4.1 BIOLOGICAL RESOURCES

This section analyzes potential impacts to biological resources as a result of construction of the proposed Riverfront Project (Project). The section is based on a review of evaluations conducted for the Project and Project site. This EIR tiers from the City of Santa Cruz Downtown Plan Amendments EIR (SCH#2017022050), which was certified on November 14, 2017, and which includes evaluation of potential impacts to biological resources resulting from development in the downtown area, including the Project site. This section also draws from the City of Santa Cruz *General Plan 2030* EIR (SCH#2009032007), which was certified on June 26, 2012, regarding background information on biological resources within the City and Project area. Relevant sections of both EIRs are incorporated by reference in accordance with section 15150 of the State CEQA Guidelines. Relevant discussions are summarized in subsection 4.4.1; the specific sections that are relied upon and incorporated by reference in this EIR are identified in section 4.4.1. Both EIRs are available for review at the City of Santa Cruz Planning and Community Development Department (809 Center Street, Room 101, Santa Cruz, California) by appointment¹. Both EIRs are also available online on the City's website at:

- Downtown Plan Amendments EIR
 <u>http://www.cityofsantacruz.com/Home/Components/BusinessDirectory/BusinessDirectory/</u>
 <u>101/2849</u>
- General Plan 2030 EIR
 <u>http://www.cityofsantacruz.com/government/city-departments/planning-and-community-</u>
 development/long-range-policy-planning/general-plan

Public and agency comments related to biological resources impacts were received during the public scoping period in response to the Notice of Preparation (NOP). Issues raised in these comments include:

- Concern was expressed regarding habitat modification and habitat loss due to placement of fill adjacent to the San Lorenzo River levee.
- □ Project and cumulative effects on riparian habitats should be evaluated.
- Clarification of location of building windows.
- □ Impacts to wildlife movement and nesting birds.
- □ Concern was expressed regarding -potential bird collisions due to building glass and nighttime lighting, and measures should be included to prevent bird collisions.
- Discussion of the San Lorenzo Urban River Plan (SLURP).

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by

¹ Contact Samantha Haschert at <u>SHaschert@cityofsantacruz.com</u> or by phone at (831)-420-5196 to make an appointment to review the EIR. See section 1.4.2 of this EIR for further information.

responsible agencies, they are identified and addressed within this EIR. Public comments received during the public scoping period are included in Appendix A.

4.1.1 Environmental Setting

Regulatory Setting

Federal Regulations

The United States Fish and Wildlife Service (USFWS) is responsible for the protection of terrestrial and freshwater organisms through the federal Endangered Species Act and the Migratory Bird Treaty Act, while the National Oceanic and Atmospheric Administration National Fisheries (NOAA Fisheries) is responsible for protection of anadromous fish (fish that live most of their adult life in saltwater but spawn in freshwater) and marine wildlife. The U.S. Army Corps of Engineers (USACE) has primary responsibility for protecting wetlands and jurisdictional "other waters of the U.S." under Section 404 of the Clean Water Act. A brief summary of relevant laws is provided below, and a full description is provided on pages 4.3-1 to 4.3-6 of the Downtown Plan Amendments EIR (Draft EIR volume) and on pages 4.8-1 to 4.8-6 of the General Plan 2030 EIR (Draft EIR volume), which are incorporated by reference.

Federal Endangered Species Act. The federal Endangered Species Act (ESA) of 1973 (Title 16 United States Code, Section 1531 *et seq.*, as amended) prohibits federal agencies from authorizing, permitting or funding any action that would result in biological jeopardy to or take of a species listed as threatened or endangered. NOAA Fisheries jurisdiction under the ESA is limited to the protection of marine mammals and fish and anadromous fish; all other species are within USFWS jurisdiction. ESA defines "take" to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Exemptions to the prohibitions against take may be obtained through coordination with the USFWS through interagency consultation for projects with federal involvement (i.e., funded, authorized, or carried out by a Federal agency) pursuant to Section 7 of the ESA; or through the issuance of an incidental take permit under Section 10(a)(1)(B) of the ESA if the applicant submits a habitat conservation plan (HCP) that meets statutory requirements including components to minimize and mitigate impacts associated with the take.

Birds of Conservation Concern. USFWS' *Birds of Conservation Concern* (BCC) (2008) was developed to fulfill the mandate of the 1988 amendment to the Fish and Wildlife Conservation Act (Public Law 100-653 (102 Stat. 3825) to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973" (U.S. Fish and Wildlife Service, September 2015). The overall goal of the Birds of Conservation Concern is to accurately identify the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the highest conservation priorities.

Migratory Bird Treaty Act. All migratory birds and their nests are federally protected under the Migratory Bird Treaty Act of 1918 (MBTA) (Title 16 United States Code, Section 703-712 as amended; 50 Code of Federal Regulations Section 21; and 50 Code of Federal Regulations Section 13) and by California Department of Fish and Wildlife codes that support the act. The MBTA makes it unlawful to "take" any migratory bird or raptor listed in the 50 Code of Federal Regulations Section 10, including their nests, eggs or products.

Wetlands and Waters of the U.S. The USACE has regulatory authority for activities within wetlands under the Clean Water Act (CWA, 1977, as amended), which serves as the primary federal law protecting the quality of the nation's surface waters. Section 404 of the CWA establishes a program to regulate discharge of dredged or fill material into "waters of the United States," which is administered by the USACE. The term "waters" includes wetlands and non-wetland bodies of water that meet specific criteria as defined in the Code of Federal Regulations. In general, a permit must be obtained before fill can be placed in wetlands or other waters of the U.S. The type of permit depends on the amount of acreage and the purpose of the proposed fill, subject to discretion of the Corps. Under Section 404, general permits may be issued on a nationwide, regional, or state basis for particular types of activities that will have only minimal adverse impacts. Individual permits are required for projects with potentially significant impacts.

Under section 401 of the CWA, the California Regional Water Quality Control Boards RWQCB) have regulatory authority over actions in waters of the U.S. through issuance of water quality certifications, which are issued in combination with permits issued by the USACE under section 404 of the Clean Water Act. A 401 Certification is required from the RWQCB whenever improvements are made within Jurisdictional Waters of the U.S.

State Regulations

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act and protects streams and water bodies through the Streambed Alteration Agreement under Section 1600 of the California Fish and Game Code (CFGC 2005).

California Endangered Species Act. The 1984 California Endangered Species Act (CESA) (Fish & Game Code, Section 2050-2098) declares that deserving plant or animal species be given protection by the State because they are of ecological, historic, educational, recreational, aesthetic, economic, and scientific value to the people of the State. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the CDFW. CESA authorizes that entities may take plant or wildlife species listed as endangered or threatened under FESA and CESA, pursuant to a federal incidental take permit issued in accordance with Section 10 of the FESA, if the CDFW certifies that the incidental take statement or incidental take permit is consistent with CESA (Fish & Game Code, Section 2080.1(a). Section 2081(b) and (c) of the CESA allows CDFG to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b).

Species of Special Concern and Fully Protected Species. In addition to lists of designated Endangered, Threatened, and Rare plant and animal species, the CDFW maintains a list of animal "Species of Special Concern," most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status under the CESA, the CDFW recommends considering these species during analysis of proposed project impacts to protect declining populations, and to avoid the need to list them as threatened or endangered in the future. These species may "be considered rare or endangered [under CEQA] if the species can be shown to meet the criteria". Additionally, the California Fish and Game Code contains lists of vertebrate species designated as "Fully Protected" (California Fish & Game Code 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], and 5515 [fish]. No Section 2081(b) permit may authorize the take of "fully protected" species and "specified birds." If a project is planned in an area where a species or specified bird occurs, an applicant must design the project to avoid all take; the CDFG cannot provide take authorization under CESA.

Fish and Game Code Sections 3503, 3511, 3513, 4150. Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3511 states fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act. All nongame mammals, including bats, are protected by California Fish and Game Code 4150.

Streambed Alteration Agreements. Jurisdictional authority of the CDFW over stream areas is established under Section 1600 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. Section 1602 of the Fish and Game Code stipulates that it is unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake without notifying the CDFG, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. Typical activities that require a Streambed Alteration Agreement include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

Native Plant Protection. The Native Plant Protection Act of 1977 (NPPA) and implementing regulations pursuant to Section 1900 et seq. of the Fish and Game Code designate rare and endangered plants and provide specific protection measures for identified populations. It is administered by the CDFG. The NPPA was enacted to "preserve, protect and enhance endangered or rare native plants of this state." The NPPA defines a plant as endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes. A rare plant is defined as a plant species that, though not presently threatened with extinction, occurs in such small numbers throughout its range that it may become endangered if its present environment worsens. The NPPA prohibits the take or sale of rare and endangered species in California, except for some exemptions provided by the law.

The California Native Plant Society has prepared and regularly updated an "Inventory of Rare and Endangered Vascular Plants of California." In general, the CDFW qualifies plant species on List 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere) or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* for consideration under CEQA. Species on CNPS List 3 (Plants About Which We Need More Information--A Review List) or List 4 (Plants of Limited Distribution--A Watch List) may, but generally do not, qualify for consideration under CEQA.

Local Regulations

Local Coastal Program (LCP). The Coastal Act defines an "environmentally sensitive area" as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Coastal Act section 30107.5). The City's existing certified LCP identifies sensitive habitats, and LCP policies seek to preserve and enhance the character and quality of riparian and wetland habitats (EQ 4.2). A separate Creeks Management Plan and policies related to the San Lorenzo River also are part of the LCP as further described below.

Management Plans. Resource management plans have been adopted by the City for management along creeks and within City-owned open space lands. Two plans are pertinent to the Project area. The *City-Wide Creeks and Wetlands Management Plan* was adopted by the City in 2007 and approved by the California Coastal Commission as a LCP amendment in October 2007. The *San Lorenzo River Urban Management Plan* was adopted in 2003 for the portion of the river south of Highway 1. Policies developed from recommendations in this plan were included in the LCP as a Coastal Commission-approved LCP amendment in 2004.

The *City-Wide Creeks and Wetlands Management Plan* provides a comprehensive approach to managing all creeks and wetlands within the City. Long-term goals to manage these resources include reduction and/or elimination of pollutants; improvement of water quality; improvement and restoration of natural habitat; and increased public awareness of the value of watershed quality. The *City-wide Creeks and Wetlands Management Plan* establishes requirements for structural setbacks and development standards and guidelines that would be applicable to future development along watercourses within the City. Properties within the "management area" defined in the Plan must comply with provisions of the Plan regarding riparian and development setbacks unless an area is governed by a specific management plan. The recommended setbacks within a designated management area includes a riparian corridor, a development setback area, and an additional area that extends from the outward edge of the development area. The riparian corridor² is adjacent to the watercourse and is the width of a riparian and/or immediate watercourse influence area. The

² The riparian corridor is intended to provide an adequate riparian width to maintain or enhance habitat and water quality values. Allowable uses within the riparian corridor are limited.

development setback area³ is the area outward from the edge of the designated riparian corridor where development is restricted, providing a buffer between the riparian corridor and development. All distances are measured from the centerline of the watercourse outward. The *Plan* establishes the requirements for obtaining a Watercourse Development Permit, and specifies uses permitted within the designated management area, development setback area and riparian corridor.

The *San Lorenzo Urban River Plan* (SLURP) is the outcome of a planning process initiated by City Council in 1999 to update previous plans for the San Lorenzo River that guided flood control, vegetation restoration and public access improvements along the San Lorenzo River. The Plan contains recommendations for habitat enhancement, as well as public access and ideas to promote river-oriented development. One of the key goals of the plan is to enhance and restore biotic values of the river, creek and marsh fish and wildlife habitat.

Municipal Code Regulations. Section 24.14.080 of the City's Municipal Code includes provisions to protect wildlife habitat and protected species for areas specified in the City's existing General Plan (Maps EQ-8 and EQ-9). Section 24.08.21 also regulates development adjacent to city watercourses, consistent with provisions of the adopted *City-Wide Creeks and Wetlands Management Plan*, including requirements for issuance of a "watercourse development permit."

Chapter 9.56 of the City Municipal Code defines heritage trees, establishes permit requirements for the removal of a heritage tree, and sets forth mitigation requirements as adopted by resolution by the City Council. Heritage trees are defined by size, historical significance, and/or horticultural significance, including but not limited to those which are: (1) unusually beautiful or distinctive; (2) old (determined by comparing the age of the tree or shrub in question with other trees or shrubs of its species within the city); (3) distinctive specimen in size or structure for its species (determined by comparing the tree or shrub to average trees and shrubs of its species within the city); (4) a rare or unusual species for the Santa Cruz area (to be determined by the number of similar trees of the same species within the city); or (5) providing a valuable habitat. Resolution NS-23,710 adopted by the City Council in April 1998 establishes the criteria for permitting removal of a heritage tree. City regulations require tree replacement to include replanting three 15-gallon or one 24-inch size specimen or the current retail value which shall be determined by the Director of Parks and Recreation, and LCP Policy 6.1.2 requires a two-for one or more replacement planting and maintenance program when tree removal is necessary for new development.

Existing Vicinity Biological Resources

The downtown area, including the Project site, is developed and does not support special status species or sensitive habitat. However, the Project site is located adjacent to the western San Lorenzo River levee. The San Lorenzo River and associated habitats in the Project area are summarized in the

³ The development setback width is intended to provide an appropriate water quality and habitat buffer between the riparian corridor and development within the remaining management area. New development generally would be limited in this area to landscaping and limited pervious surfaces.

following section. The following overview of biological resources in the Project area is summarized from the Downtown Amendment EIR (pages 4.9-6 to 4.9-16 of the Draft EIR volume), which is incorporated by reference.

San Lorenzo River

The San Lorenzo River is the major watercourse through the City and a major physical feature in the City. The river originates in the Santa Cruz Mountains and traverses through the center of the City. Following severe flooding in downtown Santa Cruz in the winters of 1938, 1941, and 1955, the USACE completed a flood control project along San Lorenzo River in 1959 that created a channelized flood control channel for the river's lower 2.5 miles below Highway 1. The project included rip-rap levee banks, removal of all vegetation from the banks, and dredging of the river channel bottom. Significant flood improvements along the river were completed in 2000 as part of the USACE's San Lorenzo River Flood Control and Environmental Restoration Project. This project raised the river levee heights, provided landscaping and improved the pedestrian/bicycle path on the levee, and rehabilitated three of the four downtown bridges (over the San Lorenzo River) to increase flood flow capacity. The habitat enhancement efforts focused on the land side of the levees, which were landscaped with native trees, shrubs, and groundcover, including areas adjacent to the Project site.

The Project site is within the "Transitional Reach" of the San Lorenzo River as described in the SLURP. This reach includes the area from Laurel Street Bridge to the Water Street Bridge. Water levels in this area are influenced by seasonal, naturally-occurring closures at the downsteam river mouth. When a sandbar creates a closed lagoon at the river mouth, this reach fills with freshwater; at times when there is no sandbar closure, extreme tides can bring saltwater into this reach. During most of the year, this reach is freshwater and includes important riparian habitat areas along San Lorenzo Park to the north of the study area (City of Santa Cruz 2003).

The habitat types most common along the San Lorenzo River within the City of Santa Cruz are ruderal grassland, mixed riparian forest, willow thickets, freshwater marsh, and brackish water tule marsh. The three most prevalent plant communities along the river in the Project area are urban landscape, ruderal grassland and mixed riparian forest (City of Santa Cruz, October 2017-DEIR volume).

Sensitive Habitat Areas

Sensitive habitats generally include riparian habitat and corridors, wetlands, habitats for legally protected species and CDFW Species of Special Concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. The California Natural Diversity Data Base (CNDDB), managed by CDFW, maintains a working list of "high priority" habitats for inventory (i.e., those habitats that are rare or endangered within the borders of California). CNDDB "high priority" habitats are generally considered sensitive habitats under CEQA.

Four habitat types found within the City of Santa Cruz are recognized as sensitive habitat types: freshwater wetland, salt marsh, riparian forest and scrub, and coastal prairie portions of grassland

habitats. Except for freshwater wetland, these habitat types correspond to habitat types that the CNDDB has designated as "high priority." In addition, coastal bird habitat is considered sensitive habitats because of high biological diversity. Additionally, any area supporting a special status species would also be considered a sensitive habitat. Locally, the overwintering monarch butterfly habitat is considered sensitive due to its restricted range and CNDDB ranking as rare. Its habitat is also identified in the City's existing General Plan as being a sensitive habitat. The General Plan sets forth protocols for evaluation of sensitive habitat and sensitive species. For riparian areas, this includes compliance with the *City-Wide Creeks and Wetlands Management Plan*.

The City's existing certified LCP identifies the following sensitive habitats: wetlands, riparian habitat, grasslands, mima mounds⁴ and habitats that support Ohlone tiger beetle, tidewater goby, burrowing owl, California brown pelican, Monarch butterfly, pigeon guillemot, black swift, Santa Cruz tarplant or American peregrine falcon (City of Santa Cruz 1994-Map EQ-9).

Within the downtown area, the San Lorenzo River and riparian habitat are considered sensitive habitats. The river also supports special status species as further described in the following section.

Special Status Species

Special-status species include species listed as Threatened or Endangered under provisions of the federal ESA and species listed as Rare, Threatened, or Endangered by the state of California under provisions of the CESA and NPPA. Species formally proposed for federal listing by the USFWS are afforded limited legal protection under ESA. Other special-status plant species are those on List 1A, List 1B, or List 2 of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*. These species are subject to state regulatory authority under CEQA. California "Species of Special Concern" are given special consideration by the CDFW because they are biologically rare, very restricted in distribution, declining throughout their range, or at a critical stage in their life cycle when residing in California or taxa that are closely associated with a habitat that is declining in California (e.g., wetlands) (City of Santa Cruz, April 2012-DEIR volume).

The Project site is located within the developed downtown area of the City of Santa Cruz, which does not support special status species, although the San Lorenzo River aquatic and riparian habitats are considered sensitive habitat in the City (City of Santa Cruz, October 2017-DEIR volume). The following overview of special status species found in San Lorenzo River habitats in the vicinity of the Project site is summarized from the Downtown Amendment EIR (pages 4.3-8 to 4.3-14) of the Draft EIR volume), which is incorporated by reference.

Special status wildlife species known to occur or have potential to occur within the San Lorenzo River and lower San Lorenzo River include steelhead (*Oncorhynchus mykiss*), coho salmon (*Oncorhynchus kisutch*), tidewater goby (*Eucyclogobius newberryi*), western pond turtle (*Emys marmorata*),

⁴ Mima mounds are a landform of small, distinct raised hummocks amidst shallow depressions, usually supporting native grasslands (City of Santa Cruz, 1994).

tricolored blackbird (*Agelaius tricolor*), and yellow warbler (*Setophaga petechia*). Steelhead and coho salmon are anadromous fish, spending time in both freshwater and saltwater. The coho salmon population in the San Lorenzo River is identified as being nearly extirpated, however the watershed is identified as a focus population for recovery by the NOAA Fisheries (Dudek 2016). Further description of these species is provided below.

- Central California Coast (CCC) Steelhead (Oncorhynchus mykiss). The Central California Coast (CCC) steelhead is a federally-listed threatened species. The CCC steelhead ESU (Evolutionarily Significant Unit) includes steelhead in coastal California streams from the Russian River to Aptos Creek, and the drainages of Suisun Bay, San Pablo Bay, and San Francisco Bay, California. CCC steelhead occur in the San Lorenzo River; the river, including the Project area, is designated as critical habitat for CCC steelhead. "Critical habitat" is habitat key to the survival of threatened and endangered species, which may require special management considerations or protection. Steelhead are present in the San Lorenzo River throughout the year and use the "transitional" reach for migration to and from the upper watershed during winter and spring, typically from December through mid-June. The Project area provides habitat for migrating steelhead adults and smolts, and the reach to the east of the Project site serves as juvenile rearing habitat when lagoon habitat conditions are favorable in summer and fall.
- Central California Coast (CCC) Coho Salmon (Oncorhynchus kisutch). The Central California Coast (CCC) coho salmon is a state and federally-listed endangered species. The CCC coho salmon ESU (Evolutionarily Significant Unit) ranges from Punta Gorda in southern coastal Humboldt County to Aptos Creek in Santa Cruz County, and the drainages of San Francisco Bay, California. CCC coho salmon historically have occurred in San Lorenzo River. The San Lorenzo River, including the Project site, is designated as critical habitat for CCC coho salmon. For coho salmon, essential habitat types in the Project area include juvenile (smolt) migration corridors and adult migration corridors. The San Lorenzo River is at the extreme southern end of the range of coho salmon. The coho salmon population in the San Lorenzo River is identified as being nearly extirpated, however the watershed is identified as a focus population for recovery by the National Marine Fisheries Service (Hagar Environmental Science, March 2015 as cited in City of Santa Cruz, October 2017-DEIR volume).
- □ Tidewater Goby. Tidewater goby (Eucyclogobius newberryi) is a federally-listed endangered species, but has been proposed for reclassification as threatened. Tidewater goby also is a State Species of Special Concern. The San Lorenzo River, including the Project area, is not within the designated critical habitat for tidewater goby. The tidewater goby is a small, short-lived species that inhabit coastal brackish water habitats entirely within California, ranging from Del Norte County near the Oregon border to northern San Diego County. The species is uniquely adapted to coastal lagoons and the uppermost brackish zone of larger estuaries, rarely invading marine or freshwater habitats. Tidewater goby are present in the San Lorenzo Lagoon and have been observed in the Project area. Tidewater goby was identified in the San Lorenzo Lagoon and lower Branciforte Creek Flood Control Channel in 2004. Prior to that

time, the species was not known to occupy the San Lorenzo River or Lower Branciforte Creek. Tidewater goby were observed as far upstream as the Water Street Bridge during instream debris removal activities in 2016 (City of Santa Cruz, October 2017-DEIR volume).

□ California Species of Special Concern. Western pond turtle and yellow warbler are California "species of special concern," which are taxa given special consideration because they are biologically rare, very restricted in distribution, declining throughout their range, or at a critical stage in their life cycle when residing in California or taxa that are closely associated with a habitat that is declining in California (e.g., wetlands) (City of Santa Cruz, April 2012-DEIR volume). Western pond turtles are known to occur in the San Lorenzo River adjacent to the in the vicinity of the Project site, although they are not known to breed in the Project area (Kittleson, as cited in City of Santa Cruz, October 2017-DEIR volume). No western pond turtle records are known from the lower transitional reach in the Project area, but suitable habitat exists throughout the lower San Lorenzo River.

Yellow warbler is a potential nesting bird species that occurs in occasional high numbers in migration seasons. Yellow warblers seem to favor willow riparian woodlands in the Project area and an average of 3.6 yellow warblers per visit were observed in the fall 2015 surveys. No breeding records are known from the Project impact area, but that may reflect a paucity of breeding season observations (Kittleson Environmental Consulting, June 2016).

Tricolored blackbird is a potential nesting bird species that utilizes dense wetland vegetation like that found along San Lorenzo River north of the Water Street Bridge. There are no records of tricolored blackbird nesting activity in the lower San Lorenzo River or elsewhere in the San Lorenzo Watershed (Kittleson Environmental Consulting, June 2016).

The California red-legged frog (*Rana draytonii*) is a federally listed threatened species that was historically widely distributed in the central and southern portions of California. CRLFs are known to exist in the upper San Lorenzo River watershed in Bean Creek and Mountain Charlie Gulch approximately 8 miles north but are not known to occur at proposed Project site. The closest known breeding site is the pond at the University of California Santa Cruz (UCSC) Arboretum approximately 1.9 miles west of the Project area. CRLFs are also known to occur in the lower Moore Creek Preserve and the upper reaches of Antonelli Pond, approximately 2.5 miles southwest of the proposed Project site (Dudek 2016). CRLFs are not known to occur in the San Lorenzo River or the nearby Neary Lagoon Wildlife Preserve. Other studies in the Project area indicate that the species appears to have been extirpated from the lower San Lorenzo River drainage, and the area was excluded from the USFWS critical habitat designation (City of Santa Cruz 2005). Additionally, scouring flows that occur during winter and into early spring probably make the river unsuitable for breeding (City of Santa Cruz, October 2017-DEIR volume).

Wildlife Movement and Breeding

San Lorenzo River provides habitat for migrating steelhead adults and smolts. For coho salmon, essential habitat types include juvenile (smolt) and adult migration corridors. Although variation occurs in coastal California, steelhead usually live in freshwater for one to three years in central California, then spend an additional one to three years in the ocean before returning to their natal stream to spawn. Steelhead may spawn one to four times over their life. Adult CCC steelhead typically migrate from the ocean to freshwater between December and April, peaking in January and February, and juveniles migrate as smolts to the ocean from January through May, peaking in April and May (Dudek 2016).

Wildlife corridors are segments of land that provide a link between these different habitats while also providing cover. Wildlife dispersal corridors, also called dispersal movement corridors, wildlife corridors or landscape linkages, are features whose primary wildlife function is to connect at least two significant or core habitat areas and which facilitate movement of animals and plants between two or more otherwise disjunct habitats (City of Santa Cruz, April 2012-DEIR volume). Three main corridors have been identified within the City that could provide connectivity between core habitats within or adjacent to the city: western corridor (Moore Creek), central corridor (San Lorenzo River and major tributaries), and eastern corridor (Arana Gulch). The San Lorenzo River and two of its main tributaries, Branciforte Creek and Carbonera Creek, create a potential wildlife corridor in the central portion of the City. Here, a relatively narrow strip of riparian habitat could provide opportunities for wildlife movement between the San Lorenzo River lagoon region and core habitat located within and adjacent Pogonip, UC Santa Cruz, and Henry Cowell (via the San Lorenzo River) and DeLaveaga Park, via Branciforte and Carbonera Creeks (Ibid.).

There are areas along the San Lorenzo River of known bird nesting sites. Native cliff swallows (*Petrochelidon pyrrhonota*), northern rough-winged swallows (*Stelgidopteryx serripennis*) and black phoebes (*Sayornis nigricans*) nest on the bridges that cross the San Lorenzo River. Non-native rock pigeons (*Columba livia*) and house sparrows (*Passer domesticus*) also make use of the bridges. Other native bird species including pie billed grebe (*Podilymbus podiceps*), marsh wren (*Cistothorus palustris*), song sparrow (*Melospiza melodia*), Anna's hummingbird (*Calypte anna*) and hooded oriole (*Icterus cucullatus*) have been observed nesting in the emergent marsh wetland and willow/cottonwood riparian habitats in the transitional reach of the San Lorenzo River. While killdeer (*Charadrius vociferus*) are known to nest downstream in Mike Fox Park, no ground nesting birds are known to successfully nest in the Project area, due to regular human disturbance on the levee slopes and limited available habitat between the levees (City of Santa Cruz, October 2017-DEIR volume).

Biological Resources on the Project Site

According to maps developed for the City's General Plan 2030 and included in the General Plan EIR, the Project site is not within a mapped sensitive habitat area (City of Santa Cruz, April 2012-DEIR Figure 4.8-3e). However, the Project site is located adjacent to the San Lorenzo River levee, which is mapped as a sensitive riparian habitat in the *General Plan 2030*. The river also supports special status

species. The southern portion of the Project site is located within the coastal zone. The San Lorenzo River segment in the coastal zone adjacent to the Project site also is mapped as sensitive riparian habitat in the City's LCP (City of Santa Cruz 1994-Map EQ-9).

The Project site is developed primarily with impervious surfaces and buildings, with some scattered trees and landscaping. The eastern edge of the Project site is situated along the western San Lorenzo River levee. Landside levee slopes were landscaped with a broad assemblage of native and ornamental trees, shrubs and forbs during the 1999-2003 San Lorenzo River Flood Control Improvement Project. A total of 32 existing trees are located on or adjacent to the Project site, including trees on the Project site, street trees on Front Street, and trees planted on the landward side of the on the San Lorenzo River levee, and include the following species:

- 9 cork oak (Quercus suber)
- 5 California sycamore (*Platanus racemosa*)
- 4 box elder (*Acer negundo*)
- 3 London plane trees (*Platanus acerifolia*)
- 3 red oak (Quercus rubra)
- 1 silk tree (Albezia julibrissin)
- 1 European white birch (*Betula pendula*)

- 1 California buckeye (*Aesculus californica*)
- Fremont cottonwood (*Populus fremontii*)
- 1 coast live oak (Quercus agrifolia)
- 1 bigleaf maple (*Acer macrophyllum*)
- 1 Italian stone pine (*Pinus pinea*)
- 1 red-leaf photinia (*Photinia fraseri*).

There are 19 planted trees on the landward side of the San Lorenzo River levee portion of the Project site. These trees include oak (9), sycamore (5), cottonwood (1), bigleaf maple (1), and ornamental (3) species (Fouts 2018). There are also five ornamental trees planted along the Project frontage on the sidewalk on Front Street and one ornamental tree on the western edge of the Project site.

A biological resources assessment focused on evaluation of federally-listed species was conducted for the Project site. State data bases were also checked. No special status species plant or wildlife species were identified along the west bank of the levee adjacent to the Project site (Dudek 2019). Therefore, while special-status species could be present on the river side of the levee, none have been identified on the Project site.

The eastern edge of the Project site is within the defined management area of the San Lorenzo River. Riparian and development setbacks for the San Lorenzo River are not established in the Creeks Plan, but rather, according to the Creeks Plan, all projects in this area are subject to provisions of the SLURP. The SLURP requires that a 10-foot setback be maintained between residential and commercial uses adjacent to the levee trail from the western edge of the trail. The SLURP also indicates that trees planted as part of the San Lorenzo Flood Control Improvement Project should be maintained and incorporated into new development.

4.2.2 Impacts and Mitigation Measures

Thresholds of Significance

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines (including Appendix G), City of Santa Cruz plans, policies, and/or guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

- BIO-1 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;
- BIO-2 Have a substantial adverse effect on state or 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;
- BIO-3 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;
- BIO-4 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;
- BIO-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- BIO-6 Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan;
- BIO-7 Substantially reduce the habitat of a fish or wildlife species;
- BIO-8 Cause a fish or wildlife population to drop below self-sustaining levels; or
- BIO-9 Threaten to eliminate a plant or animal community.

Impacts and Mitigation Measures

Areas of No Project Impact

- BIO-2 *Wetlands.* The Project site is adjacent to the San Lorenzo River, however, the Project site does not include wetlands or other habitat. The proposed Project would result in redevelopment of an existing developed site that does not contain native habitat. Therefore, the Project would not result in a substantial adverse effect on a state or federally protect wetland and would result in *no impact*.
- BIO-4 *Wildlife Corridors.* The Project site is adjacent to the San Lorenzo River. The Downtown Plan Amendments EIR concluded that future redevelopment of the existing urban

downtown area would not affect wildlife movement as it would occur within the existing development footprint. The General Plan EIR concluded that with implementation of the proposed *General Plan 2030* goals, policies and actions, as well as future environmental review of specific development projects and compliance with local regulations and plans, potential impacts related to wildlife movement would be considered less than significant. Projects adjacent to watercourses would be subject to setback requirements set forth in the City's Creeks and Wetlands Management Plan and SLURP, and compliance would ensure that the Project would not directly or indirectly substantially interfere with wildlife movement or with established wildlife corridors.

The City-wide Creeks and Wetlands Management Plan references the San Lorenzo Urban River Plan as the guiding management plan for the area. The SLURP recommends a 10-foot setback between development and the western edge of the river levee, which also is a SLURP LCP policy. The Downtown Plan requires that residential and outdoor commercial uses adjacent to the Riverwalk not be sited closer than 10 feet from the western edge of the physical walkway, except where "people-oriented" commercial uses incorporate public access points to the Riverwalk. The proposed Project complies with this provision with a setback of approximately 35 feet between the closest point of the proposed building and the western edge of the 12-foot wide Riverwalk path. Therefore, the Project would result in *no impact* related to wildlife corridors.

Potential impacts to nesting birds are addressed below under Impact BIO-4.

- BIO-6 *Conflicts with HCP or NCCP.* There are no adopted Habitat Conservation or Natural Community Conservation Plans in the City.
- BIO-7 Substantially Reduce Fish or Wildlife Species Habitat. The proposed Project would result in redevelopment of an existing developed site that does not contain native habitat. Therefore, the Project does not have the potential to substantially reduce the habitat of fish or wildlife species.
- BIO-8 Cause a Fish or Wildlife Population Decline. The proposed would result in redevelopment of an existing developed site that does not contain native habitat. As explained in Impact BIO-1 and BIO-2 below, potential indirect impacts to sensitive habitat and special status species would not be significant. Therefore, the Project does not have the potential to cause a fish or wildlife species population drop below self-sustaining levels.
- BIO-9 Threaten to Eliminate a Plant or Animal Community. The proposed would result in redevelopment of an existing developed site that does not contain native habitat and none would be removed. proposed Project would not threaten to eliminate a plant or animal community. As explained in Impact BIO-1 and BIO-2 below, potential indirect

impacts to wildlife habitat and species would not be significant. Therefore, the Project does not have the potential to threaten to eliminate a plant or animal community.

To ensure indirect impacts to the San Lorenzo River habitat and any potentially occurring federally-listed fish within this drainage are avoided, stormwater pollution prevention measures would be installed prior to construction, such as silt fencing and the installation of straw wattles, to prevent any inadvertent discharge of sediments or construction materials into the reach of the San Lorenzo River adjacent to the Project site. See measures in subsection 3.1.4, *Hydrology and Water Quality*.

Project Impacts

Impact BIO-1: Indirect Impacts to Special Status Species. Project development could result in indirect impacts to riparian and aquatic special status species due to increased shading due to increased building heights and stormwater runoff, but would not substantially affect habitats. This is considered a *less-than-significant* impact.

The Project site is developed primarily with impervious surfaces and buildings, with some scattered trees and landscaping. No special status species were identified on the Project site or along the levee where placement of fill is proposed (Dudek 2019). Therefore, special-status plant or wildlife species could be present on the river side of the levee, but not within the Project site, and the Project would not result in direct impacts to special status species. However, the proposed Project could result in potential indirect impacts to special status riparian and aquatic species as a result of introduction of buildings that could result in shading or change in water temperatures or changes in water quality due to stormwater runoff that is further discussed below.

The Downtown Plan Amendments EIR concluded that, while increased building heights in the downtown area would result in increased shading of riparian and aquatic habitat—particularly during winter months—increased shading would have a less-than-significant impact on special-status species. Additional building height and the resultant increase in shade is not likely to impact established native riparian tree species in the area. Arroyo willow, white alder, black cottonwood, and box-elder are all shade-tolerant tree species that are scattered singly along the linear landside slope of the levee and along the water's edge. The maturing landside riparian trees were planted for habitat enhancement and landscape value during the 1999-2003 levee raising project, and some are now greater than 50 feet in height. The waterside riparian trees in lower San Lorenzo River are all subject to regular vegetation management, which limits the size of both individual trees and the width of the riparian buffer zone on the riverbank. Riparian species along the reach in which the Project site is located are deciduous and lose leaves during the winter, and the ruderal vegetation on the top of the levee is regularly mowed and managed (City of Santa Cruz, October 2017-DEIR volume).

The proposed Project would result in one additional upper level floor than addressed in the Downtown Plan Amendments EIR due to waivers permitted with a density bonus for provision of very

low-income housing that is provided by the Project (see Chapter 3, Project Description). However, the additional floor would result in some additional shading that would occur primarily in the winter when additional shading was not found to be a significant impact to adjacent riparian vegetation or river habitats in the Downtown Plan Amendments EIR (City of Santa Cruz, October 2017-DEIR volume). Based on shading analyses included in the Downtown Plan Amendments EIR (Figure 4.3-1 in the DEIR volume), shading from taller buildings during other times of the year would extend slightly onto the river side of the levee, but not into the river. The upper floor of the proposed Project includes some open areas with portions of the buildings set back from the edge of the lower floor. The buildings are set back approximately 35 feet from the western edge of the Riverwalk. The Downtown Plan amendments require the top floor of Front Street properties to not exceed 60% of the floor below and 60% of the building length. However, this would be reduced with the requested density waivers (at proposed 100 percent at the northern building and 81 percent at the center southern buildings). The Downtown Plan allows for consideration or an exception to these standards when a publicly accessible accessway is included as part of the project site upon approval by the City Council upon a positive recommendation by the Planning Director.

Water temperatures in the San Lorenzo River are unlikely to be impacted by the additional building heights. The existing lack of shaded riverine aquatic habitat in the lower San Lorenzo River results in high water temperatures in the lagoon system, particularly in the late summer and fall. These high temperature conditions can be deleterious to salmonid species. High water temperatures and poor water quality conditions are exacerbated by seasonal lagoon closures and low flow conditions into the lagoon. Increased building shadows would not affect direct mid-day solar inputs during any season. High water temperatures are not an issue during winter when added late-afternoon shade may fall along the reach of the river in which the Project site is located (City of Santa Cruz, October 2017-DEIR volume).

The Project would slightly increase impervious surfacing, but would not substantially degrade water quality in the San Lorenzo River with the proposed stormwater management and treatment measures that are included in the Project design. New impervious surfaces could increase the delivery of urban pollutants into the San Lorenzo River. However, the Project would be required to adhere to City stormwater requirements that would avoid or reduce potential impacts. All stormwater would be treated prior to conveyance into City storm drains and ultimate discharge into the San Lorenzo River as occurs under existing condition. Therefore, stormwater runoff as a result of the proposed Project would not result in adverse impacts to water quality. Additionally, stormwater runoff from the levee fill area would be directed to a lined bioswale for treatment prior to conveyance to existing City storm drains.

Potentially significant erosion impacts could result during construction. However, the Project would be subject to City requirements for implementation of Best Management Practices (BMPs) during construction, and an erosion control plan is included in the Project plans. The Project erosion control plan references required compliance with the City's Construction BMPs. The proposed plan also includes measures to protect temporary stockpiles and exposed areas during storms to prevent sediments from entering storm drains, construction monitoring requirements, and reseeding

exposed soils. To ensure indirect impacts to the San Lorenzo River habitat and any potentially occurring federally-listed fish within this drainage are avoided, stormwater pollution prevention measures are proposed that would be installed prior to construction and placement of fill on the landward side of the levee, such as silt fencing and the installation of straw wattles, to prevent any inadvertent discharge of sediments or construction materials into the reach of the San Lorenzo River adjacent to the Project site (City of Santa Cruz 2019). Therefore, the proposed Project would not adversely affect water quality in San Lorenzo River or indirectly affect special status aquatic species present in the river.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified. However, the following Condition of Approval is recommended.

RECOMMENDED CONDITION OF APPROVAL: Revise Project Erosion Control Plan to specify placement of temporary barriers, such as silt fences, fiber rolls and/or bales along the levee path to demarcate limits of the work/construction areas on the eastern perimeter of the site during construction to inadvertent transport of equipment or materials to the water side of the levee and into San Lorenzo River.

Impact BIO-3:Indirect Impacts to Sensitive Riparian Habitat. Project development could
result in indirect impacts to birds in the area that could lead to bird mortalities.
This is considered a *less-than-significant* impact.

The Downtown Plan Amendments EIR concluded that future development adjacent to the San Lorenzo River, which is a sensitive habitat, would not result in indirect impacts to adjacent San Lorenzo River riparian or aquatic sensitive habitat with compliance with setbacks established in existing City plans. The *City-wide Creeks and Wetlands Management Plan* references the *San Lorenzo Urban River Plan* as the guiding management plan for the area. The SLURP recommends a 10-foot setback between development and the western edge of the river levee, which also is a SLURP LCP policy. The Downtown Plan requires that residential and outdoor commercial uses adjacent to the Riverwalk not be sited closer than 10 feet from the western edge of the physical walkway, except where "people-oriented" commercial uses incorporate public access points to the Riverwalk. The proposed Project complies with this provision with a setback of approximately 35 feet between the closest point of the proposed building and the western edge of the 12-foot wide Riverwalk path. The removal of 19 trees could affect nesting birds if any are present at the time trees are removed on the landward side of the river levee. Six trees are riparian species, although the trees were planted as part of the 1999-2003 levee improvements, and no sensitive habitat would be affected by the Project. Therefore, the Project would not result in direct impacts to sensitive habitat.

The Downtown Plan Amendments EIR determined that increased building heights adjacent to the San Lorenzo River could result in indirect impacts to birds from two causes: (1) an increase in the area of glass that would result in mortality to birds mistaking the reflective glass as safe passage to habitat

beyond, and (2) an increase in the amount of lighting and the resultant potential for mortality of birds related to disorientation during migration. The Downtown Plan Amendments EIR addressed concerns regarding potential hazards taller buildings may pose to birds due to placement of reflective windows and/or lighting. Mitigation 4.3-2 was included in the Downtown Plan Amendments EIR to address potential impacts to birds related to increased building heights adjacent to the San Lorenzo River, which would be applicable to the Project. Mitigation 4.3-2 required inclusion of seven standards in the Downtown Plan for design guidance, which are included in the Downtown Plan.

A review of the proposed Project was conducted by a biologist as part of preparation of this EIR to review Project consistency with these standards and overall found the Project's design to be consistent as summarized below.

- Minimize the overall amount of glass on building exteriors facing the San Lorenzo River. The Project plans show that the amount of exterior glass on the building fronts facing the San Lorenzo River would be limited overall, with the overall amount of glass below 50% for each building.
- Avoid mirrors and large areas of reflective glass. The plans include notes about bird-safe measures to be incorporated into the building design, stating that the Project would use window glazing treatments that create a visual barrier for birds for the majority of the glazing within the first 40 feet of ground-level façade facing the Riverwalk. In addition, the design avoids incorporating large areas of glass, with various structural elements between glass panes at the ground levels of the buildings and upper levels relying mostly on double windows rather than continual expanses of glass. None of the building designs incorporate any large, flat expanses, at single or multiple levels, that could reflect the sky in a way to give birds the impression of open sky.
- Avoid transparent glass skyways, walkways, or entryways, free-standing glass walls, and transparent building corners. The building designs incorporate no transparent skyways, walkways, entryways, or free-standing glass walls. Some windows are located at the corners of buildings, but all appear to include framing around the windows that provides a visual barrier at building corners. Also, given the inclusion of glazing treatments that create a visual barrier in glass on the side facing the San Lorenzo River, the overall design of the windows should limit bird strikes.
- Utilize glass/window treatments that create a visual signal or barrier to help alert birds to presence of glass. Avoid funneling open space to a building façade. The plans describe the incorporation of window treatments that would create visual barriers in the lower 40 feet of the buildings. The building fronts along the San Lorenzo River incorporate relatively shallow spaces that visually accentuate the barrier provided by the buildings (as opposed to supporting flat surfaces and large areas of glass that may reflect the sky and that birds may interpret as open space). These spaces are not deep enough to funnel birds to the building façade.
- Strategically place landscaping to reduce reflection and views of foliage inside or through glass. The plans include notes about bird-safe building design that state that the majority of

landscaping would be located to allow views from the buildings/designed to keep birds away from the building's façade. Many of the trees on the side facing the San Lorenzo River shown in the plans are separated from the buildings by at least 12 feet. The landscape plan does show several trees near the façade of the central building; however, glass surfaces are limited in this area compared to elsewhere along the building fronts and, with the window glazing treatment described above, the design should limit bird strikes. In general, if the final landscape design continues to incorporate the idea of allowing views outward from the building, which in turn would contribute to keeping birds occupying the landscaping away from the trees, close-up views through glass surfaces would not be provided.

Avoid or minimize up-lighting and spotlights; and Turn non-emergency lighting off (such as by automatic shutoff), or shield it, at night to minimize light from buildings that is visible to birds, especially during bird migration season (February - May and August - November). The plans state that exterior illumination would be thoughtfully designed to minimize light pollution and that the Project would avoid up-lighting and spotlights and use timers.

In 2018, the City adopted "Bird-Safe Building Design Standards" that that would apply to any portions of buildings that require design review and are located within 300 feet of specified General Plan land use designations, including waterways mapped in the City-wide Creeks and Wetlands Management. These standards specify window and lighting treatments for buildings located near specified habitat areas in order to ensure that new buildings provide a safe design to prevent bird collisions in areas near natural features. If the final design of the buildings (including glass and windows), landscaping, and lighting is consistent with the current, proposed plans and plans submitted for building permit issuance include window glazing treatments that create a visual barrier for birds for the majority of the glazing within the first 40 feet of the ground-level façade facing the Riverwalk, this Project should remain consistent with the guidance. In general, the design of the buildings adheres to the spirit of the Guidance for Bird Safe Structures in the Downtown Plan and the City of Santa Cruz Bird-Safe Building Design Standards. Therefore, the Project would not result in a significant adverse indirect impact to sensitive riparian or aquatic habitat.

The General Plan EIR concluded that future development accommodated by the *General Plan 2030* adjacent to streams and riparian habitats could result in impacts to sensitive riparian habitat areas, but that impacts would be less than significant with implementation of General Plan goals, policies, and actions and compliance with local regulations and plans, particularly the *City-Wide Creeks and Wetlands Management Plan*. As indicated above, the Project site is located adjacent to the San Lorenzo River and would be subject to General Plan goals, policies, and actions and compliance with local regulations and *Plan goals*.

Mitigation Measures

No mitigation measures are required as a significant impact has not been identified.

Impact BIO-4: Indirect Impacts to Nesting Birds. Future development as a result of the proposed Downtown Plan amendments could result in disturbance to nesting birds if any are

present in the vicinity of construction sites along the San Lorenzo River. This is a *potentially significant* impact

The trees on and adjacent to the Project site provide potential nesting for migratory birds; migratory birds are protected under the MBTA and California Fish and Game Code section 3503. The Project would require the removal of 25 trees on the Project site, river levee and along Front Street. Tree removal during the breeding season (generally March 1 to August 1) has the potential to destroy bird nests, eggs or chicks if any are present during the removal. The Project would be subject to mitigation measures adopted with the Downtown Plan Amendments, which includes Mitigation Measure 4.3.3 that requires that a pre-construction nesting survey be conducted by a qualified wildlife biologist if construction, including tree removal, adjacent to the San Lorenzo River is scheduled to begin during the nesting season. If nesting is identified, construction would need to be delayed or a suitable construction buffer established in order to prevent disturbance to nesting birds. Therefore, the Project would result in a *less-than-significant* impact with implementation of mitigation as required in the Downtown Plan Amendments EIR.

Mitigation Measures

Implementation of the following mitigation measure identified in the Downtown Plan Amendments EIR will be required of the proposed Project.

- **DPA EIR MITIGATION 4.3-3:** Require that a pre-construction nesting survey be conducted by a qualified wildlife biologist if construction, including tree removal, adjacent to the San Lorenzo River is scheduled to begin between March and late July to determine if nesting birds are in the vicinity of the construction sites. If nesting raptors or other nesting species protected under the MBTA are found, construction may need to be delayed until late-August or after the wildlife biologist has determined the nest is no longer in use or unless a suitable construction buffer zone can be identified by the biologist. (Citywide Creeks and Wetlands Management Plan Standard 12).
- Impact BIO-5:Conflicts with Local Ordinances. Construction of the proposed Project would not
result in conflicts with local policies and ordinances protecting biological
resources, such as a tree preservation policy or ordinance. Therefore, the Project
would result in *no* impact.

The proposed Project would result in removal of 20 trees on the Project site and levee fill area and five street trees. Five of the on-site trees and three of the street trees to be are removed are heritage trees pursuant to City regulations. Chapter 9.56 of the City Municipal Code defines heritage trees, establishes permit requirements for the removal of a heritage tree, and sets forth mitigation requirements as adopted by resolution by the City Council. Heritage trees are defined by size, historical significance, and/or horticultural significance; generally, trees with a 14-inch diameter or larger are heritage trees. Tree removal would be subject to approval of a tree removal permit

pursuant to the City's Heritage Tree Ordinance and Street Tree Ordinance. Approval of a heritage tree removal permit automatically requires replacement trees. Removal of trees in a manner that is consistent with the criteria, provisions, and requirements set forth in City regulations would not result in a conflict with a local ordinance. City regulations, including LCP policy 6.1.2, require tree replacement for removal of a street tree to consist of one replaced 15-gallon tree, or for removal of a heritage tree, to consist of replanting six 15-gallon or two 24-inch size specimens for each heritage tree approved for removal. In-lieu fees may also be accepted that to go to the City's Tree Trust Fund for off-site planting of trees. The Project would include tree replacement in accordance with City regulations.

The Project landscaping plan includes planting 14 trees on the river levee fill and six trees on the Project site with the following tree species: Chinese pistache (*Pistachia chinensis*), London plane tree (*Platanus acerifolia* 'Columbia'), Hungarian oak (*Quercus frainetto* 'Forest Green'), southern live oak (*Quercus virginiana*), and Drake Chinese elm (*Ulmus parvifolia* 'Drake'). The planting of 20 trees would replace the five on-site heritage trees removed and would exceed City replacement requirements. For each of the five street trees removed along Front Street, the Project would include planting of one replacement tree in a species listed on the City's Approved Street Tree List. Therefore, the Project includes replacement trees in accordance with City requirements for removal of five heritage trees.

Removal of a small number trees in a manner that is consistent with City regulations and requirements would not be considered a significant impact. Approval of a tree removal permit automatically requires replacement trees or payment of in-lieu fees as set forth above. Measures to protect the proposed retained trees, as recommended by the Project arborist report, would be implemented during construction as a standard condition of approval. Therefore, the Project would not result in conflicts with local policies and ordinances protecting biological resources, such as a tree preservation policy or ordinance., and there would be *no impact*.

Tree removal, planting, and vegetation management at the levee fill area is also subject to the Army Corps of Engineers (ACOE) Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures (ETL 1110-2—583) and Interim Guidance for Section 3013 of the Water Resources Reform and Development Act of 2014, Vegetation Management Policy. In addition to management of flood risk and the impacts of vegetation on the structural integrity of the levee, the ACOE also considers the impacts of levee landscaping with regard to the preservation, protection, and enhancement of natural resources. The levee landscape plans were developed in accordance with the ACOE requirements in that no vegetation is proposed for removal on the riverside of the levee and all of the trees planted on the new levee fill area will be located within concrete lined planters that will protect the roots from penetrating the 15-foot "Vegetation Free Zone", as measured from the levee crown. The landscaping plans were submitted for ACOE review as a part of the Project application for a Section 408 Letter of Permission.

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