent erosion control materials. All holes greater than one-foot deep must be sealed overnight to prevent the entrapment of wildlife. Where holes or trenches cannot be sealed, escape ramps that are no greater than 30 percent slope shall be positioned such that entrapped wildlife will be able to escape. The escape ramps should be at least one-foot wide and covered/fitted with a material that provides traction.
- k) Daily Species Inspections for Open Trenches or Holes. A qualified biologist and/or contractor trained by a qualified biologist shall inspect any open trenches or holes within the project areas with suitable habitat for CRLF every day before construction activities commence. If any CRLF are

found, construction activities will not be allowed to start and the USFWS and CDFW are consulted on an appropriate course of action.

San Francisco Dusky-Footed Woodrat (SFDW)

If any SFDW houses are found in the project area, they shall be marked in the field with flagging and their location shall be recorded with a Global Positioning System unit. If a SFDW house is identified within an area of disturbance, the City shall attempt to preserve the house and maintain an intact dispersal corridor between the house and undisturbed habitat. An adequate dispersal corridor is considered to be a minimum of 50 feet wide and have greater than 70 percent vegetative cover. Even if such a corridor is infeasible, the City shall avoid physical disturbance to the woodrat house, if feasible. If the woodrat house cannot be avoided, CDFW shall be notified and information regarding the house location(s) and relocation plan shall be provided to the CDFW for review and approval. With approval from CDFW, a qualified biologist shall dismantle and relocate the house material. Prior to the beginning of construction, a qualified biologist shall deconstruct the house by hand. Materials from the house shall be dispersed into adjacent suitable habitat that is outside of the disturbance area. During the deconstruction process the biologist shall attempt to assess if there are juveniles in the house. If immobile juveniles are observed, the deconstruction process shall be discontinued until a time when the biologist believes the juveniles will be fully mobile. A 10-foot wide no-disturbance buffer will be established around the house until the juveniles are mobile. The house may be dismantled once the biologist has determined that adverse impacts on the juveniles would not occur. All disturbances to woodrat houses will be documented in a construction monitoring report and submitted to City.

Nesting Birds

Nesting birds are potentially present in the willow scrub, ruderal area, or adjacent cypress tree rows of the project area. If trail extension activities are started during the nesting bird season (generally February 1 to September 15), injury to individuals or nest abandonment could occur. In addition, noise and increased construction activity could temporarily disturb nesting or foraging activities, potentially resulting in the abandonment of nest sites. However, as part of the City's standard conditions, as adopted as part of the *City of Half Moon Bay Bicycle and Pedestrian Master Plan Project, Initial Study / Mitigated Negative Declaration*, approved by the City Council in September 2019, the City would conduct a survey for nesting birds no more than five days prior to construction in order to reduce potentially significant impacts to nesting birds, as listed below.

Standard Procedures and Conditions of Approval - Nesting Birds. Surveys for nesting birds as required by federal, state, and local regulations would be undertaken in areas where suitable habitat for such species is present to minimize potential adverse impacts to these species. When construction and construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, tree removal, vegetation removal, fence installation, demolition, and grading) occur within the avian nesting season (from February 1 to September 15), all suitable habitat within the area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed prior to start of work. Active nesting is defined as a bird building a nest, sitting in a nest, a nest with eggs or chicks in it, or adults observed carrying food to the nest. The results of the surveys shall be documented and provided to the City. If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence

installation, demolition, and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring will be required to ensure compliance with relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

Effectiveness: These above measures would avoid significant impacts to special-status animal species.

Implementation: These measures shall be performed by a qualified biologist or overseen by a qualified biologist. The results of the preconstruction survey, documentation of the employee education (hand-out and sign-in sheet), and a record of the daily fence and species inspections shall be submitted to the City. The City and wildlife agencies, as appropriate, shall be notified immediately if a special-status species is discovered during construction.

Timing: Prior to and during construction activities.

Monitoring: A qualified biologist shall perform daily inspections of the work site during construction. A record of the daily inspections shall be submitted to the City.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Sensitive vegetation communities and ESHA, including riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or designated by the USFWS and CDFW or the City's LCP and/or Zoning Code occur within the project area. These habitats include riparian scrub, coastal freshwater marsh (within drainage ditches), and Roosevelt Ditch. As a portion of the project area will occur within riparian scrub (e.g., spanning bridge over creek and boardwalks/puncheons) the project is required to adhere to Zoning Code 8.38.075 and Half Moon Bay LCP policies 3-7 to 3-13 and permits from the CDFW, USACE, and/or RWQCB would need to be obtained. Mitigation Measure BIO-4 from the *City of Half Moon Bay Bicycle and Pedestrian Master Plan Project, Initial Study / Mitigated Negative Declaration* would be applied to the project to reduce potentially significant impacts to sensitive natural communities. These measures are outline below in **Mitigation Measure BIO-2.**

Trail layout has been designed to reduce and avoid impacts to these sensitive natural vegetation communities. The project avoids impacts to the coastal freshwater marsh (within drainage ditches) and the bed and bank of the perennial creek; however, alteration of the riparian scrub would occur. The placement of the spanning bridge over the perennial creek and raised boardwalk/puncheons in low-lying riparian scrub will reduce impacts. Initial estimates of trail construction impacts were approximately 6,125 square feet (0.14 acre) of willow scrub. Approximately 3,675 square feet (0.008 acre) of this area would be temporarily affected during the construction period and this area can be revegetated on-site. The trail could permanently impact up to 2,450 square feet (0.056 acre) of willow scrub (footprint of trail and bridge). These estimates were developed before the unauthorized SAM work and may be reduced in the future based on further evaluation and mitigation requirements for the SAM project.

In addition, the project could have potentially significant impacts to sensitive natural communities, where construction activities could indirectly cause the degradation of surface or ground water quality due to

erosion and transport of fine sediments downstream of the construction area and unintentional release of contaminants into waters that are outside of the footprint of the project.

Impact BIO-2: The project could inadvertently lead to the loss of sensitive vegetation communities. Although the project has been designed to avoid sensitive vegetation communities (e.g., ESHA) through the use of a free-spanning bridge and raised boardwalks/puncheons, the project will result in loss of sensitive vegetation communities or the loss of habitat quality. The vegetation will be restored in close proximity to the disturbed area in a manner that enhances the connectivity of the vegetation community. When not feasible, offsite mitigation will be implemented. The City has off-site areas that would be available for the mitigation.

Mitigation Measure BIO-2: The Coastal Commission provides guidance on implementing compensatory mitigation. Recommended California Coastal Commission standards are 10:1 for native tree replacement, 4:1 for wetlands, and 3:1 for riparian habitats. Other regulatory agencies may establish other requirements including restoration (e.g., removing non-native plants and planting native vegetation) in similar habitat adjacent to the project (i.e., area of disturbance).

The City shall prepare a Restoration and Monitoring Plan for the permanent loss of up to 2,450 square feet (0.056 acre) of willow scrub and the temporary loss of approximately 3,675 square feet (0.008 acre) of willow scrub. The Restoration and Monitoring Plan will be prepared in coordination with the restoration plan that SAM will be required to implement through their separate permitting process. The Restoration and Monitoring Plan shall be made available to the public for review for a period of at least 30 days prior to Plan implementation. The Plan shall describe the methods and practices to be employed, and include, at a minimum, the following:

- A clear statement of the goals of the restoration for all habitat types;
- Designation of a qualified biologist as the Restoration or Mitigation Manager responsible for all phases of the restoration;
- Identification of the parties responsible for the Plan implementation;
- A specific grading plan, if the topography must be altered;
- A specific erosion control plan, if soil or other substrate will be disturbed during restoration;
- A weed eradication plan designed to eradicate existing weeds and control future invasion by exotic species;
- A planting plan based on the natural habitat type;
- An irrigation plan that describes the method and timing of watering and ensures removal of watering infrastructure by the end of the monitoring period;
- A monitoring plan with performance goals/success criteria, assessment methods, and a schedule; and
- Feasible contingency measures if success criteria are not met within the established timeframe.

Effectiveness: This measure would avoid significant impacts on sensitive vegetation communities.

Implementation: A Restoration and Monitoring Plan shall be prepared for impacts to the riparian scrub. The Restoration and Monitoring Plan shall be made available to the public for a review period of at least 30 days prior to the Plan implementation.

Timing: During and following construction.

Monitoring: Any restoration and monitoring work shall be documented and submitted to the City. Monitoring shall be continued until the success criteria identified in the Restoration and Monitoring Plan are met.

d) 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 project will be constructed in an undeveloped area within the State Highway 1 ROW. The presence of State Highway 1 limits the areas use as a significant wildlife movement corridor or wildlife nursery sites, except for the areas supporting riparian scrub and the bed and bank of the perennial creek. Implementation of the proposed project is not expected to substantially interfere with the movement of wildlife species. Trail implementation would have temporary construction impacts that may affect wildlife movement (e.g., through grading or noise), but are not expected to result in permanent barriers to wildlife movement; therefore, the project is not expected to significantly impact wildlife movement.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including the County Heritage and Significant Tree Ordinances)?

As part of the design and planning process for the project, the City will comply with the policies of the LCP, Chapter 18.38 of the Zoning Code, and the Heritage Tree Ordinance. Implementation of the trail extension project will be designed, constructed and maintained in a manner consistent with all relevant City regulations. The City will review the project design to ensure its conformance with adopted City policy and regulations intended to prevent significant impact to sensitive biological resources. Therefore, the project would not conflict with local policies. In addition, the Standard Conditions and Mitigation Measures presented in the adopted *City of Half Moon Bay Bicycle and Pedestrian Master Plan Project Initial Study / Mitigated Negative Declaration* are consistent with the City's General Plan and LCP policies and ensure that special-status wildlife and vegetation, sensitive vegetation communities, and aquatic resources are protected.

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

The project is not located within an area covered by an HCP or NCCP. The project would, therefore, have no impacts on an HCP or NCCP.

LITERATURE CITED AND REFERENCES

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INTENDED USE OF THIS REPORT

The findings presented in this biological report are intended for the sole use of the Alta Planning + Design and the City of Half Moon Bay and related agencies in evaluating the proposed project. The findings presented in this report are for information purposes only; they are not intended to represent the interpretation of any State, Federal or City law or ordinance pertaining to permitting actions within sensitive habitat or endangered species. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.