CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH
Biological Technical Report

Prepared for the City of San Diego

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MANAGEMENT SUMMARY / ABSTRACT

The Chollas Creek to Bayshore Bikeway Multi-Use Path (Path) is a proposed new 4,000-foot- long segment of the long-range Chollas Creek multi-use path plan, located near the intersection of Interstates 5 and 15 within the City of San Diego. The Path route will connect Dorothy Petway Neighborhood Park at the east end to Harbor Drive at the west end, following the creek channel as closely as possible to increase community awareness and appreciation of Chollas Creek. The route will consist of a new path constructed along the creek for some segments, and will use existing roads where that is not feasible.

Biological surveys conducted for the project covered the potential impact footprints of potential routes as well as 100 feet in all directions around the potential routes. These surveys focused on habitats, plants, and wildlife, as well as wetlands and waterways that may fall under jurisdiction of regulatory agencies. While the area around the Path contains some sensitive biological resources such as the creek itself, wetland habitats, Coastal Sage Scrub, and small numbers of low-priority sensitive plants, the Path impact footprint is entirely within Disturbed and Developed land and contains no sensitive biological resources. The Path will not impact any sensitive habitats, plants, or animal species. Reconfiguration of concrete creek bank within a section of the Path footprint will include improvements below the California Department of Fish and Wildlife-jurisdictional streambed top-of-bank, and will therefore require a Lake and Streambed Alteration Agreement application. A Regional Water Quality Control Board Waste Discharge Requirement application is also expected to be a requirement.

1.0 INTRODUCTION

1.1 Purpose of the Study

The purpose of this report is to document biological resources in the Chollas Creek to Bayshore Multi-Use Path (Path) study area, identify potential impacts to biological resources resulting from the proposed project (Project), and propose measures to avoid, minimize, and/or mitigate significant impacts consistent with federal, State and local rules and regulations including the California Environmental Quality Act, Natural Community Conservation Planning program, and City of San Diego Multiple Species Conservation Program Subarea Plan.

1.2 Project Location

The 20.3-acre Project study area is located along the south branch and main channel of Chollas Creek near the intersection of Interstate 5 and Interstate 15, in the City of San Diego, California. The study area consists of the Project path footprint and 100 feet around the footprint on all sides. The eastern end of the Project adjoins Dorothy Petway Neighborhood Park just east of Interstate 5, and the Path's western end is at the intersection of 32nd Street and East Harbor Drive, just east of where Chollas Creek enters San Diego Bay. A map of the regional location is provided in **Figure 1,** and the site location and vicinity are illustrated on the United States Geological Survey (USGS) Point Loma and National City 7.5' topographic quadrangle maps in **Figure 2**. Within the Project study area, the Path route occurs both in and outside of existing roadways; the Project impact footprint addressed in this report does not include two segments entirely within existing roadways because those segments will not result in biological impacts.

1.3 Project Description

The Chollas Creek to Bayshore Multi-Use Path Project is a segment of a long-range plan to provide a multi-use path along Chollas Creek. This Project involves the development of a multi-use pedestrian and bicycle Path, linking Dorothy Petway Neighborhood Park in the Southeast San Diego community through the Barrio Logan community to East Harbor Drive. The proposed 4,000-foot-long (approximately 0.75-mile) extension of the Chollas Creek multi-use Path would be constructed along Chollas Creek and developed within public street rights-of-way. The Path would be 10 to 14 feet wide and would be primarily developed as Class I/cycletrack (separate facility) and Class II (painted bike lane) bicycle facilities, with the possibility of a Class III facility with painted sharrows along a short stretch of Rigel Street. Crossing signals would be installed at various locations to stop traffic and allow bicyclists and pedestrian to cross safely. The proposed alignment for the multi-use Path would begin at Dorothy Petway Neighborhood Park and continue southwest along the creek to Rigel Street, then follow Rigel Street to Main Street. The Path would head north on the west side of Main Street until it meets Chollas Creek on the northwest side of the Interstate 15 freeway ramp. The Path would then follow Chollas Creek southwest to 32nd Street, at which point the Path would follow the 32nd Street right-of-way to its terminus at East Harbor Drive, near the Pacific Fleet

Station MTS trolley stop. The Project would involve the grading and construction of the multi-use Path along Chollas Creek (including replacement of concrete creek banks/walls in some sections), as well as reconfiguring public streets to allow for bike facilities.

Where the trail is proposed to follow the creek, the trail will be constructed either alongside the creek or, where insufficient right-of-way exists, within the creek on the upper portion of the existing channel side-slopes. In these areas, retaining wall will be constructed to "notch in" the level trail. Where the trail is constructed alongside or within the banks of the creek it will be constructed to 14 feet in width, comprised of a 10-foot-wide paved waling/riding surface and 2-foot-wide clear shoulders on each side. Possible materials for the walking/riding surface include concrete pavement, and permeable concrete pavement. Bioretention trenches installed within the shoulder area of the trail and catch basin filter inserts will provide creek water-quality protection from trail runoff. Possible materials for the shoulder bioretention trenches include stabilized decomposed granite, small aggregate and permeable concrete. According to the February 2015 updated Water Quality Technical Report, Low-Impact Development design BMPs and proposed permanent BMPs will ensure that the Project will not degrade the existing storm drain conveyance system. (Psomas 2015)

Discretionary actions for the proposed Project include an Encroachment Agreement from Caltrans, a Letter of Request for Navy Lease from the United States Navy for development within Navy right-of-way, and various Encroachment Removal and Maintenance Agreements from the City of San Diego; the Project is also expected to require permits from State Agencies regulating impacts to jurisdictional wetlands and waters such as the California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB).

The Project was redesigned after a site visit by CDFW and RWQCB staff, in order to move the Path further upslope and away from the creek bed and wetland vegetation, with the goal of minimizing biological impacts.

2.0 METHODS AND SURVEY LIMITATIONS

Existing biological resources in the Project vicinity were investigated through field reconnaissance and literature review by REC biologists. A Project study area was established by adding a 100-foot-wide perimeter to potential routes proposed early in the process.

Literature review included CNDDB records of sensitive plant and animal species within the Project USGS 7.5' quadrangles (Point Loma and National City) and surrounding six quadrangles (La Jolla, La Mesa, El Cajon, Jamul Mountains, Otay Mesa, Imperial Beach), SanBIOS sensitive plant and animal records within a 5-mile radius of the site, aerial photographs of the site, and soil maps and descriptions from the San Diego County soil survey (Bowman 1973).

A general survey of the Project study area was conducted by REC biologists to document current biological resources, including plants, animals, and habitats. Plant species were identified by REC biologists in the field or collected for later identification. Wildlife species were identified directly by sight or vocalizations and indirectly by scat, tracks, or burrows. Field notes were maintained by REC biologists throughout the surveys, all observed plant and animal species were recorded, and species of interest were mapped. Additionally, all habitats in the Project study area were mapped and the presence or absence of suitable habitat for sensitive species was documented. Habitats and wildlife on adjacent properties were observed from the Project site or public roadways, but no surveys were conducted on private property for this report. Mapping of existing resources in the Project study area was conducted on an aerial image scaled at 1 inch equals 170 feet. For GPS-mapping of the jurisdictional wetlands/waters, the Psomas survey crew used a Trimble R8 GNSS unit operating in Real-Time Kinematic (RTK) mode, with manufacturer precision of 8 mm horizontal and 15 mm vertical, to map points along the banks that were identified by the Project jurisdictional delineator.

Table 1 summarizes the survey types, dates, times, temperature and sky conditions, and wind speed during the site surveys.

Table 1. Surveys Conducted in the Chollas Creek Multi-Use Path Study Area

Date	Time	Temp (°F)	Sky	Wind (MPH)	Survey Type	Personnel
8/15/2013	Begin: 1200 End: 1400	Begin: 70s End: 70s	Sunny	Begin: 0-5 End: 0-5	Biological resources	C. MacGregor, Hedy Levine
9/12/2013	Begin: 0730 End: 1020	Begin: 66° End: 70°	Overcast to sunny	Begin: 0-3 End: 0-3	Biological Resources	C. MacGregor, B. McGill
2/6/2015	Begin: 0945 End: 1130	Begin: 70s End: 70s	Sunny	Begin: 0-3 End: 0-3	Jurisdictional GPS-mapping	C. MacGregor
4/29/2015	Begin: 1230 End: 1300	Begin: 70s End: 70s	Sunny	Begin: 0-3 End: 0-3	Jurisdictional GPS-mapping	C. MacGregor

Scientific nomenclature and common names for animal species in this report follow American Ornithological Union (AOU 2012) for birds, Center for North American Herpetology (CNAH 2013) for reptiles and amphibians, Baker et al. (2003) for mammals, and Powell and Hogue (1979) for insects, as well as the San Diego Natural History Museum butterfly, spider, amphibian, reptile, bird and mammal checklists for subspecies (SDNHM 2002, 2005, and undated). Taxonomy and scientific nomenclature for plants follow the Jepson Manual, second edition (Baldwin et al. 2012), and common names are primarily from Rebman and Simpson (2006), with some rare plant common names from the California Native Plant Society (CNPS) Rare Plant Inventory (CNPS 2013).

The surveys described above are assumed to be limited by timing. Surveys were conducted during daylight hours, and therefore under-represent nocturnal wildlife such as raccoons and bats. Two surveys were conducted during the summer, so spring-blooming annuals could have been missed; however, given the long-term developed condition of the study area, it is unlikely that rare spring annuals persist on-site. The third survey was conducted in early February, when herbaceous species were beginning to grow. When the

Project study area was surveyed in the summer, creek conditions during the high-flow rainy season were not observed. During the February site visit, the survey was conducted around the period of high tide to observed tidal influence on the channel. Because the creek was not surveyed at low tide, extensive exposed mud flats in the lower channel were not observed. Extensive mud flats are not expected due to the relatively steep drop-off in estuarine perennial channel.

3.0 EXISTING CONDITIONS

3.1 Topography and Surroundings

The Project study area is situated in generally flat terrain along the channel of the south branch of Chollas Creek. Elevations range from 0 to 35 feet (approximately 0 to 11 m) above mean sea level, including the range from bottom of creek channel to top of highest bank or adjacent upland. The site gently slopes downward from the east toward the west, and creek water flows from the east into San Diego Bay beyond the west end of the study area. According to the Soil Survey, no natural soil types are mapped in the survey area. The only map units are water and Urban Land, which "consists of closely built-up areas in cities…The soil has been so altered by urban works that identification is not feasible" (Bowman 1973). The Project area is located within the Pueblo Watershed in the San Diego Mesa Hydrologic Unit Area Number 908.2.

The Project study area is bordered by Caltrans roads and land, private commercial and light industrial properties, US Navy land, railroad property, and small areas of City of San Diego property. The entire study area is located within an urbanized setting, and outside the City's conserved Multi-Habitat Planning Area (MHPA). The nearest MHPA lands are approximately 1.8 miles north of the Project area, north of the intersection of Interstate 15 and State Route 94. An aerial photograph of the study area and surroundings is provided in **Figure 3**.

3.2 Botanical Resources / Flora

Approximately 90 plant taxa (species, subspecies, or varieties) were observed in the Project study area, and a complete plant list is provided in **Appendix A**. Of these, approximately 47, or 52 percent, were non-native. This high percentage reflects the disturbed urban condition of the study area.

Distribution of these botanical resources within the Project study area and dominant plants within the various vegetation communities are described in the following section.

3.3 Vegetation Communities and Land Cover Categories

The Project study area contains seven vegetation communities or land cover categories, classified according to Holland (1986) as updated by Oberbauer et al. (2008): Developed land, Disturbed Land, Estuarine Open Water, Non-Vegetated Channel, Southern Coastal

Salt Marsh, Coastal Brackish Marsh, and Diegan Coastal Sage Scrub. Vegetation communities in the Project study area are illustrated in **Figure 4**.

Developed Land (Habitat Code 12000)

Most of the Project study area has already been developed and supports buildings, parking lots, paved roads and highways, parks, and other types of development. The Developed category also includes creek banks where they are concrete. Vegetation is limited to landscaping species such as eucalyptus trees (*Eucalyptus* spp.) and bougainvillea (*Bougainvillea* sp.) and ruderal species such as flax-leaf fleabane (*Erigeron bonariensis*), Russian-thistle (*Salsola* sp.), and smilo grass (*Stipa miliacea*) growing as weeds. Developed areas cover 0.25 acre within the Path impact footprint.

Disturbed Land (Habitat Code 11300)

Disturbed Land consists of "areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as native or naturalized vegetation, but continues to retain a soil substrate. Typically vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or shows signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples of disturbed land include areas that have been graded, repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural vegetation (i.e. dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, constructions staging areas, off-road vehicle trails, and old homesites" (Oberbauer et al. 2008). City of San Diego Biology Guidelines further clarify that "disturbed areas are usually associated with prior development (e.g. previous grading) or agricultural use. These areas can consist of bare ground, or when vegetated, are dominated by at least 50% cover of invasive broad-leaved non-native species" (City of San Diego 2012). Disturbed Land in the study area consists of areas that retain a soil substrate but are dominated by broad-leaved non-natives such as Cyclops acacia (*Acacia cyclops*), Australian saltbush (*Atriplex semibaccata*), sea-fig (*Carpobrotus* sp.), lamb's quarters (*Chenopodium album*), eucalyptus trees, garland daisy (*Glebionis coronaria*), short-pod mustard (*Hirschfeldia incana*), cheeseweed (*Malva* sp.) slender-leaf iceplant (*Mesembryanthemum crystallinum*), Mexican fan palms (*Washingtonia robusta*), with non-native grasses such as Bermuda grass (*Cynodon dactylon*), African fountain grass (*Pennisetum setaceum*), and annual non-native grasses such as bromes (*Bromus* spp.). This includes previously graded vegetated areas along roads and highways, and unpaved areas along the creek that lack natural vegetation. Approximately 0.46 acre of Disturbed land occurs within the Path impact footprint.

Estuarine Open Water (Habitat Code 64130)

Estuarine Open Water habitat occurs on "periodically or permanently flooded substrates and open water portions of semi-enclosed coastal waters where tidal water is diluted by flowing fresh water. Salinity and depth varies [sic] dramatically in estuarine habitats…" (Oberbauer et al. 2008). In the Project study area, Estuarine Open Water is present within the Chollas Creek channel from the west end of the study area to just northeast of the confluence of the southern and northern channels, where fresh water from the creeks

mixes with salt water from the bay (and the upper limit may move upstream during high tides). This area is usually open water, although some areas of unvegetated mudflats may be exposed at low tide. The channel bottom in this area did not appear to support vascular plants or macroalgae. No Estuarine Open Water occurs within the Path impact footprint.

Non-Vegetated Channel (Habitat Code 64200)

Non-Vegetated Channels are "unvegetated on a relatively permanent basis. Variable water lines inhibit growth of vegetation...Vegetation may exist here but is usually less than 10% total cover" (Oberbauer et al. 2008). In the Project study area, the channel of the south branch of Chollas Creek, upstream of Estuarine Open Water above the confluence with the north branch, was mapped as Non-Vegetated Channel because it is predominantly unvegetated substrate such as gravel, cobble, or rock. Under some road overpasses the substrate is concrete. Small patches of salt marsh vegetation (see Southern Coastal Salt Marsh description) are present in the channel where sediment has accumulated, but are subject to removal by high velocity flows. No Non-Vegetated Channel occurs within the Path impact footprint.

Southern Coastal Salt Marsh (Habitat Code 52120)

In the Project study area, Southern Coastal Salt Marsh grows in a narrow fringe along the unpaved banks of the channel downstream of the confluence of the southern and northern channels, and a short distance upstream into the each of those channels. The Salt Marsh fringe, averaging approximately two feet wide, is characterized by salt-tolerant natives such as Parish's pickleweed (*Arthrocnemum subterminale*), saltwort (*Batis maritima*), saltgrass (*Distichlis spicata*), and alkali-heath (*Frankenia salina*), as well as non-native five-hook bassia (*Bassia hyssopifolia*) and spearscale (*Atriplex prostrata*). Small patches of these plants, dominated by pickleweed, also occur within the Non-Vegetated Channel. No Southern Coastal Salt Marsh occurs within the Path impact footprint.

Coastal Brackish Marsh (Habitat Code 52200)

A small patch of Coastal Brackish Marsh is present in the Project study area within the southern channel at the eastern end of the Project study area. This patch grows upstream of a concrete weir that crosses the channel, and consists of a mix of brackish, alkaline-tolerant, and freshwater native species such as prairie bulrush (*Bulboschoenus maritimus* subsp. *paludosus*), California bulrush (*S. californicus*), cattail (*Typha* sp.), Mexican sprangletop (*Leptochloa fusca* subsp. *uninervia*), southwestern spiny rush *(Juncus acutus* subsp. *leopoldii*), San Diego marsh-elder (*Iva hayesiana*), and mule-fat (*Baccharis salicifolia* subsp. *salicifolia*), as well as non-natives such as giant reed (*Arundo donax*), Bermuda grass, and jungle rice (*Echinochloa colona*). This area also contains a non-native bulrush not previously documented in San Diego County: *Bulboschoenus glaucus* (identification confirmed by SDNHM herbarium). No Coastal Brackish Marsh occurs within the Path impact footprint.

Diegan Coastal Sage Scrub (Habitat Code 32510)

A very small patch of Diegan Coastal Sage Scrub (coastal form) grows at the far eastern end of the Project study area, on the unpaved southern bank of the channel. This patch is dominated by coastal sagebrush (*Artemisia californica*) and coast California buckwheat

(*Eriogonum fasciculatum* var. *fasciculatum*) with California brickellbush (*Brickellia californica*), giant wild-rye (*Elymus condensatus*), white sage (*Salvia apiana*), and fuchsia-flower gooseberry (*Ribes speciosum*) as well as non-natives such as oats (*Avena* sp.), garland daisy, castor bean (*Ricinus communis*), and smilo grass. The presence of coast cholla (*Cylindropuntia prolifera*), boxthorn (*Lycium* sp.), and jojoba (*Simmondsia chinensis*) suggested the possibility that this area might be maritime succulent scrub, but the vegetation was denser and taller than typical maritime succulent scrub and lacked other characteristic species. No Coastal Sage Scrub occurs within the Path impact footprint.

3.4 Zoological Resources / Fauna

A variety of aquatic and terrestrial animal species were observed in the study area. Invertebrate species observed included dragonfly (Suborder Anisoptera), fiery skipper (*Hylephila phyleus*), aquatic and terrestrial snails (Class Gastropoda), and white butterflies (Subfamily Pierinae). Unidentified fish species were observed in the Chollas Creek channels. Birds observed in and over the study area consisted of American crow (*Corvus brachyrhynchos*), belted kingfisher (*Megaceryle alcyon*), black phoebe (*Sayornis nigricans*), bushtit (*Psaltriparus minimus*), unidentified duck (Family Anatidae), great egret (*Ardea alba*), northern mockingbird (*Mimus polyglottos*), rock pigeon (*Columba livia*), snowy egret (*Egretta thula*), and spotted sandpiper (*Actitis macularius*). One dead red-tailed hawk (*Buteo jamaicensis*) was observed on the ground next to the highway just outside the study area. Mammal observations included raccoon tracks (*Procyon lotor*), domestic cat (*Felis sylvestris catus*), and unidentified rodent burrows. **Appendix B** provides numbers and habitats of all wildlife observed.

4.0 FEDERAL, STATE AND LOCAL APPLICABLE REGULATIONS

Multiple federal, State and local laws and regulations protect and conserve biological resources. Major regulations that apply to the Project are summarized below.

Federal Endangered Species Act

The US Congress passed the 1973 federal Endangered Species Act (ESA) (and later amendments) to protect and recover imperiled species and the ecosystems upon which they depend. The federal ESA has four major components: 1) Section 4, which provides for listing species and designating critical habitat; 2) Section 7, which requires federal agencies, in consultation with the USFWS, to ensure that their actions are not likely to jeopardize the continued existence of species or result in the modification or destruction of critical habitat; 3) Section 9, which prohibits "taking" of listed species; and 4) Section 10, which provides for permitting incidental take of listed species. Under the ESA, to "take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. A project that does or may support a species protected by the federal ESA may be subject to federal ESA regulation.

California Endangered Species Act

The California Endangered Species Act (CESA) of 1984 generally parallels the main provisions of the federal ESA and is administered by the California Department of Fish and Wildlife (CDFW); it prohibits take of any species that CDFW has classified as threatened or endangered, or that is experiencing a significant decline that could lead to such as designation, and permits take incidental to otherwise lawful development projects with approval from CDFW.

California Environmental Quality Act

The California Environmental Quality Act, or CEQA, is a statute first created in 1970 that requires State and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. Every development project that requires a discretionary governmental approval requires at least some environmental review pursuant to CEQA, unless an exemption applies. CEQA does not specifically define what constitutes an "adverse effect" on a biological resource; instead, lead agencies are charged with determining what should be considered a significant impact, according to the CEQA Guidelines.

Natural Communities Conservation Planning Act

The State of California's Natural Communities Conservation Planning (NCCP) Act of 1991 and 2003 is intended to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (and later amendments) was passed by Congress to prohibit the killing or transportation of native migratory birds and the nests and eggs of such birds, except as allowed by other legislation. All birds in California except those specifically excluded (such as non-native birds and certain "game" birds) are protected by this act.

Bald and Golden Eagle Protection Act

The Bald Eagle Protection Act was enacted in 1940 to prohibit the take, transport, or sale of bald eagles, their eggs, or any part except where expressly allowed by the Secretary of Interior, and was amended in 1962 to also cover golden eagles.

Clean Water Act

The 1972 Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating surface water quality standards. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters of the United States unless a permit was obtained. Under Section 404 of the CWA, the US Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into "Waters of the US".

California Fish and Game Code

California Fish and Game Code regulates the taking and possession of birds, mammals, fish, amphibians, and reptiles, as well as impacts to natural resources such as Waters of the State. It includes the CESA described above, Lake and Streambed Alteration (LSA) Agreement regulations (Sections 1600-1616), provisions for legal hunting and fishing, tribal agreements for activities involving take of native wildlife, protection of nests and eggs of all birds except as otherwise provided by Fish and Game Code (Section 3503), protection of all raptors and their nests and eggs except as otherwise provided (Section 3503.5), and the California Native Plant Protection Act (Section 1900-1913).

California Native Plant Protection Act

The California Native Plant Protection Act of 1977 directed CDFW to carry out the legislature's intent to "preserve, protect and enhance rare and endangered plants in this State" and gave CDFW the power to designate native plants as "endangered" or "rare" and to protect such designated plants from take.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (CWC 2013) protects wetlands and waters as "Waters of the State" and designated the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) as the principal State agencies with primary responsibility for the coordination and control of water quality. "Waters of the State" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." State Resolution 2008-0026 effectively extended jurisdiction of the SWQCB to wetlands as defined in accordance with the federal definition for the Clean Water Act. Impacts to Waters of the State and State wetlands require notification/permitting through the RWQCB and usually also require compensatory mitigation, although this mitigation is typically handled through the USACE and/or CDFW.

California Coastal Commission and Coastal Act

In response to 1972 federal coastal zone management legislation, which encouraged and funded states to implement responsible coastal zone management, the State of California established the California Coastal Commission in 1972 and adopted the California Coastal Act in 1976. The Coastal Commission, in partnership with coastal cities and counties, regulates the use of land and water in the coastal zone. Development in the coastal zone generally requires a permit from either the Coastal Commission or the local government. The Coastal Act includes specific policies that address, among other things, shoreline public access and recreation, terrestrial and marine habitat protection, water quality, and development design. This includes regulation of impacts to habitats and water resources such as those within the Project study area. The City's coastal zone and the overlap of the coastal zone and the Project area are illustrated in **Figure 5**.

Multiple Species Conservation Program

The Multiple Species Conservation Program (MSCP) is a comprehensive habitat conservation planning program for a 900-square-mile area in southwestern San Diego County. It is one of three subregional habitat planning efforts in the County, and allows

local jurisdictions to plan regional preserve systems while maintaining land use control and providing development flexibility. Local jurisdictions implement their own subarea plans. The City of San Diego's subarea plan covered approximately 206,124 acres at the time it was created in 1997, and its hard-line preserve Multi-Habitat Planning Area (MHPA) covers approximately 47,910 acres.

City of San Diego Land Development Code Biology Guidelines

The Land Development Code Biology Guidelines were formulated by the City of San Diego Development Services Department to help implement the City's Environmentally Sensitive Lands Regulation, Land Development Code, Open Space Residential Zone Code, and to guide determination of impacts and mitigation under CEQA and the Coastal Act (City of San Diego 2012a). The Biology Guidelines specifically guide protection for sensitive biological resources including narrow endemic species; habitat for rare, endangered or threatened species; vegetation communities in Tiers I, II, IIIA or IIIB; MHPA lands; and those areas outside the MHPA that qualify as wetlands according to the City of San Diego wetland definition. The Coastal Sage Scrub and wetlands in the Project study area, for example, are sensitive biological resources under these Guidelines.

City of San Diego Environmentally Sensitive Lands Regulations

The Land Development Code contains restrictions on development within Environmentally Sensitive Lands (ESL). ESL regulations are intended to "protect, preserve and, where damaged, restore the environmentally sensitive lands of San Diego and the viability of species supported by those lands." The presence of sensitive biological resources such as Coastal Sage Scrub and wetlands warrants review of the proposed Project according to these regulations. ESL regulations pertaining to this Project include those related to wetlands in the Coastal Overlay Zone, which is shown in **Figure 5**. Within the Coastal Overlay Zone, wetland buffers should be provided at a minimum width of 100 feet, or as determined on a case-by-case basis in consultation with the CDFW, USFWS, and USACE. (City of San Diego 2012b)

City of San Diego Chollas Creek Enhancement Program

Enhancement to Chollas Creek is guided by the Chollas Creek Enhancement Program (CCEP), adopted by the City Council in 2002. This program requires special design considerations for enhancement projects along the creek, including safety measures, trails, signage, habitat buffers, and creek restoration. Consistency and compliance with the Chollas Creek Enhancement Program is achieved for the Project by:

- Addressing the community issue of increasing creek identification and appreciation in adjoining communities;
- Contributing to the major design concept of a multi-use trail system connecting neighborhoods and the San Diego Bay; and
- Supporting the development design concept of maintaining continuity and connection back to the community, by linking the bayfront to a neighborhood park (City of San Diego 2002).

5.0 SENSITIVE RESOURCES

For the purposes of this report, sensitive plants and wildlife include any plant taxon (species, subspecies, or variety) that is officially listed by the State of California or the federal government as Endangered, Threatened, or Rare, or included in California Rare Plant Ranks (CRPR) 1 through 4 or listed as a City of San Diego Narrow Endemic; or any animal taxon officially listed by the State of California or the federal government as Endangered, Threatened, or a candidate for one of those listings, or as Fully Protected, Species of Special Concern, or Watch List species by CDFW. Other sensitive resources include those habitats considered sensitive by the City of San Diego, Coastal Commission, CDFW, or USFWS; wetlands and waters according to applicable definitions; the City of San Diego MHPA; and wildlife corridors.

5.1 Sensitive Plants in the Study Area

5.1.1 Sensitive Plants Observed in the Study Area

Two sensitive plant taxa were detected in the Project study area: southwestern spiny rush and San Diego marsh-elder.

Southwestern spiny rush (*Juncus acutus* subsp. *leopoldii*, Juncaceae) is a perennial rush that forms large clusters of rigid, sharp tipped leaves, and spreads by rhizomes. Individual clusters can grow to almost 1.5 meters tall and/or wide. Southwestern spiny rush typically occurs in moist saline or alkaline places, including seeps and wet meadows, coastal salt marshes, and moist areas within coastal dunes, from near sea level to approximately 900 meters above sea level (but usually below 300 m). This taxon has a CRPR of 4.2, indicating it is on the watch list because it is uncommon in California, and remaining populations are moderately threatened[1]; it also occurs in Arizona; Nevada; Baja California, Mexico; and in South America and Africa. The primary threat to this plant appears to be habitat loss from urbanization and flood control activity. (CNPS 2013, Jepson eFlora 2013). Southwestern spiny rush is not a MSCP-covered species. Two individuals of southwestern spiny rush were observed growing in the channel near the eastern end of the study area, and outside the Project impact footprint. A copy of the CNDDB Native Species Field survey form completed and submitted for this species is included at the end of Appendix D.

San Diego marsh-elder (*Iva hayesiana*, Asteraceae) is a perennial to subshrub with strongly-scented pale green leaves; it typically grows in alkaline flats, depressions, and streambanks between 10 and 900 meters above mean sea level (but usually below 300 m). The only California county in which this plant occurs is San Diego, although it also occurs in Baja California, Mexico. Its CRPR rank of 2B.2 indicates that this plant is endangered in California, although it is more common elsewhere. San Diego marsh-elder is threatened by stream channelization, coastal development, vehicle damage, and competition from non-native plants. This species is not a MSCP-covered species. One

[1] CRPR ranking description use of endangered, threatened and rare is descriptive, not statutory

San Diego marsh-elder was observed on the unpaved south bank of the southern channel, near the eastern end of the study area, and outside the Project impact footprint. A copy of the CNDDB Native Species Field survey form completed and submitted for this species is included at the end of Appendix D.

5.1.2 Sensitive Plants with High or Moderate Potential to Occur in the Study Area

A list of sensitive plants with the potential to occur in the Project study area was generated from the CNDDB RareFind5 database. The resulting list includes any sensitive plants documented within the Project USGS 7.5' quadrangles (Point Loma and National City) and surrounding quadrangles (La Jolla, La Mesa, El Cajon, Jamul Mountains, Otay Mesa, Imperial Beach), within an applicable elevation range. **Appendix C** provides information on these species, as well as an evaluation of the potential for each species to occur on-site, based on CNDDB and SanBIOS search results, the CNPS Inventory of Rare and Endangered Plants (on-line version, 2013), Reiser's "Rare Plants of San Diego County" (2001), and field observations.

No sensitive plants were determined to have moderate or high potential to occur in the study area. One sensitive plant species was determined to have a low to moderate potential to occur: aphanisma.

Aphanisma (*Aphanisma blitoides*, Chenopodiaceae) is an annual herb that blooms in spring or summer before dying back to the ground; it often turns a bright reddish brown before dying and can be most visible at this time. Aphanisma is usually found in sandy soils in coastal scrub, coastal bluffs, and coastal dunes, from just above sea level to around 300 m above sea level. Its CRPR of 1B.2 indicates that this herb is fairly endangered in California and is also rare, threatened or endangered elsewhere. According to CNPS, it is in steep decline on the mainland and is also declining on the Channel Islands. Threats to this species include urbanization, recreation, foot traffic, and, on the islands, feral herbivores. The tiny patch of coastal sage scrub in the study area is probably too dense and disturbed to support this rare plant, but because it might have been undetectable during the survey, it may have low to moderate potential to occur. However, this area is outside the impact footprint.

5.1.3 City of San Diego Narrow Endemic Plants

Narrow Endemics are those rare plants that have significantly restricted distribution, and for which the City Subarea represents a significant portion of their distribution, as determined by the City Council. An evaluation of the potential for Narrow Endemics to occur in the Project study area is provided in **Table 2**, below, and these species are also included with bolded font in **Appendix C**, which addresses all sensitive plants with the potential to occur in the study area.

Table 2. Narrow Endemics Potential to Occur in the Chollas Creek Multi-Use Path Study Area

Scientific Name	Common Name	Observed On-Site	Rationale to Expect or Not Expect On-Site
Acanthomintha ilicifolia	San Diego thornmint	No	Low potential; no suitable habitat observed in Project study area.
Agave shawii var. *shawii*	Shaw's agave	No	Low potential; would have been easily detectable but not observed.
Ambrosia pumila	San Diego ambrosia	No	Low potential; no suitable habitat observed in Project study area.
Aphanisma blitoides	aphanisma	No	Low to moderate; only a tiny area of habitat could be suitable, but plant would not have been detectable during survey.
Astragalus tener var. *titi*	coastal dune milkvetch	No	Low potential; no suitable habitat in Project study area, no *Astragalus* remains observed.
Baccharis vanessae	Encinitas baccharis	No	Low; no suitable chaparral in study area.
Cylindropuntia californica var. *californica*	snake cholla	No	Low potential; would have been detectable, only *Cylindropuntia prolifera* observed.
Deinandra conjugens	Otay tarplant	No	Low potential; no suitable habitat observed in Project study area.
Dudleya brevifolia	short-leaf dudleya	No	Low potential; no suitable sandstone substrate in Project study area.
Dudleya variegata	variegated dudleya	No	Low potential; no suitable clay soil in Project study area.
Eryngium aristulatum	San Diego button-celery	No	Low potential; no vernal pools.
Navarretia fossalis	spreading navarretia	No	Low potential; no vernal pools.
Orcuttia californica	California Orcutt's grass	No	Low potential; no vernal pools
Pogogyne abramsii	San Diego mesa mint	No	Low potential; no vernal pools.
Pogogyne nudiuscula	Otay mesa mint	No	Low potential; no vernal pools.

5.2 Sensitive Wildlife in the Study Area

5.2.1 Sensitive Wildlife Observed in the Study Area

No sensitive animal species were observed in or over the study area. One dead red-tailed hawk (*Buteo jamaicensis*) was observed just outside the study area next to Interstate 15. As a raptor, red-tailed hawks are protected under California Fish and Game Code Section 3503.5, which specifically protects all birds in the orders Falconiformes or Strigiformes (raptors including owls and turkey vultures). It is unlawful to take, possess or destroy any such raptors or their nests and eggs except as otherwise provided in the Fish and Game Code.

5.2.2 Sensitive Wildlife with High or Moderate Potential to Occur in the Study Area

A list of sensitive animals with the potential to occur in the Project study area was generated from the CNDDB RareFind5 database and SanBIOS database. The resulting list includes any sensitive animals documented within the Project site's USGS 7.5' quadrangles and surrounding quadrangles, within an applicable elevation range. **Appendix D** provides information on these animals, as well as an evaluation of the

potential for each sensitive wildlife taxon to occur on-site, based on species requirements, CNDDB and SanBIOS search results, other biological reports conducted in this area, and field observations.

Two sensitive wildlife species were determined to have moderate potential to occur in or over the Project study area: osprey and western yellow bat.

Osprey (*Pandion haliaetus*) is a former State of California Species of Special Concern that is now on the CDFW Watchlist. This fish-eating raptor was heavily impacted by pesticide poisoning through the middle of the 20th century, but has strongly rebounded since the 1970s and is now a regular year-round resident in low numbers along the coast and at inland lakes (Unitt 2004). Ospreys are unlikely to nest in the study area because most suitable trees or structures are too close to the interstates, but have moderate potential to hunt for fish in the deeper western half of the creek channel.

Western yellow bat (*Lasiurus xanthinus*) is a State of California Species of Special Concern that most commonly occurs in desert palm oases, but is increasingly found in urban areas that have palm trees. This bat roosts in hanging dead palm fronds and subsists on insects. Because the Project study area and surrounding land support Mexican fan palms and this species appears to be adapting to urban or suburban conditions, western yellow bat has moderate potential to occur in the study area.

5.2.3 Other Sensitive Wildlife Considerations

Three sensitive wildlife species have very low potential to occur within the Project study area, but their possible presence near the Project area was evaluated: coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo.

Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is a State of California Species of Special Concern and a USFWS Bird of Conservation Concern. This inhabitant of cholla thickets in coastal sage scrub has become extremely rare in San Diego County due to fragmentation and loss of habitat from development and fires. Coastal cactus wren has very low potential to occur within the study area because there is only a tiny patch of coastal sage scrub with cholla at the far eastern end, and no sign of this bird was detected during the survey. In addition, CNDDB and SanBIOS records contain no records of coastal cactus wren in or near the Project area; the closest record is more than three and a half miles to the east. Coastal cactus wrens are covered by the MSCP and this patch of habitat is outside the MHPA, but clearing/grubbing/grading both inside and outside the MHPA is restricted during the coastal cactus wren breeding season of February 15 through August 15 where such activity may impact this taxon. However, the tiny size of the habitat patch within the study area and the lack of local occurrence records indicate that focused surveys for this species are not warranted and avoidance of clearing/grubbing/grading during the coastal cactus wren breeding season is not required. No suitable habitat occurs within the Path impact footprint.

Coastal California gnatcatcher (*Polioptila californica californica*) is a small gray songbird that is listed as a State of California Species of Special Concern and is federally listed as Threatened. This resident of coastal sage scrub has very low potential to occur within the study area because there is only a tiny patch of coastal sage scrub at the far eastern end and it was not detected during the site surveys. In addition, CNDDB and SanBIOS contain no records of California gnatcatchers in or near the Project area; the closest record is approximately two miles north. California gnatcatchers are a MSCP-covered species and this patch of habitat is outside the MHPA, so avoidance of clearing/grubbing/grading during California gnatcatcher breeding season is not required. The tiny size of the habitat patch and the lack of local occurrence records indicate that protocol surveys for this species are not warranted. No suitable habitat occurs within the Path impact footprint.

Least Bell's vireo (*Vireo bellii pusillus*) is a State of California and federal Endangered bird that inhabits riparian woodlands with a dense canopy for foraging and a dense understory for nesting. This migratory bird arrives in San Diego County in late March and departs between mid-August and mid-September. Although no suitable habitat occurs in the Project study area, willows were observed along the creek bank just east of the study area. This patch of willows is only marginally suitable due to its small size and location within an urbanized area, and the potential for use by least Bell's vireo is very low. In addition, CNDDB and SanBIOS contain no records of least Bell's vireo in or near the Project area; the closest record is more than four miles away. Least Bell's vireo is covered by the MSCP and the adjacent willow patch is outside the MHPA, but clearing/grubbing/grading both inside and outside the MHPA is restricted during the least Bell's vireo breeding season of March 15 through September 15 where such activity may impact this taxon. However, the small size and low quality of the habitat patch and the lack of local occurrence records indicate that focused surveys are not warranted and avoidance of clearing/grubbing/grading during the least Bell's vireo breeding season is not required. No suitable habitat occurs within the Path impact footprint.

Critical habitat

The study area does not include any critical habitat for endangered species.

Other raptors and native birds are also afforded protection under federal and California law. Section 3503.5 of the California Fish and Game Code specifically protects raptors in the orders Falconiformes or Strigiformes – it unlawful to take possess or destroy any such raptors (including vultures) or their nests and eggs except as otherwise provided in the Fish and Game Code. Section 3503 of the California Fish and Game code prohibits taking, possessing, or needlessly destroying the nest or eggs of any bird, except as otherwise provided, and the MBTA prohibits the killing or transport of native migratory birds, and taking of any part, nest, or egg or any such bird unless allowed by another regulation (such as for "game" birds). Although one dead red-tailed hawk was observed near the Project study area, no raptor nests were observed, and the Path impact footprint does not contain suitable habitat for foraging or nesting.

5.3 Sensitive Habitats in the Study Area

Habitats considered sensitive by CDFW, USFWS, or other State and federal agencies, such as Coastal Sage Scrub or wetlands, are also treated as sensitive by the City of San Diego. Upland vegetation within the City's Subarea is divided into four tiers based on relative scarcity and ecological importance. Tier I, the most sensitive category, includes Southern Foredunes, Torrey Pines Forest, Coastal Bluff Scrub, Maritime Succulent Scrub, Maritime Chaparral, Scrub Oak Chaparral, Native Grassland, and Oak Woodland. Tier II contains Coastal Sage Scrub and Coastal Sage Scrub – Chaparral mix. Tier IIIA includes Mixed Chaparral and Chamise Chaparral. Tier IIIB includes Non-Native Grassland. Tier IV, the least sensitive category, includes Disturbed Land, Agriculture, Eucalyptus Woodland, and Ornamental Plantings. Impacts to habitats in Tiers I, II and III should be minimized and any impacts require mitigation, while impacts to Tier IV are not significant and do not require mitigation. All habitats defined as wetlands by the City are considered sensitive; impacts should be avoided, and any unavoidable impacts require mitigation at high ratios. Wetlands and other waters are addressed in the following section.

The Estuarine Open Water, Non-Vegetated Channel, Southern Coastal Salt Marsh, and Coastal Brackish Marsh habitats within the Project study area are all sensitive wetland habitats, and the Diegan Coastal Sage Scrub in the Project study area is a sensitive Tier II upland habitat. The presence of wetlands and Coastal Sage Scrub qualifies the Project study area as Environmentally Sensitive Lands. However, all of these sensitive habitats are outside the impact footprint of the Path itself, which will only be built on Developed and Disturbed Land.

5.4 Wetlands and Waters in the Study Area

A jurisdictional water body is present within the Project area: Chollas Creek. Because Chollas Creek is the motivation and focus of this Project, the Path is designed to follow the creek to the greatest extent possible. The creek within the Project area has been substantially channelized and altered in the past, and it flows through a concrete-bank channel from the eastern end of the Project to where the south branch of the creek joins the main creek channel. The main creek channel has a combination of earthen and reinforced banks, with additional reinforcement at road and train crossings. The channel bottom throughout most of the south branch of the creek consists of both cobble/sediment substrate and concrete. The channel bottom in the main channel of Chollas Creek, west of the confluence of the south branch and the main channel, appears to have a natural bottom.

The Project study area contains wetlands and/or waters that are potentially subject to regulation by various agencies. These potentially jurisdictional wetlands and waters are included in the vegetation or land cover categories of Estuarine Open Water, Non-Vegetated Channel, Southern Coastal Salt Marsh, and Coastal Brackish Marsh. The roles of regulatory agencies and the areas over which they may claim jurisdiction are summarized below.

The United States Army Corps of Engineers (USACE) regulates impacts to wetlands and other Waters of the US pursuant to Section 404 of the Clean Water Act. This agency claims jurisdiction over Waters of the US, including wetlands in or adjacent to Waters of the US. Wetlands and other Waters of the US are delineated according to the USACE 1987 *Wetlands Delineation Manual* (with on-line updates), the USACE *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region* (2008), the federal "Definition of Waters of the United States" (33 CFR Part 328), and the *Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the United States* (2010). Impacts to wetlands and Waters of the US generally require a permit from the USACE, and mitigation may be required.

For this delineation, REC Senior Biologist Catherine MacGregor performed a preliminary jurisdictional delineation along the banks closest to the Path footprint on September 12, 2013. The results of the preliminary delineation were mapped in a GIS-based graphic for the Project's biological technical report. Because the Project footprint was close to the upper limit of jurisdiction in some areas, the jurisdictional boundary was more precisely mapped by Project engineer Psomas' survey crew in February 2015. The professional-grade GPS survey was conducted around the period of high tide for greatest accuracy in the estuarine area. The north bank in the eastern section of the delineation area was delineated according to principles and indicators described in *A Field Guide to the Identification of the Ordinary High Water Mark (OWHM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008) because this section is a(n) (alluvial) low-gradient ephemeral/intermittent channel form (it would be an alluvial channel under natural conditions without concrete banks). The south bank in the western section is along a perennial channel and was delineated based on the presence of observed fringing wetland vegetation according to the USACE 1987 *Wetlands Delineation Manual* (with on-line updates), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). The jurisdictional delineation report, including surveyed data points, is provided in **Appendix E**.

The Psomas survey crew used a Trimble R8 GNSS unit operating in Real-Time Kinematic (RTK) mode, with manufacturer precision of 8 mm horizontal and 15 mm vertical, to map points along the banks that were identified by the Project jurisdictional delineator. The professionally GPS-mapped delineation points along the bank were imported into the engineers' Project CAD files to compare the upper jurisdictional limits to the lower limits of the Path and assess any potential jurisdictional impacts.

USACE wetlands and/or waters jurisdiction in the Chollas Creek channel would extend from the channel bottom to the Ordinary High Water Mark (OHWM), or to the upper edge of hydrophytic vegetation where present, such as in the narrow bands of Southern Coastal Salt Marsh in the western section of the creek. Within the eastern concrete-walled section of the channel, the OHWM was mapped at or close to the base of the concrete banks. In the western end of the Project study area where the creek waters are subject to tidal fluctuation, the jurisdictional limit is the same as in the non-tidal area because of

adjacency to the non-tidal waters (33 CFR 328.4) and was mapped at the upper edge of the fringe of salt marsh vegetation. The approximate location of the USACE jurisdictional boundary, based on water marks and vegetation observed during site visits, is shown in **Figures 6a** and **6b**. This delineation has not yet been field-checked or confirmed by USACE staff.

The California Department of Fish and Wildlife (CDFW) regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake under Sections 1601 and 1603 of the Fish and Game Code. CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW does not typically claim jurisdiction over small isolated waters such as vernal pools or detention basins. Impacts to CDFW-jurisdictional streams may be permitted with a Lake and Streambed Alteration Agreement and habitat mitigation after consultation with the agency and project approval. CDFW streambed jurisdiction typically extends from the channel bottom to either the top of bank or outer limit of riparian vegetation on natural banks, whichever is greater. At the Project site, the upper limit was determined by CDFW staff during a site visit, as the upper edge of the the concrete bank in the eastern section, and a level on the earth bank in the western section at which the angle of the bank changed. The upper limit in the western section was GPS-mapped by the Psomas survey crew on April 29, 2015. This line is above the USACE Waters of the US jurisdictional line, and the approximate location is also shown in **Figures 6a** and **6b**.

The State of California also protects waters under the Porter-Cologne Water Quality Control Act, administered by the State Water Quality Control Board (SWQCB). The SWQCB and its regional Water Boards are responsible, under the Clean Water Act, for issuing 401 certifications of State water quality control compliance for 404 permits, and/or for Waste Discharge Requirements (WDR). For Waters protected by the State under the Clean Water Act are the same as the waters delineated for the USACE as Waters of the US; waters protected as Waters of the State may have limits corresponding to Waters of the US or to CDFW jurisdictional limits as described below. In addition, after the SWANCC and Rapanos rulings reduced jurisdictional reach of the USACE, the State passed Resolution 2008-0026, which effectively extended the applied jurisdiction of the SWQCB by (a) mandating protection of wetlands and riparian areas, and (b) extending regulation from just waste discharge to also include dredge and fill activities. The State of California takes the position that wetlands as defined in accordance with the federal definition for the Clean Water Act are also Waters of the State, and therefore under jurisdiction of the Water Boards (SWRCB 2013), but the State also includes non-vegetated areas that satisfy the hydrology and substrate criteria, such as tidal flats, that would be excluded under the USACE definition. Within Porter-Cologne, Water Code section 13260 requires “a person discharging waste, or proposing to discharge waste”, to file an application for a waste discharge requirement (WDR). (Water Code § 13260(a)(1)). At the Project site, the upper limit of RWQCB jurisdiction was determined by RWQCB staff during a site visit, as identical to the CDFW limit.

The California Coastal Commission (CCC) regulates impacts to wetlands within the coastal zone of California subject to the Coastal Act, with assistance from CDFW. The CCC may claim jurisdiction over areas that have any one of the three parameters used the USACE (hydrology, hydric soils, and hydrophytic vegetation), as well as riparian habitat in the CDFW sense. The CCC also relies on local government in wetland identification and delineation within areas that have a certified local coastal program. Although the exact procedure has varied somewhat in the past, the CCC generally follows the CDFW delineation methodology. For wetland development projects requiring USACE review, the applicant may, in some cases, need to obtain two delineations, one for the coastal development permit, and another for the USACE Section 404 permit (CCC 1994).

The City of San Diego treats wetlands as a sensitive biological resource and provides its own guidelines in defining wetlands, distinct from other agencies, in the Land Development Code Biology Guidelines (City of San Diego 2012). Naturally occurring wetland vegetation communities protected by the City include salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodland, riparian scrub, and vernal pools. Areas without wetland vegetation are considered wetlands if they have wetland hydrology or hydric soil, or if wetland vegetation is absent due to past human activities or recurring or catastrophic natural events such as areas of scour within streambeds or coastal mudflats subject to tidal inundation. Channelized streambeds are considered wetlands by the City of San Diego, and the entire length of Chollas Creek within the Project area qualifies as a City wetland. The upper limit of the City wetland jurisdiction would likely be mapped according to the USACE method, as the natural top of wetland vegetation or outer limit of braided channels (see **Figures 6a** and **6b**). No vernal pools are present within the Path impact footprint or Project study area.

5.5 City of San Diego MHPA

The Chollas Creek Multi-Use Path and its Project study area are outside the City's hardline preserve Multi-Habitat Planning Area (MHPA). The nearest MHPA area is approximately 1.8 miles north of the Project area, north of the intersection of Interstate 15 and State Route 94. The Project will not directly or indirectly impact the MHPA, and is not subject to adjacency guidelines.

5.6 Wildlife Corridors and Habitat Connectivity

The Project site is surrounded by military, industrial, commercial, and roadway development on all sides, except for limited military lawn and park areas near the west end and the Dorothy Petway Neighborhood Park at the east end. The creek itself provides habitat for some fish, water birds, wading birds, and small and medium-sized mammals such as raccoons and coyotes. However, given the lack of wildlife habitat in surrounding areas, lack of vegetative cover in the creek within the Project study area, and the lack of connection to any MHPA land, the creek bed is unlikely to serve as a wildlife corridor.

6.0 PROJECT IMPACTS

Implementation of a project results in impacts to biological resources, and these impacts can be categorized as direct, indirect, or cumulative. Direct impacts are immediate impacts resulting from the permanent removal of habitat. For this Project, direct impacts were quantified by overlaying the impact footprint of the proposed Path route (excluding the two segments that are entirely within existing roadway) on the Biological Resources Map. All biological resources within the footprint of the Path are considered 100 percent directly impacted.

Indirect impacts are physical changes in the environment that are not immediately related to a project, but which, as a result of project activities, cause secondary damaging changes. Change in land use adjacent to natural habitat typically causes indirect impacts to that natural habitat, primarily as a result of adverse "edge effects" which can be either short-term indirect impacts related to construction or long-term, chronic indirect impacts associated with urban development. During construction of a project, short-term indirect impacts include dust and noise that could temporarily disrupt habitat and species vitality or construction-related soil erosion and run-off. Long-term indirect impacts may include intrusion by humans and wildlife predation by domestic pets, new or increased noise and lighting, invasion by exotic plant and wildlife species, urban runoff and pollution with toxic chemicals (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, declining air quality, and hydrological changes (e.g., groundwater level and quality).

Cumulative impacts are incremental environmental impacts that, considered individually, may be minor, but are collectively significant as they occur over a period of time. Evaluation of cumulative impacts requires review of other actions within an appropriate radius of the subject project as well as other actions occurring within an appropriate timeframe, based on the nature of the project in question.

6.1 Thresholds of Significance

Projects within the City of San Diego or carried out by the City of San Diego that may result in impacts to biological resources are evaluated by City staff through the CEQA review process, and through a review of the Project's consistency with the ESL Regulations, Biology Guidelines, City's MSCP Subarea Plan. The CEQA guidelines define "significant effect on the environment" as a "substantial or potentially substantial adverse change in the environment," and more specifically state that there may be significant effect on biological resources if the project will (a) substantially affect an endangered, rare, or threatened species of animal or plant or the habitat of the species; (b) interfere substantially with the movement of any resident or migratory fish or wildlife species; or (c) substantially diminish habitat for fish, wildlife, or plants.

The City's Initial Study Checklist provides guidance to evaluate significance: a project may have potentially significant impacts if it would result in:

1) A substantial adverse impact, either directly or through habitat modifications, on any species indentified as a candidate, sensitive, or special status species in the MSCP or local or regional plans, policies or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service;
2) A substantial adverse impact on any Tier I, II, IIIA, or Tier IIIB habitats as identified in the Biology Guidelines or the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS;
3) A substantial adverse impact on wetlands through direct removal, filling hydrological interruptions, or other means;
4) Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages indentified in the MSCP Plan, or impede the use of native wildlife nursery sites;
5) A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either with the MSCP plan area or in the surrounding region;
6) Introducing land use with an area adjacent to the MHPA that would result in adverse edge effects;
7) A conflict with any local policies or ordinances protecting biological resources;
8) An introduction of invasive species or plants into a natural open space area.

Determination of significance is based on the City of San Diego's California Environmental Quality Act Significance Determination Thresholds (City of San Diego 2011). The severity of an impact is the primary determinant of whether or not that impact can be mitigated to a level below significance.

6.2 Direct Impacts

The proposed Project directly impacts 0.71 acre by (a) repurposing existing developed land into sections of the Path and (b) building other sections of the Path on Disturbed Land. Path construction will involve cutting into the existing concrete channel bank in the eastern segment, and one short section of Path construction will include conversion of the currently sloped concrete channel bank to a stepped vertical concrete bank. **Figures 7a and 7b** depict the Project's direct impacts to vegetation/land cover categories and biological resources. As shown in **Figures 7a and 7b**, the Project impacts do not include two segments of the path that are entirely with existing roadway on Rigel Street and 32nd Street. Table 3 summarizes impacts by habitat.

Table 3. Vegetation Communities/Land Cover Categories and Impacts

Vegetation Community within Study Area	Project Impacts (acres)	Mitigation Ratio	Mitigation Required
Developed (no tier)	0.25	-	-
Disturbed Land (Tier IV)	0.46	-	-
Estuarine Open Water (wetland)	0	NA	-

Non-Vegetated Channel (wetland)	0	NA	-
Southern Coastal Salt Marsh (wetland)	0	NA	-
Coastal Brackish Marsh (wetland)	0	NA	-
Diegan Coastal Sage Scrub (Tier II)	0	NA	-
TOTAL	**0.71**	**0**	**-**

As shown in Table 3, Chollas Creek Multi-Use Path footprint impacts to vegetation/land cover categories and biological resources are limited to Disturbed and Developed land. All of the natural habitats (Estuarine Open Water, Non-Vegetated Channel, Southern Coastal Salt Marsh, and Coastal Brackish Marsh) occur outside the Project impact footprint and will not be directly impacted. The Coastal Sage Scrub occurs within the Project study area but is east of the end of the Path and will not be impacted. The Estuarine Open Water, Non-Vegetated Channel, Southern Coastal Salt Marsh, and Coastal Brackish Marsh occur in the bottom of the creek or in a narrow strip immediately adjacent to open water in the creek and will not be directly impacted. Project impacts to Tier IV Disturbed Land and Developed Land are not significant and do not require mitigation.

The Project is not expected to directly impact any sensitive or otherwise protected plant or animal species because no sensitive species were observed or are likely to occur within the Path impact footprint.

The Project is not expected to directly impact any wildlife corridors, linkages, or wildlife nursery sites.

6.3 Indirect Impacts

The Project has little potential to indirectly impact nearby habitat through edge effects because of its location within an urban setting. The primary indirect impact(s) will be construction of the new vertical stepped retaining wall in one section of the Path and the associated water-quality protection measures. Because this construction task will involve removing and replacing part of the existing concrete bank, the direct impact of concrete bank removal will be close to to the Non-Vegetated Channel. However, the Path and all associated construction and will not encroach below the USACE OHWM. Measures to prevent water quality impacts, such as flow diversion, could result in temporary impacts to the creek bed. These impacts would be less than significant because the creek bed and banks are artificial in this location. Construction best management practices would prevent potential indirect impacts to creek water quality.

The Project is not expected to indirectly impact sensitive plants or animals because of its location within an area that has already been substantially developed. The few special-status plants observed in the study area will not be exposed to greater risk of impact due to construction of the Path, and the route might actually direct foot traffic away from the plant locations.

No indirect impacts to any wildlife corridors, linkages, or wildlife nursery sites would occur because of the Project location. Possible indirect impacts from trail user noise or trail lighting are unlikely to be significant due to existing urban conditions along the Path route. However, it is difficult to evaluate the potential indirect impact of trail use on birds feeding in the creek. Disturbance of birds, or "bird startle," has been studied in more natural settings, but no literature on bird startle in urban settings was found during research for this report. City of San Diego MSCP staff was contacted for information on this topic from other similar projects, such as the river-side bike path through Mission Valley, and no such information was available. Bird startle from trail users in an urban setting has apparently not been considered a significant biological concern in San Diego, to date. It is anticipated that this type of indirect impact would be less than significant.

Water quality and air quality in the Project area will be protected from significant Project-related impacts by standard design features, and best management practices, and a Storm Water Pollution Prevention Program. Bioretention trenches installed within the shoulder area of the trail and catch basin filter inserts will provide creek water-quality protection from trail runoff. According to the February 2015 updated Water Quality Technical Report, Low-Impact Development design BMPs and proposed permanent BMPs will ensure that the Project will not degrade the existing storm drain conveyance system. (Psomas 2015)

6.4 Wetland and Wetland Buffer Impacts

The Project will avoid impacts to all wetland habitats. However, replacement of the existing concrete bank with a vertical stepped retaining wall in one section will involve concrete bank removal and reconstruction below the CDFW-jurisdictional top-of-bank. This impact to jurisdictional streambed would trigger the permit application processes. Permits and/or certifications are expected to be required by CDFW and RWQB, and by USACE if the delineation is not approved.. Based on the results of the site visit by CDFW and RWQB staff, LSA and WDR applications will be necessary, but because no wetland/riparian habitat will be impacted, it is unlikely that mitigation, beyond water quality protection measures, will be required.

The ESL requires that a wetland buffer be maintained around all wetlands "as appropriate to protect the functions and values of the wetlands." Within the Coastal Overlay Zone that buffer should be a minimum of 100 feet wide "unless a lesser or greater buffer is warranted." Because the sections of Chollas Creek within the Project area were channelized and concreted many years ago, and are located within an urban and industrial setting, no real wetland buffers exist. Strips of Disturbed Land along the south side of the western half of the channel, and the small patch of Coastal Sage Scrub on the south bank of the eastern end of the channel (outside the Project impact footprint but within the Project study area and adjacent to the creek) may offer some limited buffer functionality, such as slowing and absorption of surface water run-off. Buffer functionality will likely be enhanced by the Project because the route includes bioretention trenches between the Path and the creek. Regardless of whether limited areas are treated as wetland buffers, ESL regulations permit certain uses within wetland buffers in the Coastal Zone: public

access paths, fences, restoration and enhancement activities, and other improvement necessary to protect wetlands (City of San Diego 2012b). Therefore, the Path is a permitted use within what would be the wetland buffer if it were present and will not result in a significant impact to the wetland buffer.

During the Agency site visit, the impossibility of providing a wetland buffer was observed by CDFW and RWQCB staff. However, native plant landscaping in the western section will at least improve the quality of the land adjacent to the creek.

6.5 Cumulative Impacts

The Project is located within the City of San Diego Subarea of the MSCP, and the MSCP was designed to compensate for the loss of biological resources throughout the region. Projects that conform to the MSCP as specified by the Subarea Plan and implementing ordinances, such as the Biology Guidelines and Environmentally Sensitive Lands Regulations, are not expected to result in significant cumulative impacts for those biological resources adequately covered by the MSCP. While there could be certain unusual occasions where impacts to a particular non-covered species might be cumulatively significant even if the Project otherwise fully complies with the MSCP, such is not the case for this Project. The Project is within an urban setting and no sensitive plants, animals, or habitats will be impacted. Limited encroachment below top-of-bank is expected and will require permitting, but will only impact the artificial concrete creek bank will not result in impacts to wetland habitat. Therefore, the Project will not result in significant cumulative impacts.

7.0 MITIGATION

Under CEQA, mitigation is required for all significant environmental and biological impacts. As analyzed in this report, the Project will not result in significant biological impacts to any biological resources, and does not require compensatory mitigation for such impacts. The Project is expected to require permits for encroachment below OHWM top-of-bank in one section, but because the creek banks are concrete and non-native vegetation in these areas, no compensatory mitigation is anticipated. The design features and BMPs would serve as proactive mitigation measures for water quality.

8.0 CONCLUSION

Creation of the Chollas Creek to Bayshore Bikeway Multi-Use Path will provide a multi-use link between the Dorothy Petway Neighborhood Park in Southeast San Diego and Harbor Drive in Barrio Logan. The Path will contribute to the Chollas Creek Enhancement Program by increasing community awareness and appreciation of the creek, and contributing to the long-term plan of connecting neighborhoods, parks and San Diego Bay. While the creek itself and the area around the proposed Path route contain sensitive resources such as jurisdictional wetlands/waters, sensitive habitats, and a few rare plants, the impact footprint of the Project will not directly impact any sensitive biological resources. The Path will only directly impact Disturbed and Developed Land,

which is not a significant impact and will not require mitigation. A potentially significant indirect impact to the creek through replacement of the existing concrete bank will be avoided through proper best management practices to protect water quality. Because the Project will not cause any significant direct, indirect or cumulative impacts to habitats or species, no other mitigation measures than the planned design features and BMPs are required. Permitting for encroachment below the CDFW top-of-bank during bank replacement in one section will require applications for a LSA agreement and a WDR, but staff from those agencies indicated that a mitigation requirement is not anticipated.

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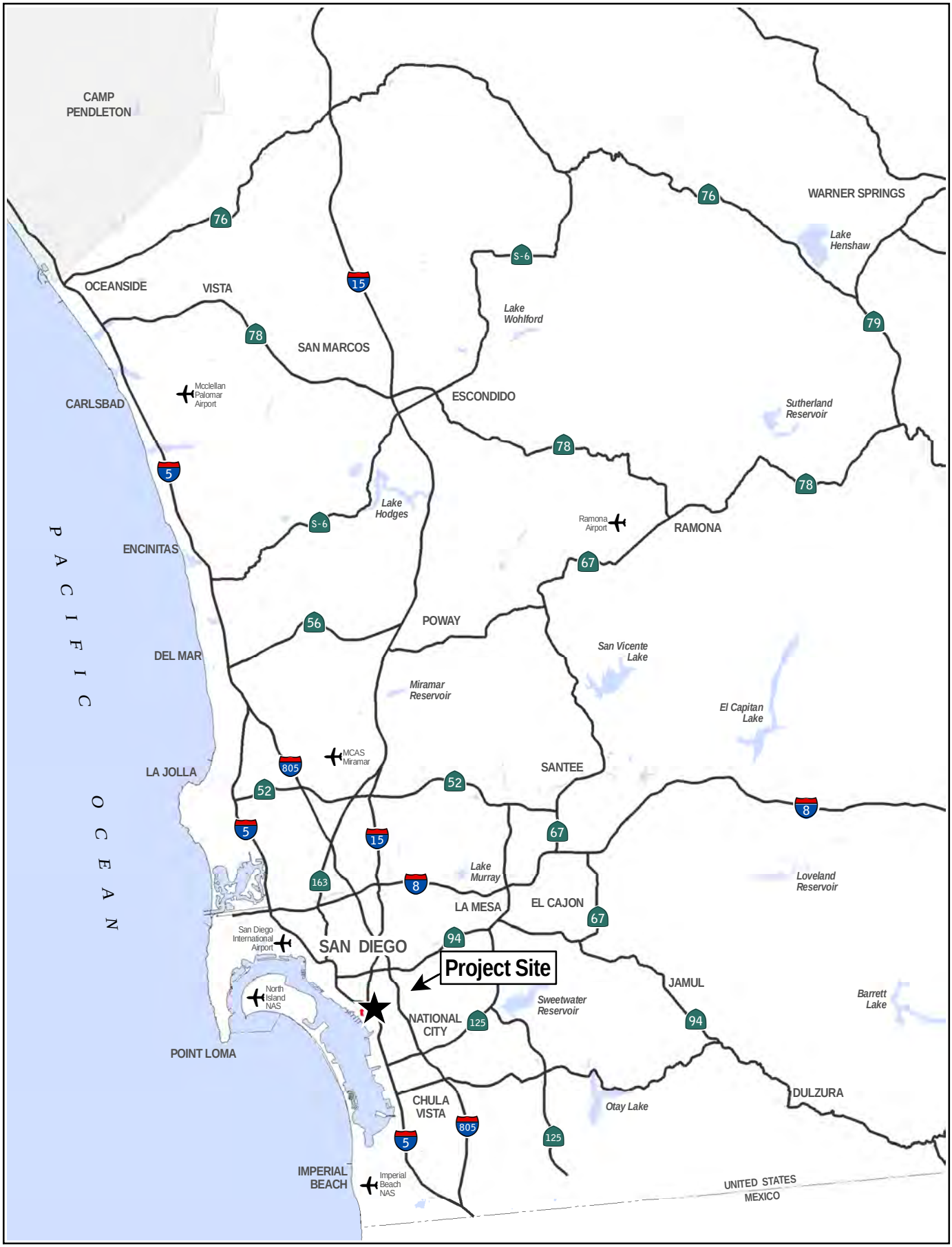


Regional Location

Miles
0 3 6

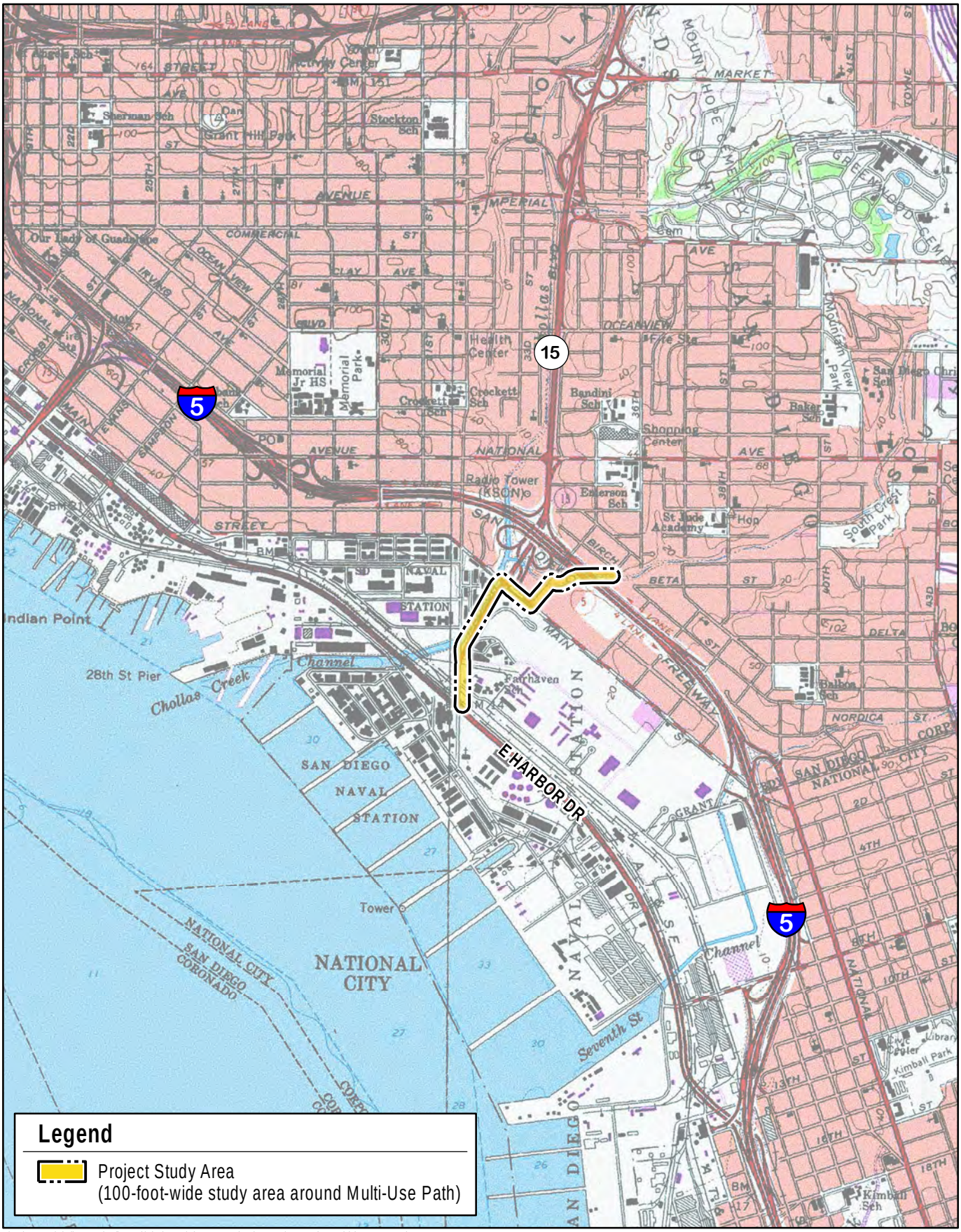
FIGURE 1

R·E·C Consultants, Inc.

CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

Source: SANGIS GIS Data, 2011.

August 2014



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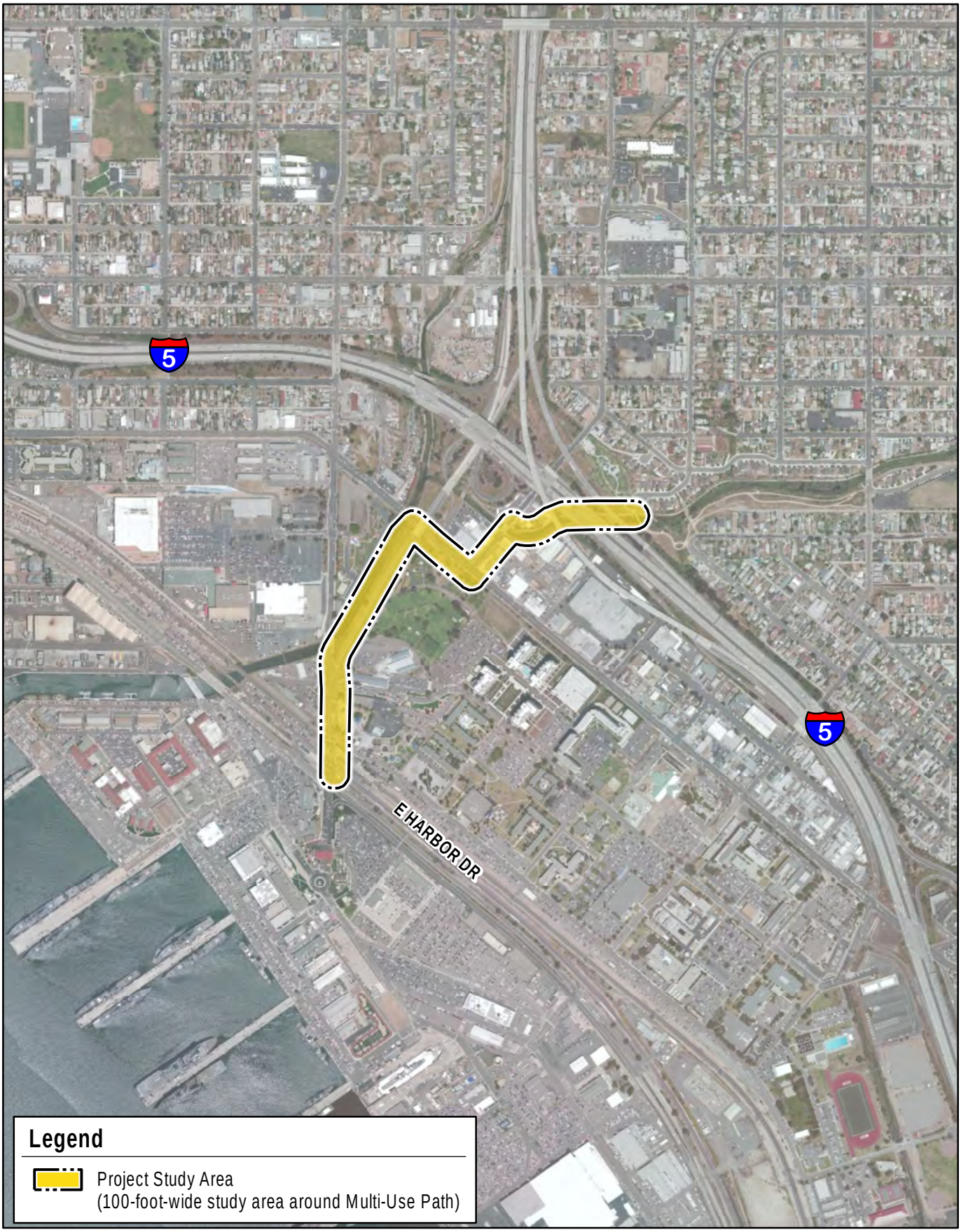
Site and Vicinity

CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

Source: USGS DRG Mosaic

FIGURE 2

August 2014



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Aerial Photograph of Location and Vicinity

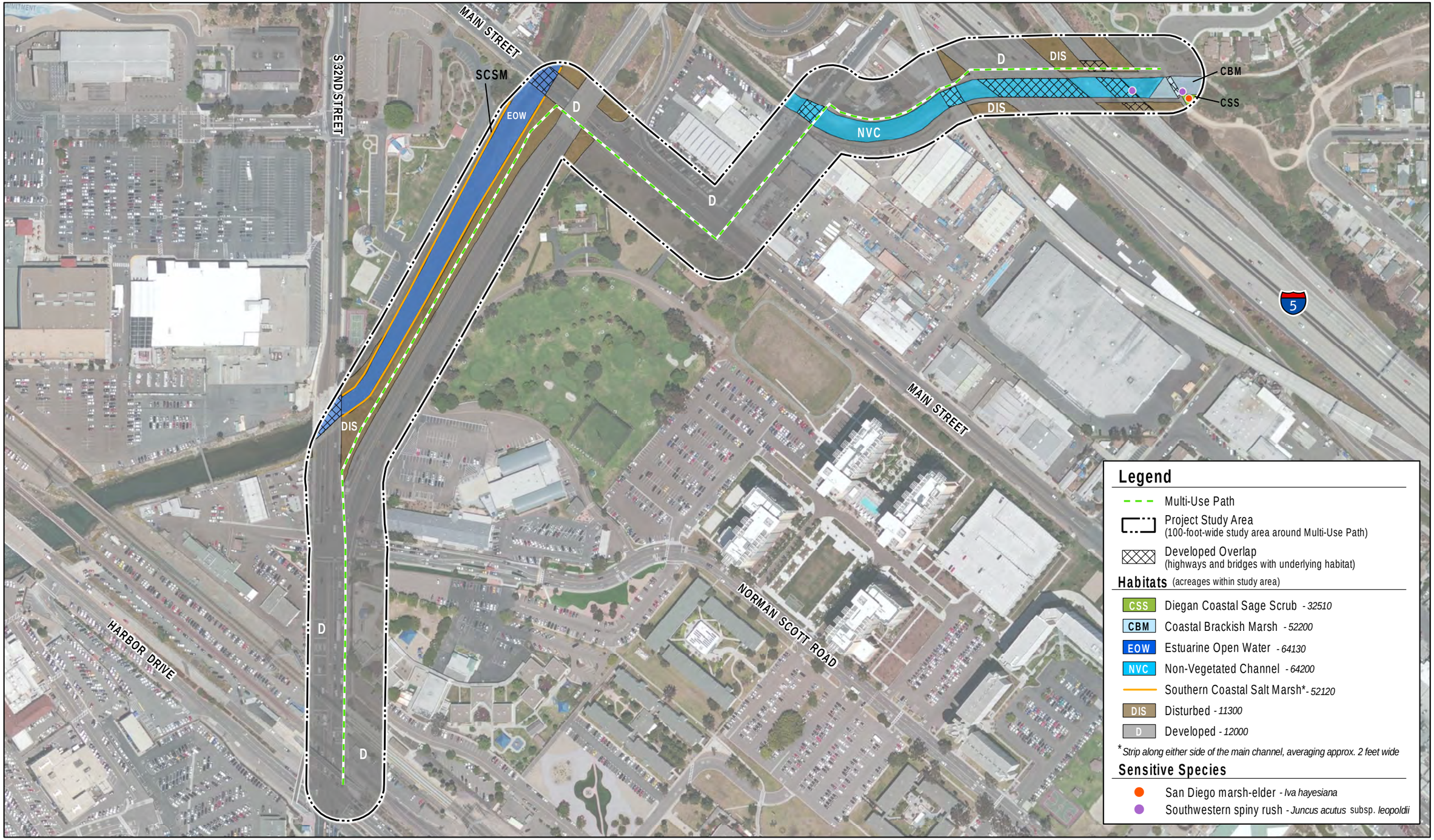
CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

0 500 1,000 Feet

Source: Esri Basemap

FIGURE 3

August 2014



Biological Resources

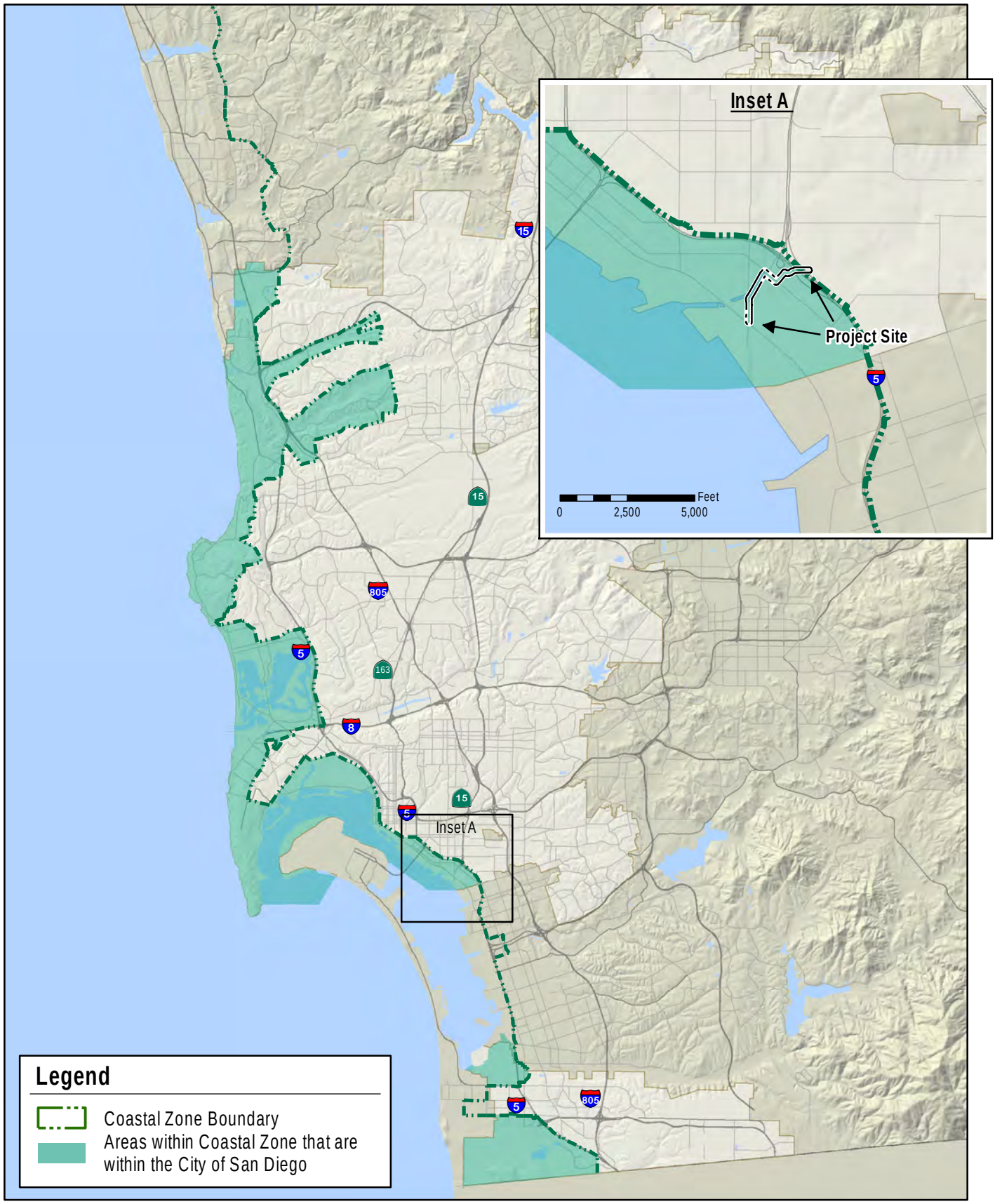
CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

0 125 250 Feet

Aerial Source: Esri Basemap

FIGURE 4

August 2014



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City of San Diego Coastal Zone Boundary

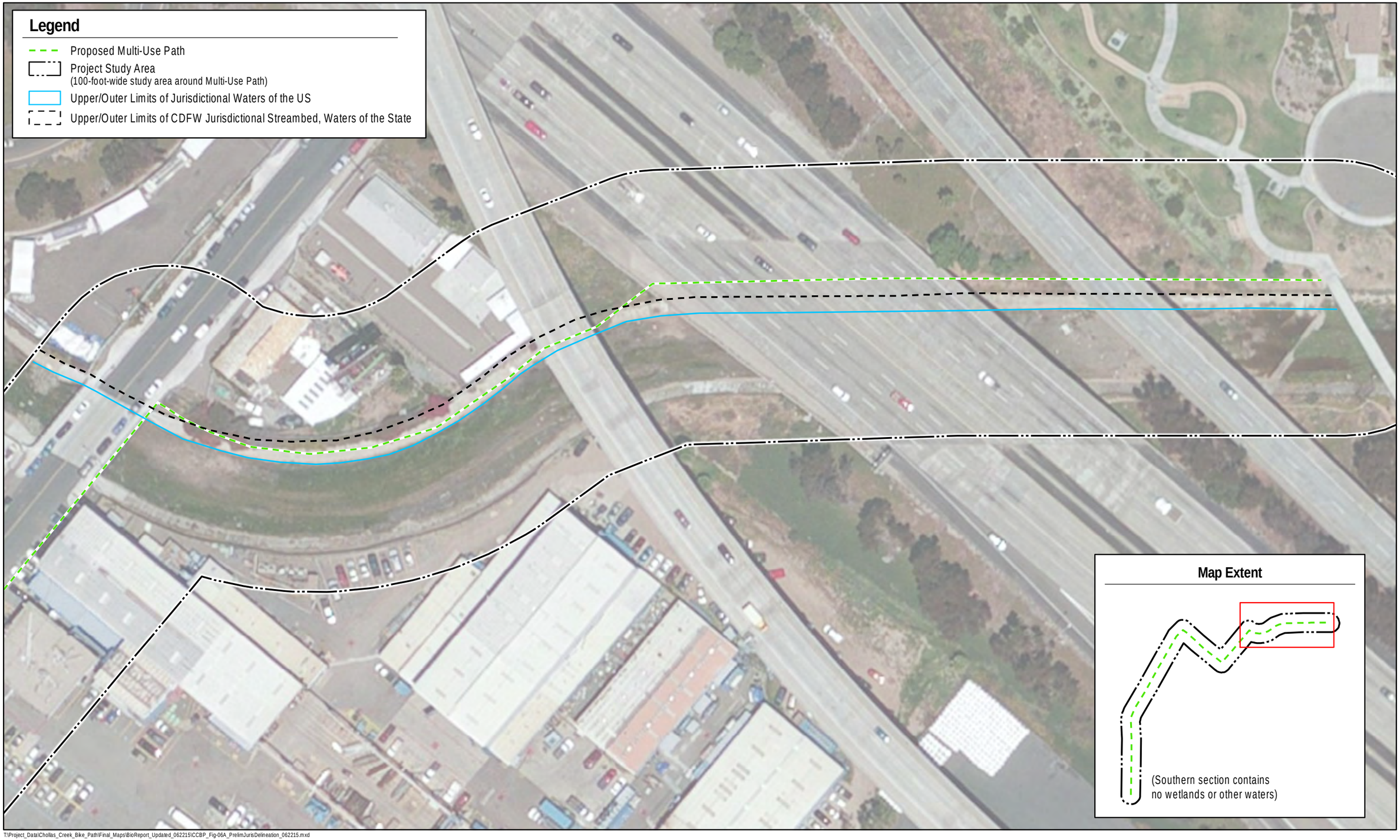
0 12,000 24,000 Feet

FIGURE 5

CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

Source: Esri Basemap

August 2014



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Delineation of Wetlands/Waters and Streambed

CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

0 40 80 Feet

Source: Esri Basemap

FIGURE 6A

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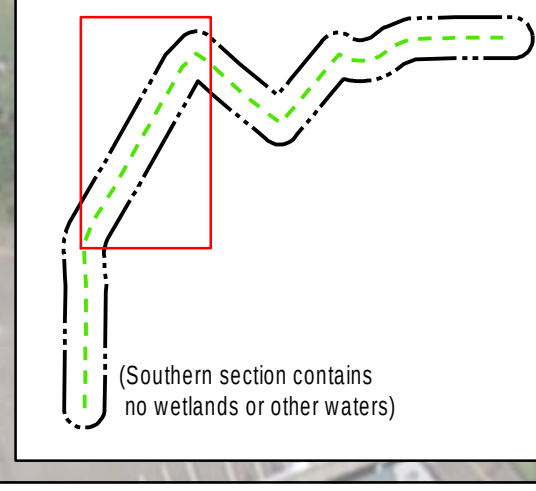
Legend

- Proposed Multi-Use Path
- Project Study Area
  (100-foot-wide study area around Multi-Use Path)
- Upper/Outer Limits of Jurisdictional Waters of the US
- Upper/Outer Limits of CDFW Jurisdictional Streambed and Waters of the State

Map Extent



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Delineation of Wetlands/Waters and Streambed

CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

0 40 80 Feet

Source: Esri Basemap

FIGURE 6B

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Legend

Project Study Area
(100-foot-wide study area around Multi-Use Path)

Developed Overlap
(highways and bridges with underlying habitat)

Bikeway Impact Area (Outside Existing Roadways)

Habitats within Study Area

CBM Coastal Brackish Marsh - *52200*

NVC Non-Vegetated Channel - *64200*

DIS Disturbed - *11300*

D Developed - *12000*

Sensitive Species

Southwestern spiny rush - *Juncus acutus* subsp. *leopoldii*

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Project Impacts - Northern Portion

CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

0 30 60 Feet

Aerial Source: Esri Basemap

FIGURE 7A

August 2014

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R·E·C Consultants, Inc.

Project Impacts - Southern Portion

CHOLLAS CREEK TO BAYSHORE BIKEWAY MULTI-USE PATH

0 10 20 30 40 50 60 70 Feet

Source: Esri Basemap

FIGURE 7B

August 2014

APPENDIX A PLANTS OBSERVED IN THE CHOLLAS CREEK MULTI-USE PATH STUDY AREA			
Scientific Name	**Common Name**	**Family**	**Habitat**
*Acacia cyclops**	Cyclops acacia	Fabaceae	DEV, DIS
Ambrosia psilostachya	western ragweed	Asteraceae	DEV, DIS, CBM
Artemisia californica	coastal sagebrush	Asteraceae	DIS, CSS
Artemisia douglasiana	Douglas mugwort	Asteraceae	CSS/CBM
Arthrocnemum subterminale	Parish's pickleweed	Chenopodiaceae	NVC, SM
*Arundo donax**	giant reed	Poaceae	DEV, CBM
*Atriplex prostrata**	spearscale	Chenopodiaceae	DIS, CBM, SM
*Atriplex semibaccata**	Australian saltbush	Chenopodiaceae	DIS
Avena sp.*	oats	Poaceae	CSS, DIS
Baccharis salicifolia subsp. *salicifolia*	mule-fat, seep-willow	Asteraceae	CBM
*Bassia hyssopifolia**	five-hook bassia	Chenopodiaceae	SM
Batis maritima	saltwort, beachwort	Bataceae	NVC, SM
*Bolboschoenus glaucus**	non-native bulrush previously undocumented in SD County	Cyperaceae	CBM
Bolboschoenus maritimus subsp. *paludosus*	prairie bulrush	Cyperaceae	CBM
Bougainvillea sp.*	Bougainvillea	Nyctaginaceae	DEV, DIS
Brickellia californica	California brickellbush	Asteraceae	CSS
*Bromus diandrus**	ripgut grass	Poaceae	DEV, DIS
Carpobrotus sp.*	sea-fig or hottentot fig	Aizoaceae	DIS
Cenchrus sp.*	sandspur	Poaceae	DEV
*Chenopodium album**	lamb's quarters	Chenopodiaceae	DIS
Cistus sp.*	rockrose	Cistaceae	DEV
Cressa truxillensis	alkali weed	Convolvulaceae	DIS
*Cupaniopsis anacardioides**	carrotwood	Sapindaceae	DIS
Cylindropuntia prolifera	coast cholla	Cactaceae	CSS
*Cynodon dactylon**	Bermuda grass	Poaceae	CSS, DIS, CBM
Cyperus eragrostis	tall flatsedge	Cyperaceae	CBM
Datura wrightii	western jimson weed	Solanaceae	DEV, DIS
Distichlis spicata	saltgrass	Poaceae	DIS, SM
*Echinochloa colona**	jungle-rice	Poaceae	CBM
*Ehrharta erecta**	panic veldt grass	Poaceae	DEV
Elymus condensatus	giant wild-rye	Poaceae	CSS
Encelia californica	California encelia	Asteraceae	DIS
*Erigeron bonariensis**	flax-leaf fleabane	Asteraceae	DEV
Erigeron canadensis	horseweed	Asteraceae	DIS
Eriogonum fasciculatum var. *fasciculatum*	coast California buckwheat	Polygonaceae	CSS, DIS
Eucalyptus sp.*	eucalyptus	Myrtaceae	DIS
*Euphorbia maculata**	spotted spurge	Euphorbiaceae	DIS, CBM
*Festuca perennis**	ryegrass	Poaceae	CBM, NVC
*Foeniculum vulgare**	sweet fennel	Apiaceae	DIS
Frankenia salina	alkali-heath	Frankeniaceae	SM
*Fraxinus uhdei**	Shamel ash	Oleaceae	DEV
*Glebionis coronaria**	garland/crown daisy	Asteraceae	CSS, DIS
Heliotropium curassavicum var. *oculatum*	salt heliotrope	Boraginaceae	SM
Heterotheca grandiflora	telegraph weed	Asteraceae	DEV, DIS
*Hirschfeldia incana**	short-pod mustard	Brassicaceae	DIS
Hordeum murinum subsp. *leporinum**	hare barley	Poaceae	DIS
Isocoma menziesii var. *menziesii*	spreading goldenbush	Asteraceae	DIS
Iva hayesiana!	San Diego marsh-elder	Asteraceae	CBM

Scientific Name	Common Name	Family	Habitat
Juncus acutus subsp. *leopoldii!*	southwestern spiny rush	Juncaceae	CBM, NVC
*Lactuca serriola**	prickly lettuce	Asteraceae	DIS
Leptochloa fusca subsp. *uninervia*	Mexican sprangletop	Poaceae	CBM
Lycium sp.	box-thorn	Solanaceae	CSS
Malacothamnus fasciculatus var. *fasciculatus*	chaparral bushmallow	Malvaceae	CSS
Malosma laurina	laurel sumac	Anacardiaceae	CSS
Malva sp.*	cheeseweed or mallow	Malvaceae	DIS
Malvella leprosa	alkali mallow	Malvaceae	DIS
*Mesembryanthemum nodiflorum**	slender-leaf iceplant	Aizoaceae	DIS
*Myoporum parvifolium**	creeping myoporum	Myoporaceae	DEV
*Nerium oleander**	oleander	Apocynaceae	DEV
*Nicotiana glauca**	tree tobacco	Solanaceae	DEV, DIS
Oenothera elata	great marsh evening-primrose	Onograceae	DEV, CBM
Opuntia sp.	prickly-pear	Cactaceae	DIS
*Paspalum dilatatum**	dallis grass	Poaceae	DEV, CBM
*Pennisetum setaceum**	African fountain grass	Poaceae	DEV, DIS
*Phoenix canariensis**	Canary Island date palm	Arecaceae	DEV
Platanus racemosa	western sycamore	Platanaceae	DEV
Poaceae	lawn grasses	Poaceae	DEV
Poaceae	annual non-native grasses (disintegrated, unidentifiable)	Poaceae	DIS
Polygonum sp.*	knotweed	Polygonaceae	DIS
*Polypogon monspeliensis**	annual beard grass	Poaceae	NVC
Populus fremontii subsp. *fremontii*	western cottonwood	Salicaceae	DIS
*Raphanus sativus**	wild radish	Brassicaceae	DIS
Ribes speciosum	fuchsia-flower gooseberry	Grossulariaceae	CSS
*Ricinus communis**	castor bean	Euphorbiaceae	CSS, DIS
*Rumex crispus**	curly dock	Polygonaceae	CBM
Ruppia maritima	beadfruit sea-tassel	Potamogetonaceae	NVC
Salsola sp.*	Russian-thistle	Chenopodiaceae	DIS
Salvia apiana	white sage	Lamiaceae	CSS
*Schinus molle**	Peruvian pepper tree	Anacardiaceae	DIS
*Schinus terebinthifolius**	Brazilian pepper tree	Anacardiaceae	CBM
Schoenoplectus americanus	Olney's bulrush	Cyperaceae	CBM
Schoenoplectus californicus	California bulrush	Cyperaceae	CBM
Simmondsia chinensis	jojoba, goatnut	Simmondsiaceae	CSS
*Sonchus oleraceus**	common sow-thistle	Asteraceae	DIS
Spergularia sp.*	sand-spurrey	Caryophyllaceae	DIS
Sporobolus airoides	alkali sacaton	Poaceae	CSS
Stipa miliacea var. *miliacea**	smilo grass	Poaceae	CSS, DIS, CBM
*Tamarix aphylla**	athel	Tamaricaceae	DEV
*Tipuana tipu**	tipu tree	Fabaceae	DEV
Typha sp.	cattail	Typhaceae	CBM, DIS
Ulva sp.	sea lettuce	Ulvaceae	NVC
*Washingtonia robusta**	Mexican fan palm	Arecaceae	DIS
Xanthium strumarium	cocklebur	Asteraceae	CBM

* non-native
! sensitive

CBM = Coastal Brackish Marsh
CSS = Coastal Sage Scrub
DEV = Developed
DIS = Disturbed
NVC = Non-Vegetated Channel
SM = Southern Coastal Salt Marsh

APPENDIX B ANIMALS OBSERVED IN THE CHOLLAS CREEK MULTI-USE PATH STUDY AREA			
Scientific Name	**Common Name**	**Habitat Observed**	**No. Observed**
Invertebrates			
Class Gastropoda(*)	snail, aquatic	EOW, NVC	many
*Helix aspersa**	brown garden snail	DIS	many
Hylephila phyleus	fiery skipper	DIS, SM	many
Subfamily Pierinae	white (unidentified)	DIS	1
Suborder Anisoptera	dragonfly	EOW flyover	several
Fish			
Fish (unidentified, small)	Superclass Osteichthyes	NVC	many
Birds			
Actitis macularius	spotted sandpiper	EOW	1
Ardea alba	great egret	NVC	1
Buteo jamaicensis	red-tailed hawk	DIS off-site	1 (dead)
*Columba livia**	rock pigeon	DEV	5
Corvus brachyrhynchos	American crow	DEV	2
Egretta thula	snowy egret	NVC	1
Family Anatidae	duck (unidentified)	NVC	1
Megaceryle alcyon	belted kingfisher	EOW flyover	1
Mimus polyglottos	northern mockingbird	DEV	3
Psaltriparus minimus	bushtit	CSS	small flock
Sayornis nigricans	black phoebe	DEV	2
Mammals			
Felis catus, Felis sylvestris c.**	cat (domestic)	DEV	1
Order Rodentia	rodent, unidentified	DIS	many burrows
Procyon lotor	raccoon	EOW (exposed mud)	tracks

! State or federal special-status species

* Non-native species

CSS = Coastal Sage Scrub
DEV = Developed
DIS = Disturbed
EOW = Estuarine Open Water
NVC = Non-Vegetated Channel

APPENDIX C
SENSITIVE PLANTS WITH THE POTENTIAL TO OCCUR ON THE CHOLLAS CREEK MULTI-USE PATH STUDY AREA
(USGS POINT LOMA AND EL CAJON QUADS, 0 - 11 METERS [0 - 35 FT])

Species Name	Common Name	Family	CRPR	State/ Federal	City NE	Growth form, bloom time	Habitat	Potential to Occur Onsite
Acanthomintha ilicifolia	**thornmint, San Diego thorn-mint**	**Lamiaceae**	**1B.1**	**SE/FT**	**X**	**Annual herb, Apr-Jun**	**Clay soil, openings in chaparral, coastal scrub, valley & foothill grassland, vernal pools; 10-960 m**	**Low; not observed, no suitable habitat observed in project study area.**
Acmispon prostratus (Lotus nuttallianus)	Nuttall's acmispon (Nuttall's lotus)	Fabaceae	1B.1	-/-		Annual herb, Mar-Jul	Coastal dunes, sandy coastal scrub; 0-10 m	Low; not observed in tiny patch of sage scrub in project study area.
Adolphia californica	spineshrub, California adolphia	Rhamnaceae	2B.1	-/-		Shrub (deciduous), Dec-May	Clay soil in chaparral, coastal scrub, valley & foothill grassland; 45-740 m	Low; would have been easily detectable and was not observed.
Agave shawii* var. *shawii	**Shaw's agave**	**Agavaceae**	**2B.1**	**-/-**	**X**	**Perennial (leaf succulent), Sep-May**	**Coastal bluff scrub, coastal scrub; 10-120 m**	**Low; would have been easily detectable and was not observed.**
Ambrosia chenopodiifolia	San Diego bur-sage	Asteraceae	2B.1	-/-		Shrub, Apr-Jun	Coastal scrub; 55-155 m	Low; would have been easily detectable and was not observed.
Ambrosia monogyra (Hymenoclea m.)	desert fragrance	Asteraceae	2B.2	-/-		Shrub, Aug-Nov	Sandy or rocky soils in sage scrub, chaparral and Sonoran desert scrub; 10-500 m	Low; would have been easily detectable and was not observed.
Ambrosia pumila	**San Diego ambrosia**	**Asteraceae**	**1B.1**	**-/FE**	**X**	**Perennial herb (rhizomatous), Apr-Oct**	**Sandy loam or clay, often disturbed areas, sometimes alkaline areas, in chaparral, coastal scrub, valley & foothill grassland, near vernal pools; 20-415 m**	**Low; no suitable habitat observed in project study area.**
Aphanisma blitoides	**aphanisma**	**Chenopodiaceae**	**1B.2**	**-/-**	**X**	**Annual herb, Mar-Jun**	**Sandy soils in coastal bluff scrub, coastal dunes, coastal scrub; 1-305 m**	**Low to moderate; only a tiny area of habitat is suitable, but plant would not have been detectable during survey.**
Arctostaphylos glandulosa subsp. *crassifolia*	Del Mar manzanita, fe del mar manzanita	Ericaceae	1B.1	**-/FE**		Shrub (evergreen), Dec-Jun	Sandy maritime chaparral; 0-365 m	Low; would have been easily detectable and was not observed.
Artemisia palmeri	Palmer's sagewort, San Diego sagewort	Asteraceae	4.2	-/-		Biennial to perennial herb to subshrub, Feb-Sep	Sandy, mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; 15-915 m	Low; would have been easily detectable and was not observed.
Astragalus tener* var. *titi	**coastal dune milkvetch**	**Fabaceae**	**1B.1**	**SE/FE**	**X**	**Annual herb, Mar-May**	**Sandy coastal bluff scrub, coastal dunes, coastal prairie (mesic); 1-50 m**	**Low; no suitable habitat in project study area, no Astragalus remains observed.**
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	1B.2	-/-		Perennial herb, Mar-Oct	Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, valley & foothill grassland; 3-460 m	Low; only a tiny area of suitable habitat and was not observed.
Atriplex pacifica	south coast saltbush, south coast saltscale	Chenopodiaceae	1B.2	-/-		Annual herb, Mar-Oct	Coastal bluff scrub, coastal dunes, coastal scrub, playas; 0-140 m	Low; only a tiny area of suitable habitat and was not observed.

Species Name	Common Name	Family	CRPR	State/ Federal	City NE	Growth form, bloom time	Habitat	Potential to Occur Onsite
Bergerocactus emoryi	velvet cactus, golden-club cactus, golden-spined cereus	Cactaceae	2B.2	-/-		Shrub (stem succulent), May-Jun	Sandy soils in closed-cone coniferous forest, chaparral, coastal scrub; 3-395 m	Low; only a tiny area of suitable habitat and was not observed.
California macrophylla (Erodium macrophyllum)	California large-leaf filaree/storksbill, round-leaved filaree	Geraniaceae	1B.1	-/-		Annual herb, Mar-May	Clay soil, cismontane woodland, valley & foothill grassland; 15-1200 m	Low; no suitable habitat observed in study area.
Chloropyron maritimum subsp. *maritimum (Cordylanthus maritimus* ssp. *m.)*	salt marsh bird's beak	Orobanchaceae	1B.2	**SE/FE**		Annual herb (hemiparasitic), May-Oct	Coastal dunes, coastal salt marshes and swamps; 0-30 m	Low; not observed during survey.
Chorizanthe orcuttiana	Orcutt's spineflower	Polygonaceae	1B.1	**SE/FE**		Annual herb, Mar-May	Chaparral (maritime), closed-cone coniferous forest, coastal scrub/ sandy openings; 3-125 m	Low; no suitable habitat in project study area.
Chorizanthe polygonoides var. *longispina*	knotweed spineflower, long-spined spineflower	Polygonaceae	1B.2	-/-		Annual herb, Apr-Jul	Often clay soils in chaparral, coastal scrub, meadows & seeps, valley & foothill grassland, near vernal pools; 30-1530 m	Low; no suitable habitat in project study area.
Corethrogyne filaginifolia var. *incana* (no varieties recognized in TJM2)	San Diego sand-aster	Asteraceae	1B.1	-/-		Perennial herb, Jun-Sep	Chaparral, coastal bluff scrub, coastal scrub; 3-115 m	Low; no *Corethrogyne* observed during survey and would have been detectable.
***Cylindropuntia californica* var. *californica* (*Opuntia parryi* var. *serpentina*)**	**snake cholla**	**Cactaceae**	**1B.1**	**-/-**	**X**	**Shrub (stem succulent), Apr-May**	**Chaparral, coastal scrub; 30-150 m**	**Low; would have been detectable, only *Cylindropuntia prolifera* observed.**
Deinandra conjugens (Hemizonia c.)	**Otay tarplant**	**Asteraceae**	**1B.1**	**SE/FT**	**X**	**Annual herb, May-Jun**	**Clay soils in coastal scrub, valley & foothill grassland; 25-300 m**	**Low; not observed, no suitable habitat observed in project study area.**
Dicranostegia orcuttiana (Cordylanthus orcuttianus)	Orcutt's bird's beak	Orobanchaceae	2B.1	-		Annual herb (hemiparasitic), Mar-Sep	Coastal scrub, 10-350 m	Low; would have been detectable and was not observed in tiny patch of suitable habitat.
Dudleya attenuata subsp. *attenuata* (*D. a.* ssp. *orcuttii)*	Orcutt's dudleya	Crassulaceae	2B.1	-/-		Perennial herb, May-Jul	Rocky or gravelly coastal bluff scrub, chaparral, coastal scrub; 3-50 m	Low; not observed, known in CA only from Border Field SP.
Dudleya blochmaniae subsp. *blochmaniae (D. blochmanae)*	Blochman's dudleya	Crassulaceae	1B.1	-/-		Perennial herb, Apr-Jun	Rocky, often clay/serpentinite in coastal bluff scrub, chaparral, coastal scrub, valley & foothill grassland; 5-450 m	Low; not observed, no suitable substrate observed in project study area.
Dudleya brevifolia (D. blochmaniae* subsp. *brevifolia)	**short-leaf dudleya**	**Crassulaceae**	**1B.1**	**SE/-**	**X**	**Perennial herb, Apr-May**	**On Torrey sandstone in openings in maritime chaparral & coastal scrub; 30-250 m**	**Low; not observed, no suitable substrate observed in project study area.**
Dudleya variegata	**variegated dudleya**	**Crassulaceae**	**1B.2**	**-/-**	**X**	**Perennial herb, Apr-Jun**	**Clay soils in chaparral, cismontane woodland, coastal scrub, valley & foothill grassland, near vernal pools; 3-580 m**	**Low; not observed, no suitable soil observed in project study area.**

Species Name	Common Name	Family	CRPR	State/ Federal	City NE	Growth form, bloom time	Habitat	Potential to Occur Onsite
Dudleya viscida	sticky dudleya	Crassulaceae	1B.2	-		Perennial herb, May-Jun	Rocky coastal bluff scrub, chaparral, coastal scrub; 10-550 m	Low; not observed, records in project CNDDB quad are questionable.
Ericameria palmeri var. *palmeri*	Palmer's goldenbush	Asteraceae	1B.1	-/-		Shrub (evergreen), Jul-Nov	Mesic chaparral, coastal scrub; 30-600 m	Low; would have been easily detectable and was not observed.
Eryngium aristulatum var. *parishii*	San Diego button-celery	Apiaceae	1B.1	**SE/FE**		Biennial to perennial herb, Apr-Jun	Mesic coastal scrub, valley & foothill grassland, vernal pools; 20-620 m	Low; not observed, no vernal pools in project study area.
Euphorbia misera	cliff spurge	Euphorbiaceae	2B.2	-/-		Shrub, Dec-Aug	Coastal bluff scrub, coastal scrub/ rocky; 10-500 m	Low; would have been easily detectable and was not observed in tiny patch of suitable habitat.
Ferocactus viridescens	coast barrel cactus, San Diego barrel cactus	Cactaceae	2B.1	-/-		Perennial (stem succulent), May-Jun	Chaparral, coastal scrub, valley & foothill grassland, near vernal pools; 3-450 m	Low; was not observed in tiny patch of suitable habitat.
Frankenia palmeri	Palmer's frankenia	Frankeniaceae	2B.1	-/-		Perennial herb, May-Jul	Coastal dunes, coastal salt marshes and swamps, playas; 0-10 m	Low; Frankenia collected in the project study area keyed to *F. salina* .
Geothallus tuberosus	Cambell's liverwort	Sphaerocarpaceae	1B.1	-/-		Ephemeral liverwort	Vernal pools and mesic coastal sage scrub; 10-600 m	Low; no suitable habitat observed in project study area.
Harpagonella palmeri	Palmer's grappling-hook	Boraginaceae	4.2	-/-		Annual herb, Mar-May	Clay soils in chaparral, coastal scrub, valley & foothill grassland; 20-955 m	Low; no suitable habitat observed in project study area.
Heterotheca sessiliflora subsp. *sessiliflora*	false goldenaster, beach goldenaster	Asteraceae	1B.1	-/-		Perennial herb, Mar-Dec	Coastal chaparral, coastal dunes, coastal scrub; 0-60 m	Low; would have been detectable and was not observed.
Isocoma menziesii var. *decumbens*	decumbent goldenbush	Asteraceae	1B.2	-/-		Shrub, Apr-Nov	Sandy, often disturbed areas in chaparral, coastal scrub; 10-135 m	Low; would have been detectable and was not observed, Isocoma in project study area keyed to *I. m.* var. *m* .
Iva hayesiana	San Diego marsh-elder	Asteraceae	2B.2	-/-		Perennial herb to subshrub, Apr-Oct	Marshes & swamps, playas; 10-500 m	**Occurs onsite:** one large plant at far east end of project study area, on south bank of south channel, just below patch of sage scrub.
Juncus acutus subsp. *leopoldii*	southwestern spiny rush	Juncaceae	4.2	-/-		Perennial herb, Mar-Jun	Coastal dunes (mesic), meadows & seeps (alkaline seeps), marshes and swamps (coastal salt); 3-900 m	**Occurs onsite:** two individuals observed near east end of the study area.
Lasthenia glabrata subsp. *coulteri*	Coulter's salt-marsh daisy, Coulter's goldfields	Asteraceae	1B.1	-/-		Annual herb, Feb-Jun	Coastal salt marshes & swamps, playas, vernal pools; 1-1220 m	Low; no suitable habitat observed in project study area.
Lepidium virginicum var. *robinsonii* (not recognized in TJM2)	Robinson's peppergrass	Brassicaceae	4.3	-/-		Annual herb, Jan-Jul	Chaparral, coastal scrub; 1-885 m	Low; no *Lepidium* remains observed in tiny patch of suitable habitat.

Species Name	Common Name	Family	CRPR	State/ Federal	City NE	Growth form, bloom time	Habitat	Potential to Occur Onsite
Leptosyne maritima (Coreopsis m.)	San Diego sea-dahlia	Asteraceae	2B.2	-/-		Perennial herb, Mar-May	Coastal bluff scrub, coastal scrub; 5-150 m	Low; no flower remains observed in tiny patch of suitable habitat.
Monardella stoneana	Jennifer's monardella	Lamiaceae	1B.2	-/-		Perennial herb to subshrub, Jun-Sep	Usually in rocky intermittent streambeds, closed-cone coniferous forest, chaparral, coastal scrub, riparian scrub; 10-790 m	Low; no suitable habitat observed in project study area, would have been detectable and was not observed.
Monardella viminea (M. linoides ssp. *v* .)	willowy monardella	Lamiaceae	1B.1	**SE/FE**		Perennial herb to subshrub, Jun-Aug	Alluvial ephemeral washes, chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; 50-225 m	Low; no suitable habitat observed in project study area, would have been detectable and was not observed.
Myosurus minimus	little mousetail	Ranunculaceae	3.1	-/-		Annual herb, Mar-Jun	Valley & foothill grassland, vernal pools (alkaline); 20-640 m	Low; no suitable habitat observed in project study area.
Nama stenocarpum	mud nama	Boraginaceae	2B.2	-/-		Annual to perennial herb, Jan-Jul	Marshes & swamps (lake margins, riverbanks); 5-500 m	Low; not observed, habitat in project study area is probably not suitable due to brackish conditions.
Navarretia fossalis	**spreading navarretia**	**Polemoniaceae**	**1B.1**	**-/FT**	**X**	**Annual herb, Apr-Jun**	**Chenopod scrub, marshes & swamps (shallow freshwater), playas, vernal pools; 30-655 m**	**Low; not observed, no suitable habitat observed in project study area.**
Navarretia prostrata	flat navarretia	Polemoniaceae	1B.1	-/-		Annual herb, Apr-Jul	Alkaline floodplains and vernal pools; <700 m (TJM2)	Low; not observed, no suitable habitat observed in project study area.
Nemacaulis denudata var. *denudata*	coast woolly-heads	Polygonaceae	1B.2	-/-		Annual herb, Apr-Sep	Coastal dunes; 0-100 m	Low; not observed, no suitable habitat in project study area.
Nemacaulis denudata var. *gracilis*	slender woolly-heads, slender cottonheads	Polygonaceae	2B.2	-/-		Annual herb, Mar-May	Coastal dunes, desert dunes, Sonoran desert scrub; -50-400 m	Low; not observed, no suitable habitat in project study area.
Orcuttia californica	**California Orcutt's grass**	**Poaceae**	**1B.1**	**SE/FE**	**X**	**Annual herb, Apr-Aug**	**Vernal pools; 15-660 m**	**Low; no suitable habitat in project study area.**
Ornithostaphylos oppositifolia	Baja California birdbush	Ericaceae	2B.1	**SE**/-		Shrub (evergreen), Jan-Apr	Chaparral; 55-800 m	Low; no suitable habitat in project studya area.
Orobanche parishii subsp. *brachyloba*	beach broom-rape, short-lobe broom-rape	Orobanchaceae	4.2	-/-		Perennial herb (parasitic), Apr-Oct	Sandy coastal bluff scrub, coastal dunes, coastal scrub; parasitic on shrubs, generally *Isocoma menziesii* ; 3-305 m	Low; would have been detectable during survey and was not observed.
Phacelia stellaris	Brand's phacelia	Boraginaceae	1B.1	-/FC		Annual herb, Mar-Jun	Coastal dunes, coastal scrub; 1-400 m	Low; tiny area of coastal scrub is probably not open and sandy enough.
Pogogyne abramsii	**San Diego mesa mint**	**Lamiaceae**	**1B.1**	**SE/FE**	**X**	**Annual herb, Apr-Jul**	**Vernal pools; 90-200 m**	**Low; not observed, no vernal pools in project study area.**
Pogogyne nudiuscula	**Otay mesa mint**	**Lamiaceae**	**1B.1**	**SE/FE**	**X**	**Annual herb, May-Jul**	**Vernal pools; 90-250 m**	**Low; not observed, no vernal pools in project study area.**

Species Name	Common Name	Family	CRPR	State/ Federal	City NE	Growth form, bloom time	Habitat	Potential to Occur Onsite
Quercus dumosa	Nuttall's scrub oak	Fagaceae	1B.1	-/-		Shrub (evergreen), Feb-Aug	Sandy, clay loam soils in closed-cone coniferous forest, chaparral, coastal scrub; 15-400 m	Low; would have been easily detectable during survey and was not observed.
Ribes viburnifolium	Santa Catalina Island currant, evergreen currant	Grossulariaceae	1B.2	-/-		Shrub (evergreen), Feb-Apr	Chaparral, cismontane woodland; 30-305 m	Low; would have been easily detectable during survey and was not observed.
Senecio aphanactis	California groundsel, chaparral ragwort	Asteraceae	2B.2	-/-		Annual herb, Jan-Apr	Chaparral, cismontane woodland, coastal scrub, sometimes alkaline; 15-800 m	Low; potential habitat in project study area is maringal and probably too disturbed.
Stemodia durantifolia	blue streamwort, purple stemodia	Plantaginaceae	2B.1	-/-		Perennial herb, Jan-Dec	Riparian habitats, on wet sand or rocks, drying streambeds; <400 m (TJM2)	Low; would have been detectable during survey and was not observed.

Listing Designations

CRPR - California Rare Plant Rank (from Rare Plant Status Review Group, jointly managed by California Department of Fish and Wildlife [CDFW] and California Native Plant Society [CNPS])

1A - Plants presumed extirpated in California and either rare or extinct elsewhere
1B - Plants rare, threatened or endangered in California AND elsewhere
2A - Presumed extirpated or extinct in California, but more common elsewhere
2B - Plants rare, threatened or endangered in California, but more common elsewhere
3 - Plants about which more information is needed - a review list
4 - Plants of limited distribution - a watch list

.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 - Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

State of California species designations (CDFW April 2013)
SE - State-listed Endangered
ST - State-listed Threatened
SR - State-listed Rare

Federal species designations (CDFW April 2013, USFWS 2013)
FE - Federally listed Endangered
FT - Federally-listed Threatened
FC - Federal candidate for listing

City NE - an X in this column indicates the species is considered a Narrow Endemic by the City of San Diego (Land Development Manual - Biology Guidelines 2009)

Other abbreviations:

TJM2 - The Jepson Manual, 2nd edition (2012) (taxonomic authority for this report except where it conflicts with special-status plant recognition)
(Common names are primarily from *The Checklist of Vascular Plants of San Diego County* [Rebman and Simpson 2006], and secondarily from CNPS's Inventory of Rare and Endangered Plants [CNPS 2010, 2013])

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 09/12/2013

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Iva hayesiana*

Common Name: San Diego marsh-elder

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1-2 Subsequent Visit? ☐ yes ☐ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Catherine MacGregor
Address: 2442 Second Avenue
San Diego, CA 92101
E-mail Address: catherine@rec-consultants,com
Phone: (619) 326-6008

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

***Location Description* (please attach map AND/OR fill out your choice of coordinates, below)**

Bank of south branch of Chollas Creek, immediately south of Dorothy Petway Neighborhood Park, just east of intersection of I-5 and I-15

County: San Diego County Landowner / Mgr.: City of SD?

Quad Name: _____ Elevation: _____

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GIS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model _____

DATUM: **NAD27** ☐ **NAD83** ☑ **WGS84** ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☑

Coordinates: (from GIS, entered based on hand-mapping on aerial photos): 32°41'27.857"N 117°7'4.354"W

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Growing on natural (unpaved) south bank of the creek in a large mound, could not tell for sure if it was one large plant or a couple of plants; also at edge of creek: Rosa californica, Ribes speciosum, Elymus condensatus, Artemisia douglasiana; and coastal sage scrub plants above that such as Artemisia californica, Eriogonum fasciculatum, Brickellia californica, Salvia apiana, with some succulents such as Cylindropuntia prolifera, a Lycium sp., and Simmondsia chinensis but no Ferocactus, Mammilaria, Euphorbia misera, etc. Creek here has a cobble bottom and a patch of brackish marsh is just downstream (see Juncus acutus subps. leopoldii form).

Please fill out separate form for other rare taxa seen at this site. Juncus acutus subsp. leopoldii nearby

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: Park to north, empty land and residential to south, freeway and concrete channel to west, channel to east

Visible disturbances: urban creek: concreted banks, trash, invasive species, alteration of flow from weir

Threats: Trampling?

Comments:

Determination: *(check one or more, and fill in blanks)*

☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☑ Other: already known

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☑
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 09/12/2013

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Juncus acutus subsp. leopoldii*

Common Name: southwestern spiny rush

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 2 Subsequent Visit? ☐ yes ☐ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Catherine MacGregor
Address: 2442 Second Avenue
San Diego, CA 92101
E-mail Address: catherine@rec-consultants,com
Phone: (619) 326-6008

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

***Location Description* (please attach map AND/OR fill out your choice of coordinates, below)**

In channel of south branch of Chollas Creek, south of Dorothy Petway Neighborhood Park, just east of intersection of I-5 and I-15. One was to east of pedestrian bridge and one to the west below the concrete weir.

County: San Diego County Landowner / Mgr.: City of SD?

Quad Name: _____ Elevation: _____

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): GIS

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model _____

DATUM: **NAD27** ☐ **NAD83** ☑ **WGS84** ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☑

Coordinates: (from GIS, entered based on hand-mapping on aerial photos): West plant: 32°41'28.038"N 117°7'6.146"W
East plant: 32°41'28.027"N 117°7'4.559"W

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Eastern plant growing in cobble-bottom channel upstream of concrete weir that crosses channel, in a small patch of brackish marsh, with Bulboschoenus maritimus subsp. paludosus, Scirpus californicus, Typha sp., Leptochloa fusca subsp. uninervia, Iva hayesiana, and Baccharis salicifolia subsp. salicifolia, as well as non-natives such as Arundo donax, Bermuda grass, jungle rice Echinochloa colona, and Bulboschoenus glaucus. Western plant growing on downstream side of the weir on accumulated sediment, little nearby vegetation.

Please fill out separate form for other rare taxa seen at this site. Iva hayesiana nearby

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: Park to north, empty land and residential to south, freeway and concrete channel to west, channel to east

Visible disturbances: urban creek: concreted banks, trash, invasive species, alteration of flow from weir

Threats: Trampling? washing away by storm flows? City maintenance clean-out?

Comments:

Determination: *(check one or more, and fill in blanks)*

☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☑ Other: already known

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☑
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

APPENDIX D
SENSITIVE ANIMALS WITH THE POTENTIAL TO OCCUR ON THE CHOLLAS CREEK MULTI-USE PATH STUDY AREA
(USGS POINT LOMA AND NATIONAL CITY QUADS, 0 - 11 METERS [0 - 35 FT])

Species Name	Common Name	State/Federal Status	Habitat	Potential to Occur Onsite
INVERTEBRATES				
Branchinecta sandiegonensis	San Diego fairy shrimp	-/**FE**	Vernal pools and other unvegetated ephemeral basins in Orange and San Diego Counties and Baja California.	Low; no vernal pools in project study area.
Callophrys thornei	Thorne's hairstreak	-/BLM-S	Otay Mountain; host plant is *Hesperocyparis forbesii* .	Low; no host plant in project study area.
Cicindela gabbii	western tidal-flat tiger beetle	-/-	Mud flats, salt marshes, and sea beaches	Unknown; would be difficult to detect if present in mud flats within western estuarine creek channel; no impacts proposed to its habitat.
Cicindela hirticollis gravida	sandy beach tiger beetle	-/-	Moist swales behind dunes or on upper beaches above normal high tide	Low; no beach or dunes in project study area.
Cicindela latesignata latesignata	western beach tiger beetle	-/-	Coastal sea beaches, bays, estuaries, salt marshes, and alkali sloughs.	Low; no beaches in project study area, salt marsh areas are small and disturbed.
Cicindela senilis frosti	senile tiger beetle	-/-	Coastal salt marshes, tidal mud flats, interior alkali mud flats; an inland site near Jacumba.	Unknown; would be difficult to detect if present in salt marsh or mud flats along western estuarine creek channel; no impacts proposed to its habitat.
Coelus globosus	globose dune beetle	-/-	Sea beach dunes	Low; no dunes in project study area.
Danaus plexippus	monarch butterfly		Land with host plant milkweeds (*Asclepias* spp.) or nectar plants.	Low; no host plants observed, project study area is likely too developed.
Euphydryas editha quino	Quino checkerspot butterfly	-/**FE**	Open grassy areas, interior foothills, host plants *Plantago erecta* , *Plantago ovata* , *Castilleja exserta (Cordylanthus rigidus, Antirrhinum coulterianum, Collinsia heterophylla);* 0-1000 ft.	Low; no suitable habitat or host plants observed in project area.
Helminthglypta coelata	Mesa shoulderband	-/-	Known from only a few locations in coastal SD County; in rock slides, beneath bark and rotten logs, and in coastal vegetation.	Low; known only from La Jolla and Pacific Beach; project study area is likely too developed and contains too little native coastal vegetation.
Lycaena hermes	Hermes copper	-/-	Coastal sage scrub, mixed chaparral and chamise chaparral; from Mexican border to Fallbrook and inland to Pine Valley in SD County; host plant is spiny redberry (*Rhamnus crocea)* .	Low; no host plant in project study area.
Melitta californica	California melittid bee	-/-	Desert regions of SW Arizona, SE California, and Baja California; also collected at Torrey Pines and Coronado.	Low; Coronado collection was from 19th century, very unlikely to occur in this developed setting.
Panoquina errans	wandering skipper (saltmarsh skipper)	-/-	Salt or alkali marsh; 0-500 ft	Low; salt marsh is limited to small patches in south branch channel and thin edges along channel below confluence and is disturbed.
Streptocephalus woottoni	Riverside fairy shrimp	-/**FE**	Vernal pools and other unvegetated ephemeral basins in inland Riverside, Orange and San Diego (Ramona area) Counties, and coastal SD County and Baja California.	Low; no vernal pools in project study area.

Species Name	Common Name	State/Federal Status	Habitat	Potential to Occur Onsite
Tryonia imitator	mimic tryonia	-/-	Coastal lagoons, estuaries and salt marshes in permanently submerged areas, in a variety of sediment types, withstands wide range of salinity.	Unknown; would be difficult to detect; the one aquatic snail observed was not this species; but project will not directly impact habitat of this species.
AMPHIBIANS				
Anaxyrus californicus (Bufo c.)	arroyo toad	SSC/**FE**, USFWS-S	Washes, arroyos, sandy riverbanks, riparian areas; needs exposed sandy streamsides with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding; 0-3,000 ft (900 m).	Low; no suitable sandy streamsides with terraces in project study area, not reported in CNDDB project quads.
Spea hammondii	western spadefoot	SSC/BLM-S	Open areas with sandy or gravelly soils; rainpools free of bullfrogs, fish, or crayfish needed for breeding. Activity limited to wet season, summer storms or during evenings with elevated substrate moisture levels; nocturnal; 0-4,500 ft	Low; project study area is too highly developed; not reported in project CNDDB quads.
REPTILES				
Anniella pulchra pulchra	silvery legless lizard	SSC/-	Loose soil and leaf litter with plant cover in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks; often under surface objects such as rocks, boards, driftwood, and logs; sometimes found in suburban gardens in southern California; lives mostly underground.	Low; not observed, tiny areas of suitable habitat in project study area are probably too isolated within urban setting.
Aspidoscelis hyperythra (Cnemidophorus hyperythrus)	orangethroat whiptail (Belding's orange-throated whiptail)	SSC	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral, west of Peninsular Ranges; 0-2,000 ft (610 m).	Low; not observed, tiny areas of suitable habitat in project study area are probably too isolated within urban setting.
Aspidoscelis tigris stejnegeri (Cnemidophorus t. s.)	coastal whiptail	-/-	Found in hot, dry open areas with sparse foliage such as chaparral, woodland, and riparian areas	Low; not observed, tiny areas of suitable habitat in project study area are probably too isolated within urban setting.
Charina trivirgata	rosy boa	-/(USFS-S)	Arid scrublands, semi-arid shrublands, rocky shrublands, rocky deserts, canyons, and other rocky areas; appears to be common in riparian areas, but does not require permanent water; those outside a small area in the Tijuana and Otay River watersheds have been placed in another species, *L. orcuttii* (northern three-lined boa).	Low; not observed, project study area is too developed.
Chelonia mydas	green sea turtle	-/**FT**	Marine, eats seagrasses and algae.	Low; no desirable seagrasses observed in the creek channel.
Crotalus ruber	red-diamond rattlesnake	SSS/-	Arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas, and, on desert slopes of mountains, also rocky desert flats.	Low; not observed, tiny area of suitable habitat in project study area are probably too isolated within urban setting.
Diadophis punctatus (similis)	(San Diego) ringneck snake	-/USFS-S	Moist woodlands, forests, grasslands, chaparral, farms, and gardens; usually found on the ground under bark, logs, stones, or boards; may not be distinct from San Bernardino subspecies (*D. p. modestus*)	Low; not observed, tiny areas of suitable habitat in project study area are probably too isolated within urban setting.
Phrynosoma blainvillii (P. coronatum b.)	coast horned lizard	SSC/BLM-S, USFS-S	Coastal sage scrub with harvester ants (*Pogonomyrmex* spp.) and other native ants.	Low; not observed, tiny patch of coastal sage scrub in project study area is isolated within urban setting.

Species Name	Common Name	State/Federal Status	Habitat	Potential to Occur Onsite
Plestiodon skiltonianus interparietalis (Eumeces s. i.)	Coronado skink	SSC/BLM-S	Grassland, woodlands, pine forests, chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers; prefers rocky areas near streams with lots of vegetation, also found in areas away from water; diurnal but secretive; southwestern CA.	Low; project study area is too highly developed; not reported in project CNDDB quads.
Salvadora hexalepis virgultea	coast patch-nosed snake	SSC/-	Semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains, in coastal zone south and west of the deserts; active during the day.	
Thamnophis hammondii	two-striped garter snake	SSC/BLM-S. USFS-S	Around pools, creeks, cattle tanks, and other water sources, often in rocky areas, in oak woodland, chaparral, brushland, and coniferous forest; 0-6,988 ft (2,130 m).	Low; not observed, tiny patches of natural habitat in proejct study area are not suitable.
	BIRDS			
Accipiter cooperii	Cooper's hawk (nesting)	WL/-	Oak woodlands, mature riparian woodlands, eucalyptus groves in urban and suburban settings, most common on coastal slope.	Low; not observed, project study area contains few trees or foraging habitat for this species.
Agelaius tricolor	tricolored blackbird (nesting colony)	SSC/BCC, BLM-S	Fresh water, preferably emergent wetland with tall, dense cattails or tules, also in thickets of willow, blackberry, wild rose, tall herbs; feeds in grassland and cropland habitats.	Low; not observed, no suitable habitat in project study area.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	WL/-	Sparse, mixed chaparral and coastal scrub habitats, frequently relatively steep, often rocky hillsides with grass and forb patches.	Low; not observed, no suitable habitat observed in project study area.
Ammodramus savannarum	grasshopper sparrow	SSC/-	Short- to middle-height, moderately open grasslands with scattered shrubs, native bunchgrasses preferred; hard to identify except when singing (Mar-Jul).	Low; no suitable non-native grassland in project study area.
Artemisiospiza belli belli (Amphispiza b. b.)	Bell's sage sparrow	WL/BCC	Year-round resident in open chaparral and sage scrub, especially recently where burned areas or on gabbro substrate; most common in central southern SD County; very sensitive to habitat fragmentation.	Low; not observed, no suitable habitat in project study area.
Athene cunicularia	burrowing owl (burrow sites and some wintering sites)	SSC/BCC, BLM-S	Open, dry grasslands, agricultural and range lands, shrub and desert habitats of low-growing open vegetation (associated with burrowing animals).	Low; not observed, little patches of potential habitat are probably too isolated within development.
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren, San Diego cactus wren	SSC/BCC, USFS-S	Open coastal sage scrub with thickets of chollas (*Cylindropuntia* sp.), south- and west-facing slopes below 1,500 ft, usually within quarter mile of river valleys.	Low; not observed, tiny area of suitable habitat within project study area is too isolated within development, not documented in project CNDDM quads.
Charadrius nivosus (Charadrius alexandrinus n.)	snowy plover (Western snowy plover) (nesting)	SSC/FT, BCC	Immediate coast at scattered beach, bay and lagoon locations; nests on beaches, dunes and salt flats.	Low; not observed, unlikely to use creek channels.
Circus cyaneus	northern harrier (nesting)	SSC/-	Year-round resident but more common in winter; nests on ground in marsh or other dense vegetation, forages over grasslands.	Low; not observed, not enough grassland in the area to attract this species.
Coccyzus americanus occidentalis	western yellow-billed cuckoo (nesting)	**SE**/FC, BCC, BLM-S, USFS-S	Extensive stands of mature riparian woodland.	Low; not observed, no suitable habitat in project study area.

Species Name	Common Name	State/Federal Status	Habitat	Potential to Occur Onsite
Empidonax traillii extimus	wouthwestern willow flycatcher (nesting)	**SE/FE**	Riparian wooded/shrubby habitat that is dense in all strata.	Low; no suitable habitat observed in project study area, not documented in projet CNDDB quads.
Eremophila alpestris actia	California horned lark	WL/-	Open patches of bare land alternating with low vegetation in grasslands, montane meadows, and sagebrush plains.	Low; not observed, no suitable habitat within project study area.
Falco mexicanus	prairie falcon	WL/BCC	Nests inland and forages in open desert or grassland, may move west toward coast for winter foraging.	Low; not observed, unlikely to occur this far west and in such a developed setting; not documented in project CNDDB quads.
Falco peregrinus anatum	American peregrine	FP, CDF-S/BCC	Near wetlands, lakes, rivers or other water; on cliffs, banks, dunes, or mounds, or human structures.	Low; not observed, closest location in Bird Atlas was pair that nested on a crane on the waterfront in National City through 1997; project study area is probably not the most attractive hunting grounds in the area
Icteria virens	yellow-breasted chat (nesting)	SSC/-	Summer visitor in dense riparian woodland, most common in coastal lowland, strongly concentrated in NW corner of County; usually return to SD second week in April and start to leave by early August.	Low; not observed, no suitable habitat in project study area.
Ixobrychus exilis	least bittern	SSC/BCC	Nests in marshes at borders of ponds or reservoirs.	Low; not observed, no suitable habitat on-site.
Laterallus jamaicensis coturniculus	California black rail	**ST**, FP/BCC, BLM-S	Shallow salt and freshwater marsh; considered extirpated from County	Low; not observed, considered extirpated.
Pandion haliaetus	osprey	WL, CDF-S/-	Coasts and inland lakes and rivers.	Moderate; not observed, but could hunt in main creek channel.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	**SE**/-	Narrowly restricted to coastal marshes dominated by pickleweed, southern California and northern Baja California	Low; not observed, patches of pickleweed saltmarsh are too small or thin and surrounded by development.
Pelecanus occidentalis	brown pelican	FP/-	Oceans, bays, and inland lakes.	Low; not observed, unlikely to use creeks.
Phalacrocorax auritus	double-crested cormorant (nesting colony)	WL/-	Lakes and bays; 0-500 ft.	Low; not observed, unlikely to use creek channels.
Polioptila californica californica	coastal California gnatcatcher	SSC/**FT**	Resident in southern California coastal sage scrub, especially where dominated by coastal sagebrush (*Artemisia californica)* and CA buckwheat *(Eriogonum fasciculatum)* ; may also use open chaparral next to sage scrub; usually in coastal lowland below 1,000 ft.	Low; not observed, tiny area of suitable habitat within project study area is too isolated within development, not documented in project CNDDM quads.
Rallus longirostris levipes	light-footed clapper rail	**SE**, FP/**FE**	Year-round resident in coastal salt marsh, especially where dominated by Spartina, and also known at three freshwater sites in SD County.	Low; not observed, patchs of saltmarsh vegetation are too tiny and thin.
Setophaga petechia (Dendroica p.)	yellow warbler (nesting)	SSC/BCC	Mature riparian woodland.	Low; not observed, no suitable habitat in project study area.
Sternula antillarum browni (Sterna a. b.)	California least tern	**SE**, FP/**FE**	Nests on dunes and flats along sea, bay and estuary shores; forages in bays and estuaries, ocean, and inland lakes in coastal lowland; has nested up to four miles inland in the past	Low; not observed, unlikely to forage in creek channels.

Species Name	Common Name	State/Federal Status	Habitat	Potential to Occur Onsite
Vireo bellii pusillus	least Bell's vireo	**SE/FE**	Riparian woodland with dense canopy for foraging and dense understory for nesting; also forages in upland scrub, and sometimes even nests in non-riparian habitat; more common in coastal lowlands; migratory, usually arrives in SD County third week in March and leaves between mid-August and mid-September.	Low; no riparian woodland habitat in project study area, not documented in project CNDDB quads.
MAMMALS				
Antrozous pallidus	pallid bat	SSC/BLM-S, USFS-S	Once common in SD County west of the mountains in riparian, chaparral, oak savannah, and cultivated areas but now known at only a few inland valley sites in southern San Diego County; intolerant of human development; roosts in crevices.	Low; intolerant of human development, unlikely to use such a developed area.
Chaetodipus californicus femoralis	Dulzura pocket mouse	SSC/-	Variety of habitat including coastal sage scrub, chaparral, and grassland, attracted to grass-chaparral edges.	Low; the tiny amount of suitable habitat in the project study area is likely too isolated by development.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	SSC/-	Sandy, herbaceous areas, usually associated with rocks or coarse gravel, in coastal scrub, chaparral, grasslands, sagebrush in western San Diego County; nocturnal.	Low; no suitable habitat observed in project study area.
Choeronycteris mexicana	Mexican long-tongued bat	SSC/-	In CA, found in residential areas, roosts in garages, sheds, porches, and under houses on stilts; feeds on pollen and nectar, especially of agaves and columnar cacti, and will visit hummingbird feeders and possibly avocado flowers; seen in fall and winter, presumed to not breed in CA.	Low; no suitable nectar sources observed in project study area.
Corynorhinus townsendii (Plecotus t.)	Townsend's big-eared bat	SSC/BLM-S, USFS-S	Pine forest, desert scrub, and a variety of habitats; requires caves, mines, or tunnels for roosts; highly sensitive to human disturbance.	Low; no suitable habitat or roosts observed in project study area, area is too urbanized for this specise.
Euderma maculatum	spotted bat	SSC/BLM-S	Primarily cave dwelling but also found in mixed chaparral and oak woodlands; very rare in SD County.	Low; no suitable habitat observed in project study area.
Eumops perotis californicus	western mastiff bat	SSC/BLM-S	Open semi-arid to arid habitats; crevices in cliff faces, high buildings, trees, and tunnels are required for roosting; typically forages over wide-open spaces in various habitats.	Low; project area lacks wide-open spaces.
Lasiurus blossevillii	western red bat	SSC/-	Prefers riparian areas, where they roost in broad-leaf trees; migratory, most likely to be in western SD in winter.	Low; no suitable habitat observed in project study area.
Lasiurus cinereus	hoary bat	-/-	Roosts in trees and fencerows, migrates to southern California for winter, seldom found in urban settings.	Low; unlikely to occur in such a developed area.
Lasiurus xanthinus	western yellow bat	SSC/-	Desert areas with palms and, increasingly, year-round in urban areas in planted palms; roosts in hanging palm fronds.	Moderate; could roost in fan palms within or adjacent to project area, documented in project CNDDB quad.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	SSC/-	Grasslands, agricultural fields, sparse shrublands, edges of citrus groves on coastal side of mountains, sea level to over 6,000 ft, mostly west of National Forest lands in SD County.	Low; not observed, no suitable habitat observed in project study area.

Species Name	Common Name	State/Federal Status	Habitat	Potential to Occur Onsite
Myotis ciliolabrum	western small-footed myotis	-/BLM-S	Primarily found in relatively arid wooded and brushy uplands near water; roosts in caves, buildings, mines, crevices, and occasionally under bridges and under bark.	Low; project study area lacks suitable habitat, too developed.
Myotis evotis	long-eared myotis	-/BLM-S	Most common in forests, roosts in tree cavities, or under tree bark, or in rock crevices, caves, mines, abandoned buildings.	Low; unlikely to occur in such a developed area, not reported in project's CNDDB quadss.
Neotoma lepida intermedia	San Diego desert woodrat	SSC/-	Coastal sage scrub, oak woodlands and chaparral with rock outcroppings, boulders, and cacti; middens are typically smaller than those of *N. fuscipes* and built in rock and rock crevices rather than in shrubs; nocturnal.	Low; no rat middens observed, suitable habitat is probably too small and isolated within development.
Nyctinomops femorosaccus	pocketed free-tailed bat	SSC/-	Mixed chaparral and desert scrub. Prefers rock crevices in cliffs as roosting sites; 0-1000 ft. Nocturnal.	Low; no suitable habitat observed in project study area.
Nyctinomops macrotis	big free-tailed bat	SSC/-	Rocky arid habitat, roosts in crevices in rock faces, although two early 20th century San Diego specimens were found in buildings; migrates to Mexico for winter.	Low; project study area is likely too highly developed.
Perognathus longimembris pacificus	Pacific pocket mouse	SSC/**FE**	Coastal sage scrub and grasslands with fine-grain, sandy substrates; historically inhabited coastal dunes, river alluvium, and sage scrub habitats growing on marine terraces within approximately 2.4 miles of the ocean; 0-500 ft.	Low; tiny area of suitable habitat is probably too disturbed and isolated within development.
Taxidea taxus	American badger	SSC/-	Most common in drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	Low; no burrows observed, unlikely to live in such a developed area.

Listing Designations

Federal Listing (USFWS 2013, CDFW 2011)
FE - Federal-listed Endangered
FT - Federal-listed Threatened
FC - Federal Candidate for listing
BCC - US Fish and Wildlife Service Bird of Conservation Concern
BLM-S - Bureau of Land Management Sensitive
USFS-S - US Forest Service Sensitive

State Listing (CDFW 2011, 2013)
SE - State-listed Endangered
ST - State-listed Threatened
SEC - State Endangered Candidate
FP - CA Dept. of Fish and Wildlife Fully Protected
SSC - State Species of Special Concern
WL - CA Dept. of Fish and Wildlife Watch List
CDF-S - CA Dept. of Forestry Sensitive