3.7 BIOLOGICAL RESOURCES

This section of the Draft EIR provides an analysis of the potential impacts on biological resources.

3.7-1 REGULATORY FRAMEWORK

Federal, state, regional, and local regulations concerning biological resources are described in the following section.

3.7-1.1 Federal Regulations

Endangered Species Act

The Endangered Species Act (16 United States Code [USC] Section 1531 et seq.) and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Section 7 of the Endangered Species Act requires federal agencies to aid in the conservation of listed species and ensure that their activities do not jeopardize the continued existence of listed species or adversely modify designated critical habitat. At the federal level, the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration are responsible for the administration of the Endangered Species Act. Permits associated with Section 7 of the Endangered Species Act are not anticipated as part of the Proposed Project, or Trench or Hawthorne Options, as there are no federally endangered or threatened species identified with potential to occur that could be impacted by construction or operation activities.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC Section 703 et seq.) decrees that all migratory birds and their parts (including eggs, nests and feathers) are fully protected. Under this act, taking, killing or possessing migratory birds is unlawful. Projects that are likely to result in the taking of birds protected under the MBTA require take permits from the USFWS. Activities that require such a permit include, but are not limited to, the destruction of migratory bird nesting habitat during the nesting season when eggs or young are likely to be present. In order to ensure compliance with the Act, nesting bird surveys are required to determine if nests would be disturbed and, if so, a buffer area with a specified radius around the nest would be established so that no disturbance or intrusion would be allowed until the young had fledged and left the nest. If not otherwise specified in the permit, the size of the buffer area would vary with species and local circumstances (e.g., the presence of busy roads) and would be based on the professional judgment of the monitoring biologist. Nesting bird surveys are anticipated as part of the Proposed Project, and Trench or Hawthorne Options, during all situations in which potential nesting substrate and breeding birds could be impacted and/or disturbed by construction or activities during the nesting bird season (defined herein as February 1 through September 15).

Clean Water Act

The goal of the Clean Water Act (CWA) (33 USC Section 1251 et seq.) is to eliminate the discharge of pollutants and to restore and maintain the chemical, physical and biological integrity of the nation's waters. The CWA also established the National Pollutant Discharge Elimination System (NPDES) permit system. NPDES permits are required for the discharge of pollutants from point sources into navigable waters.

Section 401(a)(1) of the CWA specifies that an applicant for a federal license or permit, in order to obtain authorization to conduct any activity (i.e., construction or operation of facilities that may result in any discharge into navigable waters), shall obtain a certification from the state in which the discharge

originates. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306 and 307 of the CWA. Succinctly, this means that, in California, Regional Water Quality Control Boards (RWQCBs) must certify that a project will comply with water quality standards.

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. A Section 404 permit is required by the United States Army Corps of Engineers (USACE) for the dredging or filling of lakes, streams, tidelands, marshes or low-lying areas behind dikes along the coast as well as the dumping of dredged material into the ocean. This permit is not required as part of the Proposed Project, or Trench or Hawthorne Options, unless USACE jurisdictional waters are impacted, which is not anticipated under any scenario. The Proposed Project and Options footprints do not cross or otherwise encroach on any known jurisdictional waters.

United States Fish and Wildlife Coordination Act

The USFWS Coordination Act (16 USC Section 661-666 or 16 USC 662 S.2) requires consultation with the USFWS and the state agency responsible for wildlife resources whenever a stream or other body of water is proposed to be modified for any purpose whatsoever. Neither the Proposed Project, nor Trench or Hawthorne Options are anticipated to require USFWS coordination related to impacts of rivers, streams, or lakes as their footprints do not cross or otherwise encroach on any sensitive habitat types, such as rivers, streams, or lakes.

3.7-1.2 State and Regional Regulations

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) is responsible for the administration of the California Endangered Species Act (California Fish and Game Code, Section 2050 et seq.). For projects that affect state listed species, a take permit under the California Endangered Species Act is required. The state endangered species act also lends protection to species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly regarding the protection of isolated populations, nesting or den locations, communal roosts and other essential habitat. A 2081 take permit under the California Endangered Species Act would be a requirement of the Proposed Project, and Trench or Hawthorne Options, if construction and operation activities have potential to impact any of the state-listed special-status species identified with potential to occur (included Table 3.7-1). A 2081 take permit is not anticipated as part of the Proposed Project, or Trench or Hawthorne Options, as there are no state threatened or endangered species identified with potential to occur that could be impacted by construction or operation activities; however, consultation with CDFW could be required.

California Fish and Game Code (Sections 3500-3705 and 1600 et seq.)

Sections 3500 through 3705 of the California Fish and Game Code (CFGC) prohibit the taking of nesting birds, their nests, eggs or any portion thereof during the nesting season. Typically, the breeding/nesting season for all passerine species is from February 1 through September 15 (which captures all the various breeding/nesting durations for all applicable birds) and January 15 to September 15 for all raptors (birds of prey). Depending on each year's seasonal factors, the breeding season can start earlier and/or end later. In order to ensure compliance with CFGC, nesting bird surveys are required during the breeding/nesting season to determine if active nests have potential to be disturbed as a result of

construction activities. If so, buffer areas with a specified radius are to be established so that no disturbance or intrusion would be allowed until the young had fledged and left the nest.

Section 1602 of the CFGC requires agencies to notify the CDFW of any project that will divert, obstruct or change the natural flow or bed, channel or bank of any river, stream or lake. If CDFW jurisdictional areas are impacted by a project, a Section 1602 Streambed Alteration Agreement would be required. The Proposed Project is not anticipated to impact CDFW jurisdictional areas related to rivers, streams, or lakes as the Proposed Project footprint does not cross or otherwise encroach on any sensitive habitat types.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (1969), codified as Division 7 ("Water Quality") of the State Water Code, established the responsibilities and authorities of the State Water Resources Control Board and the nine RWQCBs. Each RWQCB prepares and adopts a Water Quality Control Plan, or Basin Plan, which incorporates the unique aspects of a particular region. Regional differences may include existing water quality, beneficial uses of surface and ground waters and localized water quality problems. The RWQCBs implement Basin Plans by issuing and enforcing waste discharge regulations to individuals, communities or businesses whose discharges can affect water quality. These regulations can be either Waste Discharge Requirements (WDRs) for discharges to land or NPDES permits for discharges to surface water. The RWQCBs may issue WDRs for impacts to isolated wetlands that are not jurisdictional to the USACE. The Porter-Cologne Water Quality Control Act has the potential to add regulatory requirements and state-level permitting for potential impacts to isolated wetlands. Yet, because the footprints do not cross or otherwise encroach on any known isolated wetlands, the Proposed Project, and Trench or Hawthorne Options, would not require Porter-Cologne Water Quality Control Act authorization. The State of California recently established a wetland and riparian protection policy, which became effective in 2020.

County of Los Angeles Significant Ecological Area (SEA) Program

The County of Los Angeles has designated the Madrona Marsh and adjacent sandy upland as a Significant Ecological Area (SEA). SEAs are officially designated areas within the County with irreplaceable biological resources. An SEA within unincorporated areas of the County is maintained and regulated by the County's SEA Program, whereas an SEA within an incorporated city, such as the Madrona Marsh, is maintained and regulated by the incorporated city.

3.7-1.3 Local Regulations

The discussion below summarizes the biological resource objectives and policies identified in the Dominguez Watershed Management Master Plan and the City of Torrance General Plan and City of Torrance Street Tree Master Plan. Related policies, goals, or objectives were not identified in the Redondo Beach and Lawndale City General Plans. No additional tree protection ordinances were noted within the Resource Study Area (RSA). The RSA for biological resources includes a quarter-mile buffer around the footprints of the Proposed Project, and Trench and Hawthorne Options, as shown in Figure 3.7-1, and further described in Section 3.7-2.1, below.

Dominguez Watershed Management Master Plan

The majority of the RSA is contained within the Dominguez Watershed, within which the Dominguez Channel is the largest drainage feature. The Dominguez Watershed Management Master Plan (WMMP) was developed by the Dominguez Watershed Advisory Council, which consists of local governmental representatives, environmental groups, regulating agencies, members of business and industry, water

and sewer service providers and private citizens. The Dominguez WMMP was developed to manage and enhance water quality and habitats within the watershed (DCWMAG, 2004).

According to the Dominguez WMMP, native habitats constitute approximately 16% of the watershed. Despite the fragmented nature and urbanized context of the natural habitats, the watershed supports several hundred species of wildlife. Issues of concern for biological resources include the following: channelization of drainages; exotic, invasive plant species and non-native animals; further habitat fragmentation; narrow buffers to urban development; protection of special-status species[1] and wildlife corridors; sediment contamination and eutrophication (i.e., increase of nitrogen, phosphorus, and other nutrients in surface waters); and trash and debris.

The Dominguez WMMP outlines goals and objectives to address issues, problems, and concerns identified through stakeholder outreach described in Table 3.7-1 below.

[1] For the purpose of this document, "special-status species" are defined as those plant and wildlife species with the following designations.
Federal Status Designations:
FE – Federally Endangered; FT – Federally Threatened
FC – Federal Candidate Species for Listing
State Status Designations:
SC – State Candidate Species for Listing
SSC – California Department of Fish and Wildlife Species of Special Concern; SE – State Endangered; ST – State Threatened
California Native Plant Society Codes:
1B. – Rare or Endangered in California and elsewhere
1B.1 – Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
1B.2 – Fairly endangered in California (20-80% occurrences threatened)
Other Special-Status Designations:
BLMS – Bureau of Land Management Sensitive
WBWG – Western Bat Working Group
H = High Conservation Priority
M = Medium Conservation Priority
LM = Low-Medium Conservation Priority

Table 3.7-1. Dominguez WMMP – Relevant Regulations

Code/Goal/Policy	Description
Dominguez WMMP	
Goal 1	Protect and enhance water quality
Goal 2	Protect, enhance and restore native habitats and biological resources
Goal 3	Protect, enhance and restore native habitats and biological resources
Goal 4	Promote public awareness and involvement in watershed management
Goal 5	Implement stewardship of the watershed and its resources in balance with economic and environmental impacts
Objective 1	Diminish and eliminate further degradation of the watershed and its resources through better management practices
Objective 2	Promote, preserve and protect beneficial uses of the watershed
Objective 3	Restore and enhance ecological systems of the watershed
Objective 4	Increase the viability, diversity, and health of the watershed
Objective 5	Raise public awareness of the Dominguez Watershed and encourage participation in management and protection of watershed resources
Objective 6	Obtain grant funds to implement watershed improvement projects

Source: Dominguez WMMP, 2014

City of Torrance General Plan

The 2010 Torrance General Plan contains several objectives and policies that relate to biological resources, specifically those relating to designated areas of open space; the relevant objectives and policies are described in Table 3.7-2 below.

Table 3.7-2. City of Torrance – Relevant Regulations

Code/Goal/Policy	Description
City of Torrance General Plan	
Section 1.3: Open Space Objectives and Policies	
Objective CR.1	To utilize open space as a means of achieving desirable growth patterns.
Policy CR.1.1	Continue to evaluate the environmental impact of public and private projects on properties that have significant open space value.
Policy CR.1.2	Require the provision of on-site open space in new developments.
Policy CR.1.3	Require that development projects involving modifications or additions include plans to upgrade or add open space and landscaping.
Objective CR.2	To preserve natural resource lands that contribute to the environmental quality of the City.
Policy CR.2.1	Assign open space designations and apply preservation policies to significant natural habitat areas.
Objective CR.5	To preserve open space necessary to protect the health, safety, and well-being of City residents.
Policy CR.5.1	Maintain open space features that are critical components of the City's flood control system.
Section 3.8: Wildlife Habitat Objectives and Policies	
Objective CR.16	The preservation of unique and beneficial wildlife habitat in Torrance.
Policy CR.16.1	Maintain the Madrona Marsh Nature Preserve[1] for the enjoyment and education of present and future generations.
Policy CR.16.2	Support the dual use of drainage detention and retention basins for open space, recreation, and/or wildlife habitat opportunities, and increased groundwater recharge as long as the secondary use does not conflict or interfere with the operation and maintenance of the primary function of flood control and drainage.

Source: City of Torrance General Plan, 2010a

[1]Madrona Marsh is a permanent ecological preserve owned and maintained by the City of Torrance

City of Torrance Street Tree Master Plan

The Street Tree Master Plan (City of Torrance, 2015f) was created to enhance and preserve the City's trees by having a set list of recommended trees that would best fit each area of the city. Rather than a list of protected, native species that may occur in open space areas, the tree list is a recommended replacement list in cases of tree removal (e.g., due to disease). In addition, The Street Tree Master Plan identifies eight "Special Designated Areas for Tree Conservation and Protection."

3.7-2 METHODOLOGY

An ecosystem is the interaction between biological resources (e.g., plants, animals, microorganisms) and the physical environment in which they live, all of which function together as a unit. Ecosystems are made up of living organisms, including humans and the environment they inhabit. Understanding this relationship between living organisms and their environment is basic to the assessment of impacts on ecosystems. Information in this report is primarily based on the following activities:

- Evaluating available inventories and mapped resources: (a) special-status species and vegetation communities; (b) wetlands and riparian habitat; (c) wildlife corridors; and (d) local policies, and ordinances (e.g., tree protections).
- A search of the California Natural Diversity Database (CNDDB) was conducted to identify special-status plants and animals with the potential to occur in the RSA. To identify special-status plants and animals with the potential to occur in the RSA, topographic quadrangle maps corresponding with the RSA were included in the CNDDB search. A quadrangle typically refers to a map sheet published by the United States Geological Survey (USGS). The "7.5-minute" series is the smallest scale topographic quadrangle map, and is also known as a topographic or topo map. The Proposed Project, Trench Option, and the Hawthorne Option are located within the Inglewood and Torrance 7.5-minute quadrangles, and both quadrangles were included in the CNDDB records search exercise.
- Visual surveys were conducted in November of 2020, the methods of which included both a windshield (from a vehicle) and pedestrian survey (surveying on foot). Surveys consisted of visual observation and selected photographic documentation of all parks and open space areas within the RSA; photographic documentation of which are provided in Figure 3.7-2 through Figure 3.7-13.
- An aerial photograph review was conducted in May of 2020 using web-based aerial photographs of parks and other public open spaces within a quarter mile of either side of the proposed alignments and stations. This work also included using Google Earth (2020) to compare past (starting in 1994) and current biological conditions. This effort also included web-based research and the review of reports and local planning documents relevant to the RSA (such as watershed plans and city and county general plans).

The thresholds of significance related to biological resources in Appendix G of the CEQA Guidelines, discussed below, were used as the basis to determine if the Proposed Project would result in direct or indirect impacts to biological resources. These thresholds, described in Section 3.7-2.2, include the following issue areas: special status species, riparian habitat, and other sensitive natural communities, state and federally protected wetlands, wildlife movement corridors, and local policies, ordinances, and Habitat Conservation Plan (HCPs) that serve to protect biological resources.

3.7-2.1 Resource Study Area

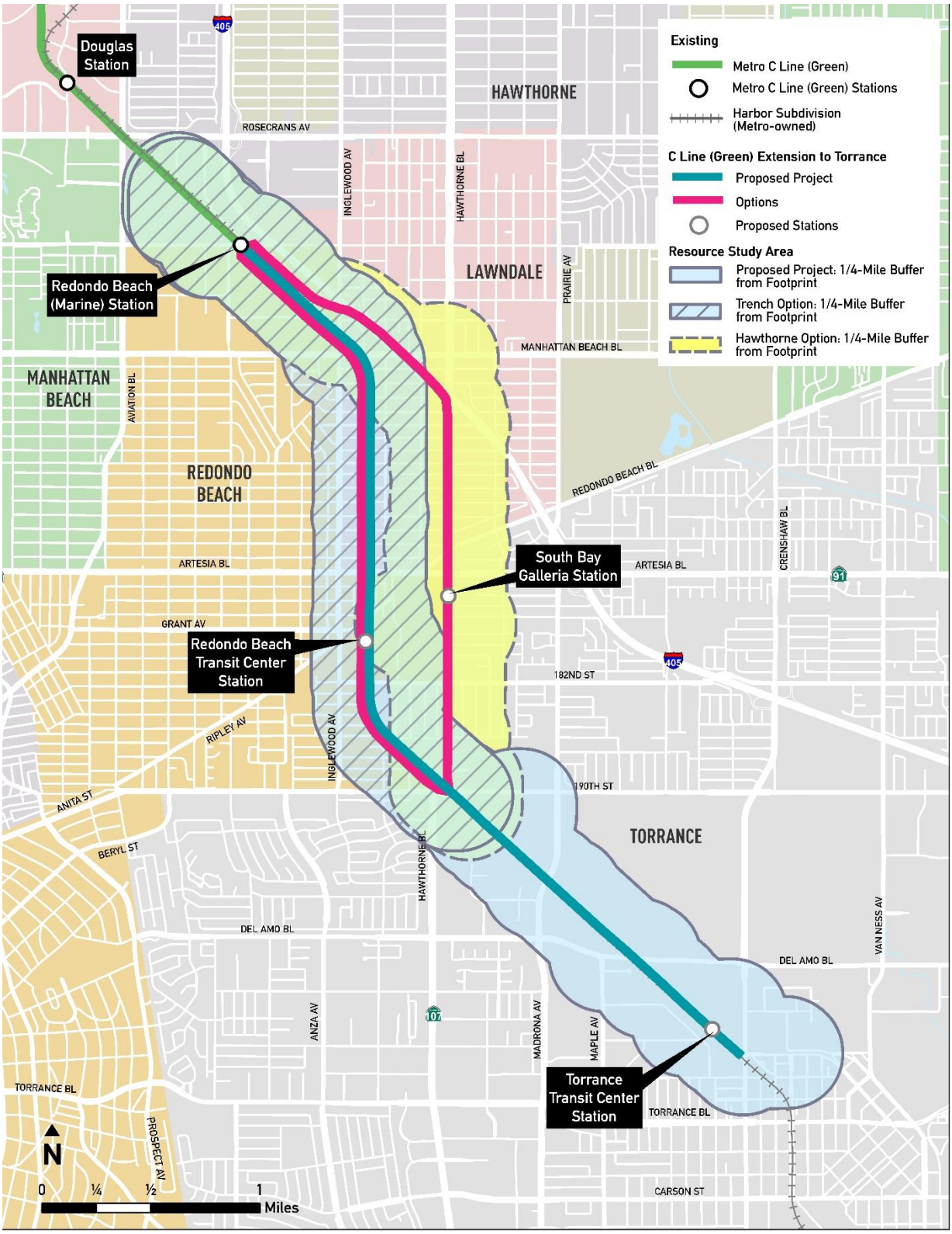
The RSA for biological resources includes the Proposed Project, Trench Option, and Hawthorne Option footprints, as well as a quarter-mile buffer around the footprints to evaluate and assess nearby biological resources in a larger context, as shown in Figure 3.7-1.

The Proposed Project footprint is defined as the area necessary to construct, operate, and maintain the Proposed Project. The Proposed Project footprint is approximately 91 acres, which includes all areas that may be potentially disturbed during construction.

Within the Trench Option segment (from Redondo Beach (Marine) Station to 190th Street), the footprint is approximately 60 acres (compared to approximately 59 acres for the Proposed Project within the segment).

Within the Hawthorne Option segment (from Redondo Beach (Marine) Station to 190th Street), the footprint is approximately 62 acres (compared to approximately 59 acres for the Proposed Project within the segment).

Figure 3.7-1. Biological Resources Resource Study Area



Source: STV, 2022; AECOM, 2022

3.7-2.2 Significance Thresholds

Based upon the thresholds of significance contained in Appendix G of the CEQA Guidelines, implementation of the Proposed Project would result in a significant impact related to biological resources if it would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
f. Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP

3.7-2.3 Project Features

As described in Chapter 2, Project Description, a number of features have been incorporated into the project to ensure compliance with the laws, guidelines, or best practices of federal, state, local, and regional agencies. There are no specific project features for biological resources.

3.7-3 AFFECTED ENVIRONMENT / EXISTING CONDITIONS

This section describes the affected environment/existing conditions related to biological resources within the RSAs (Figure 3.7-1). In addition, biological resources located outside the RSA but within the adjacent cities of Redondo Beach and Lawndale are also discussed if they are regionally significant, otherwise noteworthy resources, or have some potential for indirect impacts from being located within the same local watershed. Areas discussed that extend beyond the RSA are located within the City of Torrance, and represent a regional network of water quality basins discussed below.

3.7-3.1 General Characterization of the RSA

Historically, development and rapid urbanization has been occurring in the surrounding region, and associated RSA, since the late 1800s. Today, the region is an established metropolitan setting consisting of a mostly highly urbanized landscape including both industrial and residential communities. Continued development relating to infrastructure improvement, housing construction, and other community needs is regularly, and frequently, occurring. In general, natural landscapes and areas of native habitat within the RSA are extremely fragmented and potential biological resources are limited to a few parks and vacant parcels. Such parks, listed in order of location from north to south, include William Green Park (Lawndale), El Nido Park (Redondo Beach), Franklin Park (Redondo Beach), Pequeno Park (Torrance), Columbia Park (Torrance), and Delthorne Park (Torrance). These parks are primarily landscaped areas consisting or ornamental vegetation, and wildlife species utilizing the parks are mostly those adapted to living in an urban environment. Native plant species are mainly limited to those few, such as California sycamore (*Platanus racemosa*), preserved within public parks. Vegetation within the parks and vacant

parcels may provide potential roosting and/or nesting sites for numerous avian species as well as food and cover for other human-tolerant wildlife adapted to surviving in an urban environment.

Within the RSA of the Proposed Project and Trench Option, the main biological resources (in the form of ornamental trees) are located within a north-south oriented section of the Metro ROW parallel to Condon Avenue, between 159th Street (in the north) to Grant Avenue (to the south) in the Cities of Redondo Beach and Lawndale. For the Hawthorne Option, the center median of Hawthorne Boulevard, between 162nd Street in the north to West 182nd Street in the south (in the Cities of Torrance, Redondo Beach, and Lawndale) contains the main biological resource in the form of ornamental trees. A complete inventory of native and non-native trees within the Metro ROW is provided in Table 3.7-3. Selected photographic documentation of surveys of all parks and open space areas within the RSA are provided in Figure 3.7-2 through Figure 3.7-13.

Table 3.7-3. Trees and Shrubs Located in Metro Right-of-Way with Potential for Trimming or Removal

Tree/Shrub Species [1]	East Side	West Side	Total within Metro Right-of-Way [2]
Major Trees and Shrubs along right-of-way			
Pinus halepensis (Aleppo pine- most large trees; some non-mature)	10 (7 M/3 IM) [3]	64 (54 M/10 IM) [3]	74 (61 M/13 IM) [3]
Myoporum laetum (Ngaio tree- small trees; two small shrubs)	29 (29 M/0 IM) [3]	2 (0 M/2 IM) [3]	31 (29M /2 IM) [3]
Washingtonia robusta (Mexican fan palm- four large trees, two small shrubs)	4 (2 M/2 IM) [3]	2 (2 M/0 IM) [3]	6 (4 M/2 IM) [3]
Schinus terebinthifolius (Brazilian Pepper; small tree)	3	0	3
Fraxinus sp. (Ornamental ash; small tree)	0	1	1
Morus sp. (Mulberry; small tree)	1	0	1
Nerium oleander (Oleander; shrub)	0	48	48
Ornamental Plantings along right-of-way			
Cupressus sempervirens (Italian cypress; ornamental shrub)	0	2	2
Rosmarinus officinalis (Rosemary; ornamental shrub)	0	2	2
Escallonia x exoniensis (Pink Princess Escallonia; ornamental shrub)	0	3	3
Lingustrum texanum (Texas privet; ornamental shrub)	0	1	1
Phoenix roebelenii (Pygmy date palm; ornamental shrub)	0	3	3
Bougainvillea sp. (Bougainvillea; ornamental shrub)	1	0	1
Total Count	**48**	**128**	**176**

[1] All trees and shrubs were non-native species. Various other plants, such as flowering plants and grasses (e.g., pampas grass, [*Cortaderia* sp.]) were not included in this table. The data in the table is focused on woody plants (trees, shrubs) that have potential to be impacted by construction.

[2] Trees and shrubs growing immediately adjacent to the edge of the ROW were not included; only trees and shrubs that would need to be removed or trimmed were included (and counted).

[3] M = Mature tree for a given species; IM = Immature (Non-Mature) tree for a given species. Definition of mature is subjective, but basically refers to relative size of trunks and canopy coverage. The N, IM data were only provided for the three dominant species within the ROW. Other species were either immature trees or shrubs.

Figure 3.7-2. View of freight bridge over 190th Street located west of Hawthorne Blvd in City of Torrance

Source: AECOM, 2020

Figure 3.7-3. View of individual non-native trees within Metro ROW from 182nd Street facing towards El Nido Park (southeast) in Redondo Beach

Source: AECOM, 2020

Figure 3.7-4. Southern tarplant in bloom (Centromadia parryi ssp. australis; List 1B.1 sensitive plant)

Source: AECOM, 2020

Figure 3.7-5. A southern tarplant individual within the established Open Space Preserve (Torrance TC); facing south

Source: AECOM, 2020

Figure 3.7-6. View Across Torrance TC Towards Proposed Station at Torrance TC; facing southwest

Source: AECOM, 2020

Figure 3.7-7. Metro ROW with current freight track, south of 182nd Street; facing south

Source: AECOM, 2020

Figure 3.7-8. View of Metro ROW with current freight track, looking north from 182nd Street

Source: AECOM, 2020

Figure 3.7-9. Surrounding residential neighborhood near Metro ROW at West 162nd Street and Condon Avenue; facing south

Source: AECOM, 2020

Figure 3.7-10. Existing conditions at the intersection of Hawthorne Boulevard and Artesia Boulevard; facing west

Source: AECOM, 2020

Figure 3.7-11. Existing freight bridge in Metro ROW, crossing over Artesia Boulevard; facing west

Source: AECOM, 2020

Figure 3.7-12. Ornamental trees located within the Metro ROW; facing northeast

Source: AECOM, 2020

Figure 3.7-13. Proposed laydown area adjacent to the Open Space Preserve (Torrance TC); facing north

Source: AECOM, 2020

3.7-3.2 Potential Biological Resources Within the RSA

Potential Biological Resources Near Rail Alignments

There are no SEAs or officially delineated wetland and riparian areas located within or adjacent to the RSAs (Figure 3.7-1 and Figure 3.7-14). Potential wetland features were observed within the Pioneer Basin, as discussed below, but no official delineation has been conducted at that location.

The following features are located within the RSA and have the potential to contain biological resources:

- Pioneer Flood Control Basin (Pioneer Basin) – The Pioneer Basin is located on the north side of Prairie Avenue and adjacent to the western edge of the Proposed Project in the City of Torrance (City of Torrance, 2009). The Pioneer Basin is the only basin located within the RSA. The Pioneer Basin is owned by the City of Torrance, zoned as Public/Quasi-Public/Open Space, is identified on National Wetland Inventory (NWI) maps (USFWS, 2020) as a palustrine wetland and has a pumping station associated with the basin. The Pioneer Basin supports ruderal (weedy) vegetation, ornamental vegetation, as well as wetland species such as bulrush (*Scirpus* sp.) and dock (*Rumex* sp.). This basin is one of four basins in the City of Torrance that has an on-site pumping station, which is used to manage water levels during the wet season.
- Industrial Open Space Areas in Torrance – Open space areas zoned for heavy industrial land uses, but not currently actively used, are located on the south side of Prairie Avenue, across and adjacent to the western edge of the Proposed Project. These areas contain some native vegetation communities, though are predominately non-native vegetation, and may support urban-tolerant wildlife. This property, owned by ExxonMobil, supports vegetation dominated by ruderal (weedy) vegetation and non-native grassland. Typical species observed during the various site visits included garland chrysanthemum (*Chrysanthemum coranarium*), filaree (*Erodium* sp.), mallow (*Malva* sp.), and several non-native grasses (e.g., *Bromus* spp., *Avena* sp.). Overall, the site shows signs of disturbance, and a portion of the site is grazed by horses (an equestrian area is located adjacent the open space area).

Potential Biological Resources Near Light Rail Stations and Surface Parking Lot

There are no SEAs or officially-delineated wetland and riparian areas located within or adjacent to the proposed stations. The Torrance TC site, which is adjacent to the Proposed Project's surface parking lot, contains features with the potential to contain biological resources, as described below. This site, currently owned by the City of Torrance, was once the property of Pittsburg Paint and Glass and has undergone on-site remediation of contaminated soils. Previous CEQA-related documentation (i.e., Initial Study and Negative Declaration (California Department of Toxic Substances Control [DTSC], 2008; City of Torrance, 2015d)) completed for Pittsburg Paint and Glass reported the presence of non-native grassland and coastal scrub habitat. A special-status plant species, the southern tarplant (List 1B.1 sensitive plant), was observed across the southern portion of the site during 2008 (DTSC, 2008). A subsequent site visit in May 2010 also found several populations of the southern tarplant, as well as several seasonally ponded areas that provide habitat for plant species often found associated with wetlands. Additional studies of this site have been conducted by the City of Torrance (City of Torrance, 2015e; 2020g; Helix, 2014; Green, 2015, 2019; Friends of Madrona Marsh, 2016); the results of which included additional southern tarplant detections, as well as areas of suitable habitat including several seasonally ponded areas. These previously detected wetland features located at the Torrance TC site have since been disturbed by other projects. In order to offset impacts resulting from the Torrance TC, the City of Torrance established the Southern Tarplant Mitigation Plan and subsequent two-acre Open Space Preserve, located in the northwestern portion of the site. The Open Space Preserve was established, and is currently managed, to ensure long-term survival of the existing southern tarplant population. The rest of the site was graded by the City of Torrance for the Torrance TC project (Cooper, 2014).

3.7-3.3 Potential Biological Resources Adjacent to the RSA

This section discusses biological resources located adjacent to the RSAs. Within the City of Torrance, features located beyond but within proximity to the RSA are discussed below if they contain regionally

significant, otherwise noteworthy biological resources, or have potential for indirect impacts from being located within the same local watershed. This section describes such features, which are also shown in Figure 3.7-14.

City of Torrance

The majority of undeveloped, open space areas adjacent to the RSA is located within the City of Torrance and adjacent to or within proximity to the RSA. According to the Torrance General Plan (City of Torrance, 2010a), "sumps" is a local term for shallow depressions that are used for flood control and retention basins. The sumps also contain adjacent wetland, riparian and upland habitats, which may provide foraging, shelter, and breeding areas for wildlife species, including migratory birds (City of Torrance, 2015b; Friends of Madrona Marsh, 2016; City of Torrance 2020d, City of Torrance 2020f; CWE, 2013). The City of Torrance has several sumps (also called storm water retention basins) and detention basins, both of which serve the primary purpose of controlling stormwater runoff and preventing localized ponding and flooding. Retention basins (or sumps) hold water after a storm but have no outlet, while detention basins have an outlet and retain the water for a period of time. These features are also required to prevent storm water with bacteria from being discharged to the Santa Monica Bay. The City of Torrance is in the process of improving several of these basins in order to provide natural treatment systems, improve groundwater recharge, and provide the community with more opportunities for recreational uses. These features are shown in Figure 3.7-14. Pioneer Basin, located adjacent to the Metro ROW in the City of Torrance, is discussed in Section 3.7-3.2. Additional sump and wetland habitat near the RSA include:

> Entradero Sump and Drainage Ditch (located to the west of Hawthorne Boulevard, between 190th Street to the north and Del Amo Boulevard to the south): Identified on NWI maps as being an intermittent streambed and palustrine (also called depressional, with no drainage outflow) wetland feature. The wetland feature is within a park that is used for recreational uses.

> Amie Sump (located east of Hawthorne Boulevard, between Del Amo Boulevard to the north and Torrance Boulevard to the south): Identified on NWI maps as being a palustrine wetland feature. A pumping station exists at this facility, and the City of Torrance is planning future habitat improvements to this facility (City of Torrance, 2010a).

> Henrietta Sump (located south of Del Amo Boulevard, east of Anza Avenue, and north of Torrance Boulevard): Identified as a palustrine wetland feature. The City of Torrance is planning future habitat improvements to this facility (City of Torrance, 2010a).

> Bishop Montgomery Sump, Ocean Ave Sump, and Del Amo Basin (located generally south of Entradero Sump and west of Madrona Marsh): Identified on NWI maps as being palustrine wetlands. In general, these sumps and basins do not support high quality wetland habitat.

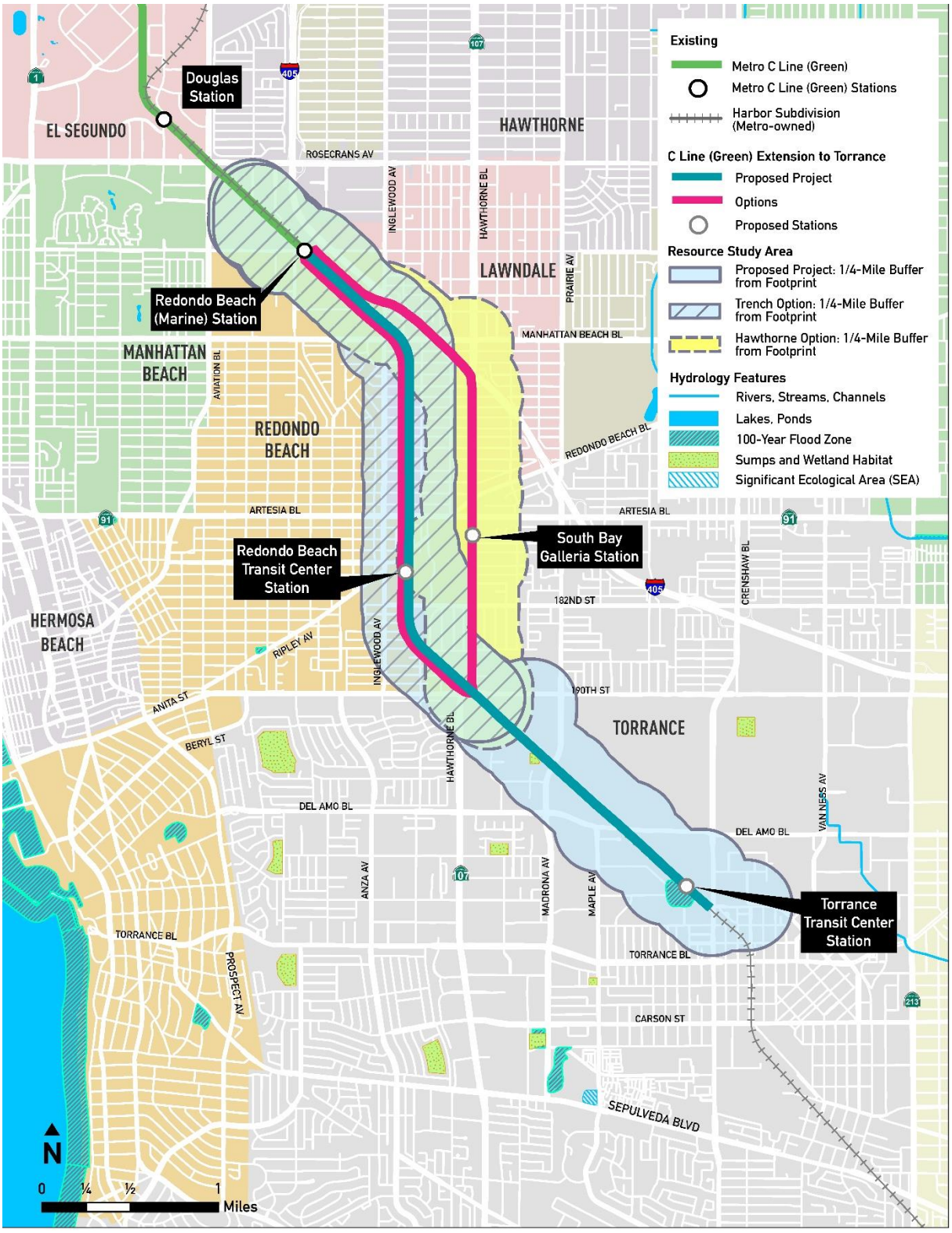
> El Dorado Basin (located west of Maple Avenue between Torrance Boulevard to the north and Carson Street to the south): This basin is not mapped as a wetland on NWI maps. A pumping station exists at this facility.

> Mobil Basin (located east of Crenshaw Boulevard, between 190th Street to the north and Del Amo Boulevard to the south): Identified on NWI maps as a palustrine wetland; although, it does not support high quality wetland habitat.

> Madrona Marsh (also known as SEA No. 36; bordered by Madrona Avenue to the west, Sepulveda Boulevard to the south, Maple Avenue to the east, and Carson Street to the north): A palustrine wetland area that is a regionally significant resource (and SEA) containing seasonal marshes and

vernal pools, which provide habitat for numerous native plants and wildlife species. The Federally listed Riverside Fairy Shrimp (*Streptocephanlus woottonii)* and the San Diego Fairy Shrimp (*Branchinecta sandiegonensis*) are potentially present at Madrona Marsh (City of Torrance, 2010a). According to the manager at Madrona Marsh Nature Reserve, only females of the two endangered fairy shrimp have been found at Madrona Marsh (Tracy Drake, personal communication 2010). These species, however, were not included in the results of the CNDDB search for the Torrance quadrangle (CDFW, 2020).

Figure 3.7-14. City of Torrance's Sumps and Wetland Habitats



Source: STV, 2022; AECOM, 2022

3.7-3.4 Sensitive Biological Resources Within the RSA

Special-Status Plant and Wildlife Species

Based on CNDDB results and review of applicable historic literature, a complete list of special-status plant and wildlife species that have potential to occur within the two 7.5-minute quadrangles associated with the RSA is presented in Table 3.7-4. In total, 10 special-status plant species and 10 special-status wildlife species were determined to have potential to occur. Of the 20 special-status plant and wildlife species included in Table 3.7-4, 18 were determined to have a low potential to occur due to a lack of suitable habitat present within the RSA and the largely urbanized and developed nature of the landscape resulting in unfavorable conditions for foraging and breeding. One plant species was determined to have a high potential to occur, and one additional wildlife species was determined to have a moderate potential to occur, each of which is further discussed in the subsequent paragraphs below.

One special-status plant species, southern tarplant, was determined to have a high potential to occur. The southern tarplant is the only species that has been previously documented within the RSA in the City of Torrance (DTSC, 2008), as discussed in Section 3.7-3.2, and is, therefore, the only species with a high potential of occurrence. Suitable habitat for this species is present within the RSA, immediately adjacent to the Proposed Project's parking lot located at the Torrance TC.

One bat species, Yuma myotis (*Myotis yumanensis*), was identified to have a moderate potential to occur based on the presence of suitable roosting habitat in the form of anthropogenic features, including bridges, and the close proximity of several open space recreational areas to one such potential roost. Neither of the other two bat species included in Table 3.7-4 are known to commonly roost under bridges or other man-made resources (H.T. Harvey & Associates, 2004) and instead rely heavily on the presence of natural rock and cliff features.

In addition to the special-status species provided in Table 3.7-4, numerous avian species protected under both the MBTA and CFGC have potential to occur within the RSA. Portions of the RSA provide both suitable breeding and foraging habitat in the form of trees, vegetation, and man-made structures.

Table 3.7-4. Special-Status Plant and Wildlife Species Potential for Occurrence within the RSA

Scientific Name	Common Name	Status	Potential for Occurrence (High/Moderate/Low)/ Comments
Invertebrates			
Euphilotes battoides allyni	El Segundo blue butterfly	FE[1]	Low[5] – No suitable habitat present.
Reptiles			
Phrynosoma coronatum blainvillii	Coast (San Diego) horned lizard	SSC[2]	Low – No suitable habitat present.
Birds			
Agelaius tricolor	Tricolored blackbird	ST	Low – No suitable habitat present.
Athene cunicularia	Burrowing owl	SSC	Low – Potential wintering habitat would be open space areas within the RSA, but none of the remaining open space area(s) potentially impacted are considered moderate or high quality habitat for the species due to a lack of burrows, lack of foraging opportunities, heavy disturbance, and fragmented condition. The existing conditions present, indicate no potential for breeding activity as a result of the factors listed above.
Polioptila californica	Coastal California gnatcatcher	FT / SSC	Low – No suitable habitat present.
Sternula antillarum browni	California least tern (foraging)	FE / SE	Low – No suitable habitat present.
Mammals			
Eumops perotis californicus	Western mastiff bat	SSC WBWG[3]: H	Low – Some suitable habitat present. This species does not commonly roost under bridges but has been known to occasionally roost on buildings. More commonly, roosting habitat consists of cliff faces or rocky crevices.
Nyctinomops femorosaccus	Pocketed free-tailed bat	SSC WBWG: M	Low – No suitable habitat present. This species does not commonly roost under bridges and instead roosts on cliff faces or rocky crevices.
Myotis yumanensis	Yuma myotis	WBWG: LM	Moderate – Commonly roosts under bridges and overhangs.
Perognathus longimembris pacificus	Pacific pocket mouse	FE / SSC	Low – No suitable habitat present.
Plants			
Astragalus tener var. titi	Coastal dunes milk-vetch	FE / SE 1B.1[4]	Low – No suitable habitat present.

Scientific Name	Common Name	Status	Potential for Occurrence (High/Moderate/Low)/ Comments
Atriplex pacifica	South coast saltscale	1B.2	Low – No suitable habitat present. This species has not been observed at the Torrance TC site in repeated site visits.
Centromadia parryi ssp. Australis	Southern tarplant	1B.1	High -This species is known to occur at the Torrance TC Site (Adjacent to the Metro ROW and surface parking lot).
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	1B.1	Low – No suitable habitat present.
Lasthenia glabrata ssp. Coulteri	Coulter's goldfields	1B.1	Low – No suitable habitat present.
Navarretia fossalis	Spreading navarretia	FT 1B.1	Low – No suitable habitat present.
Navarretia prostrata	Prostrate vernal pool navarretia	1B.1	Low – No suitable habitat present.
Pentachaeta lyonii	Lyon's pentachaeta	FE / SE 1B.1	Low – No suitable habitat present.
Phacelia stellaris	Brand's star phacelia	1B.1	Low – No suitable habitat present.
Symphyotrichum defoliatum	San Bernardino aster	1B.2	Low – No suitable habitat present.

Sources: AECOM, 2020; CDFW, 2020; CNPS, 2020.

[1]Federal Status Designations: FE – Federally Endangered; FT – Federally Threatened; FC – Federal Candidate Species for Listing

[2]State Status Designations: SC – State Candidate Species for Listing; SSC – California Department of Fish and Wildlife Species of Special Concern; SE – State Endangered; ST – State Threatened

[3]Other Special Status Designations: WBWG – Western Bat Working Group (H = High Conservation Priority; M = Medium Conservation Priority; LM = Low-Medium Conservation Priority)

[4]California Native Plant Society Codes: 1B – Rare or Endangered in California and elsewhere; 1B.1 – Seriously endangered in California (0ver 80% of occurrences threatened/high degree and immediacy of threat); 1B.2 – Fairly endangered in California (20 – 80% occurrences threatened).

[5]High = Suitable habitat of high quality is present in the RSA for this species and/or the species has been directly observed in the RSA; Moderate = Suitable habitat is present within the RSA for this species but is limited in capacity and/or of lesser quality; Low = Suitable habitat is of very poor quality or not present within the RSA for this species.

Riparian Habitat and Other Sensitive Natural Communities

Riparian habitat associated with riverine and depressional wetland resources are limited to the sumps located within the City of Torrance as described in Section 3.7-3.3. As discussed in Section 3.7-3.3, these sumps are created habitats which mainly exist for flood control purposes. No other naturally occurring or created riparian or sensitive natural communities exist within the RSA.

State and Federally Protected Wetlands

Riverine and depressional wetland resources are limited to the sumps located outside the RSA but within the City of Torrance as described in Section 3.7-3.3. Although several sumps are identified in NWI maps as palustrine wetlands, a delineation of the sumps' jurisdictional features, if any, has not been performed. The Pioneer Basin discussed in Section 3.7-3.3 is identified on NWI maps (USFWS, 2020) as a palustrine wetland and is located within the RSA as well. No naturally occurring or other wetlands exist within the RSA.

Wildlife Movement Corridors

Due to its urbanized nature and fragmentation of any remaining open space, no wildlife movement corridors are present within the RSA.

3.7-3.5 Local Policies and Ordinances; Protected and Non-Protected Trees

Site surveys consisted of visual observation and selected photographic documentation of all parks and open space areas within the RSAs. During the surveys, mature trees existing along the Proposed Project , Trench Option, and the Hawthorne Option were observed. During the site surveys, few native tree species were observed that had the potential to be affected, none of which are specifically-protected under local ordinances. Many non-native and ornamental tree species are present within the RSA that could support birds during nesting season and have potential to be affected.

For the Proposed Project and Trench Option, the main biological resources (in the form of ornamental trees) within the RSA are located within a north-south oriented section of the Metro ROW parallel to Condon Avenue, between West 159th Street to the north and Grant Avenue to the south (Cities of Redondo Beach and Lawndale, respectively). This area contains many non-native, ornamental tree species adjacent to the Metro ROW (and adjacent to nearby residences).

For the Hawthorne Option, the median of the north-south section of Hawthorne Boulevard, between 162nd Street to the north and West 182nd Street to the south (Cities of Torrance, Redondo Beach, and Lawndale, respectively) contains landscape trees and shrubs.

The City of Torrance has published a Street Tree Master Plan (City of Torrance, 2015f), which was created to enhance and preserve the City's trees by having a list of recommended trees that best fit each area of the city. Also, the city has a map called "Special Designated Areas for Tree Conservation and Protection" (eight locations). The identified eight designated areas are not located within the RSA but are instead located south of Proposed Project and Trench and Hawthorne Options. Therefore, no City ordinances require that the Proposed Project or Trench and Hawthorne Options replace impacted trees.

In October 2022, the Metro Board adopted a Metro Tree Policy which outlines Metro's commitment to protecting trees, when possible, or replacing trees removed as a result of Metro construction and maintenance. For non-heritage trees, the replacement ratio defined was two trees for every tree removed. This policy also prioritizes planting strategies that maximizes the use of native species.

3.7-3.6 Habitat Conservation Plans and Natural Community Conservation Plans

The RSA is not located within any areas designated within HCPs or NCCPs.

3.7-4 ENVIRONMENTAL IMPACTS

3.7-4.1 Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

3.7-4.1.1 Construction Impacts

Less than Significant Impact with Mitigation. Although the RSA is largely urbanized, construction of the Proposed Project could adversely impact special-status plant and wildlife species. The southern tarplant was previously detected during historic survey efforts at the Torrance TC site, which is adjacent to the Proposed Project's surface parking lot, and has potential to occur within areas of suitable habitat in the

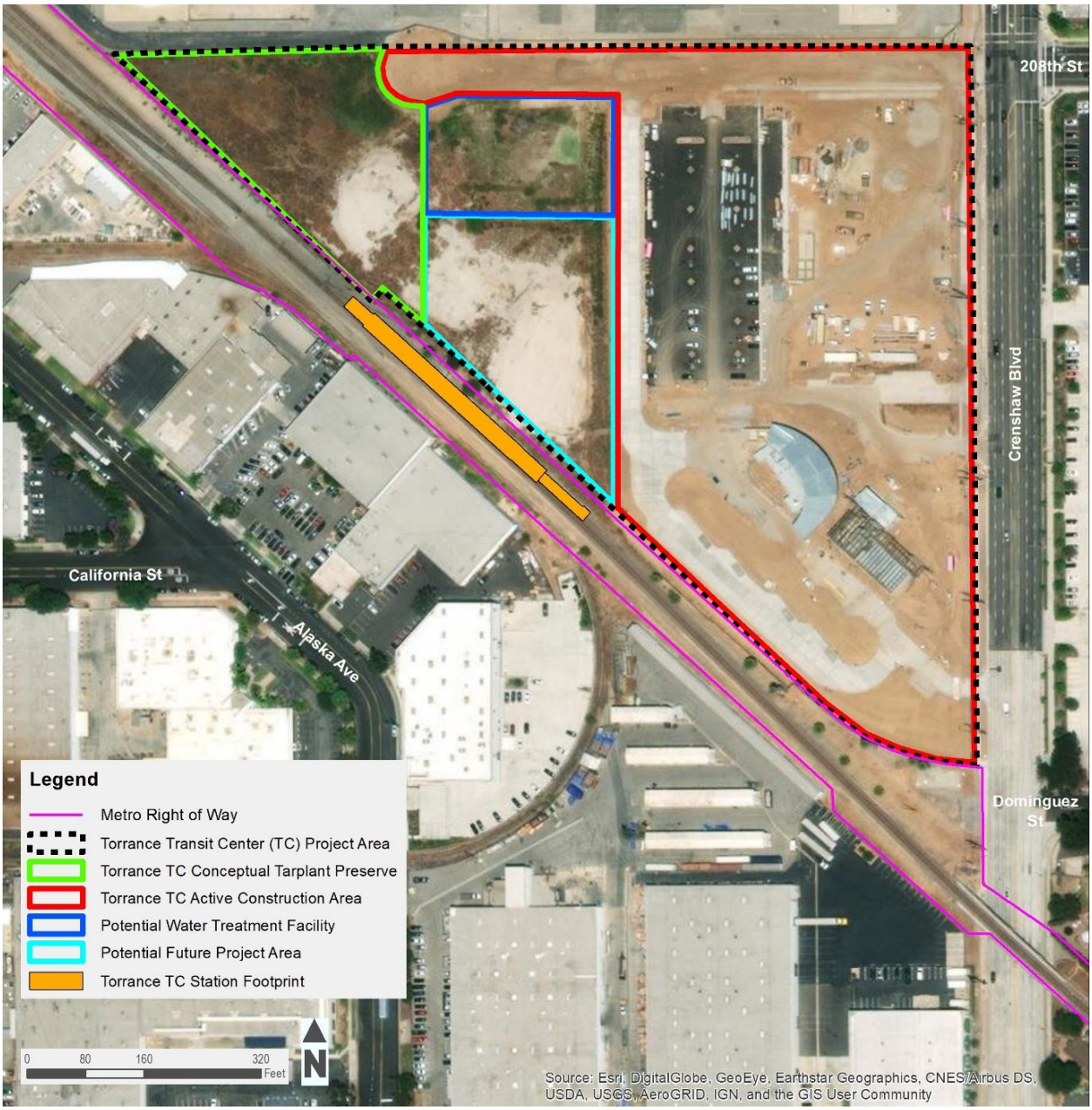
RSA located immediately adjacent to the established Open Space Preserve (Helix, 2014), shown in Figure 3.7-15. Potential direct impacts to the southern tarplant may include the loss of individual plants as a result of removal or crushing due to construction related activities (i.e., equipment or employees inadvertently working in an unauthorized area). Potential indirect impacts may include soil and contaminant runoff in the wet season, dust in the dry season during excavation, and the introduction of non-native/invasive species that have potential to degrade habitat and outcompete southern tarplant for critical resources. Construction of the Proposed Project would not disturb the Open Space Preserve that has been established adjacent to the Torrance TC, as this area has been designated as a protected space by the City of Torrance. Impacts to southern tarplant would be less than significant through implementation of mitigation measures (described in more detail in Section 3.7-5). MM-BIO-1, General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources, and MM-BIO-4, Pre-Construction Rare Plant Survey, would require the delineation of work limits and buffers, a pre-construction rare plant survey prior to ground disturbance, and on-site monitoring by a qualified botanist.

Direct impacts to special-status bird species are not likely to occur as moderate to high quality suitable habitat conducive to breeding and/or foraging activity specific to the species identified in was not identified within the RSA. While direct impacts to special-status bird species are unlikely to occur, potential direct impacts to breeding birds protected under the MBTA and CFGC Sections 3500 through 3705 such as the destruction of occupied nests during the breeding season (and thus loss of young) and loss of suitable nesting substrate may occur if construction related to the demolition of the bridges at Grant Avenue and Del Amo Boulevard or vegetation and tree removal occurs within the breeding season (generally defined as February 1 – September 15). Potential indirect impacts to breeding birds during the breeding season may include construction-related noise and light disturbance, the degradation of habitat related to dust settlement, nest abandonment, and an increase in opportunistic predators. Impacts to breeding birds would be less than significant through implementation of MM-BIO-2, Nesting Bird Season Restrictions and Pre-Construction Surveys which would require a pre-construction nesting bird survey during the breeding season, work/construction buffers around active nests, and the monitoring of nesting activity by qualified biologists.

Demolition of the existing freight bridge at Grant Avenue and roadway bridge at Del Amo Boulevard may also impact special-status bat species, as both structures have potential to support both day and night roosting activity for bridge roosting species; specifically, Yuma myotis. Potential direct impacts resulting from the demolition of the bridges may include a loss of roosting habitat and/or direct mortalities. Potential indirect impacts may include construction-related noise, vibration, and light disturbance; all of which could lead to colony/roost abandonment. In addition, human presence and subsequent construction activities could also alter the approach to a roost and force individuals to change their direction or pattern of egress and ingress to and from a roost. Impacts to special-status bat species would be less than significant through implementation of mitigation measure MM-BIO-3, Roosting Bat Restrictions and Survey Requirements which would require a bat roost habitat assessment and subsequent consultation with CDFW and preparation of a mitigation plan if presence is detected.

Through incorporation of MM-BIO-1, MM-BIO-2, MM-BIO-3, and MM-BIO-4, impacts to special-status plants, wildlife, and other birds protected under the MBTA and CFGC, associated with the construction of the Proposed Project would be **less than significant**.

Figure 3.7-15. Torrance TC Site



Source: STV, 2022; AECOM, 2022

TRENCH OPTION

Less than Significant Impact with Mitigation. The Trench Option is similar to the Proposed Project, following the same alignment, but with a lower profile in segments where the light rail would run below street level in an open air trench between Inglewood Ave and 170th Street, as well as under 182nd Street. Potential impacts associated with the Trench Option are similar to the Proposed Project due to their location and similarity in construction methods. With the exception of a few select areas along the alignment, the construction of the Trench Option would require approximately the same land area within the Metro ROW to construct and therefore would result in equivalent potential impacts to

special-status plant and wildlife species. The difference in excavation, structural reinforcement, and duration of construction would require a longer duration of mitigation, but otherwise would be similar in the context of protected habitat and species. The duration of construction of the Trench Option would be approximately two years longer than that of the Proposed Project, but the same mitigation measures taken to mitigate impacts would still be applicable. Therefore, through implementation of MM-BIO-1, MM-BIO-2, MM-BIO-3, and MM-BIO-4, impacts associated with construction of the Trench Option would be **less than significant**.

HAWTHORNE OPTION

Less than Significant Impact with Mitigation. Construction of the Hawthorne Option would take approximately the same amount of time as the Proposed Project. The footprint within the Hawthorne Option segment is a few acres larger than that of the Proposed Project, but it would still result in equivalent potential impacts to special-status plant and wildlife species. In contrast to both the Proposed Project and Trench Option, the Hawthorne Option does not intersect with open space and park areas containing trees or vegetation but does include areas of ornamental trees, though not special-status, located within the center median and east side of Hawthorne Boulevard. Through implementation of MM-BIO-1, MM-BIO-2, MM-BIO-3, and MM-BIO-4, impacts associated with construction of the Hawthorne Option would be **less than significant**.

3.7-4.1.2 Operational Impacts

Less than Significant Impact with Mitigation. Maintenance activities along the Metro ROW may potentially result in both temporary direct and indirect impacts to bird species protected under the MBTA and CFGC if trees and vegetation that have potential to support nesting birds during the breeding season were removed or disturbed during the breeding season. Potential direct impacts may subsequently cause nest abandonment (and thus loss of young), nest failure, or direct mortality of individuals. However, Metro routine maintenance during operation does not typically disturb vegetation or trees that supports nesting birds.

Potential indirect impacts to southern tarplant individuals present within the Open Space Preserve adjacent to the Torrance TC may occur as a result of oil and fluid run-off from the Proposed Project's surface parking lot degrading habitat and soil quality. However, although the Proposed Project parking lot would be impervious, it would not contribute to stormwater runoff, since the site would be designed with best management practices to retain stormwater on-site (see Section 3.10, Hydrology and Water Quality). This factor, and with implementation of MM-BIO-1, would result in **less than significant impacts** to southern tarplant.

TRENCH OPTION

Less than Significant Impact with Mitigation. Within the Trench Option segment, the potential impacts would be similar to the Proposed Project. Metro routine maintenance during operation does not typically disturb vegetation or trees that supports nesting birds

Like the Proposed Project, potential indirect impacts to southern tarplant individuals present within the Open Space Preserve adjacent to the Torrance TC may occur as a result of oil and fluid run-off from the Proposed Project surface parking lot degrading habitat and soil quality. However, the Proposed Project parking lot would be impervious, it would not contribute to stormwater runoff, since the site would be designed with best management practices to retain stormwater on-site (see Section 3.10, Hydrology and Water Quality). This factor, and with implementation of MM–BIO-1, would result in **less than significant impacts** to southern tarplant.

HAWTHORNE OPTION

Less than Significant Impact. Within the Hawthorne Option segment, the potential impacts would be similar to the Proposed Project. Metro routine maintenance during operation does not typically disturb vegetation or trees that supports nesting birds.

Like the Proposed Project, potential indirect impacts to southern tarplant individuals present within the Open Space Preserve adjacent to the Torrance TC may occur as a result of oil and fluid run-off from the Proposed Project surface parking lot degrading habitat and soil quality. However, the Proposed Project parking lot would be impervious. This factor, and with implementation of MM–BIO-1, would result in **less than significant impacts** to southern tarplant.

3.7-4.2 Would the Proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

3.7-4.2.1 Construction Impacts

No Impact. Construction of the Proposed Project is not expected to disturb any riparian habitat or sensitive natural community, as none occur within the Proposed Project footprint. The Pioneer Basin and associated wetland habitat is located within the RSA but would not be impacted by construction activities as it is situated on a bluff above (in elevation) the Metro ROW. Therefore, the Proposed Project would result in **no impact**.

TRENCH OPTION

No Impact. Construction of the Trench Option is not expected to disturb any riparian habitat or sensitive natural community, as none occur within the Trench Option footprint. The Pioneer Basin and associated wetland habitat is located within the RSA but would not be impacted by construction activities as it is situated on a bluff above (in elevation) the Metro ROW. Therefore, the Trench Option would result in **no impact.**

HAWTHORNE OPTION

No Impact. Construction of the Hawthorne Option is not expected to disturb any riparian habitat or sensitive natural community, as none occur within the Hawthorne Option footprint. The Pioneer Basin and associated wetland habitat is located within the RSA but would not be impacted by construction activities as it is situated on a bluff above (in elevation) the Hawthorne Option footprint. Therefore, the Hawthorne Option would result in **no impact.**

3.7-4.2.2 Operational Impacts

No Impact. Operational activities associated with the Proposed Project are not expected to impact any riparian habitat directly or indirectly or sensitive vegetation communities within or adjacent to the Proposed Project alignment. This is due to the absence of riparian and other sensitive vegetation communities within the Proposed Project footprint. Therefore, the Proposed Project would result in **no impact.**

TRENCH OPTION

No Impact. Operation of the Trench Option is not expected to directly or indirectly impact any riparian habitat or sensitive vegetation communities within or adjacent to the Trench Option alignment. This is due to the absence of riparian and other sensitive vegetation communities within the Trench Option footprint. Therefore, the Trench Option would result in **no impact.**

HAWTHORNE OPTION

No Impact. Operation of the Hawthorne Option is not expected to impact any riparian habitat or sensitive vegetation communities directly or indirectly within or adjacent to the Hawthorne Option alignment. This is due to the absence of riparian and other sensitive vegetation communities within the Hawthorne Option footprint. Therefore, the Hawthorne Option would result in **no impact.**

3.7-4.3 Would the Proposed Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

3.7-4.3.1 Construction Impacts

No Impact. Construction of the Proposed Project is not expected to adversely impact state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. Wetland features previously identified at the Torrance TC site have since been disturbed by other projects, and mitigation by another project consisted of establishment of a two-acre Open Space Preserve that would support the on-site population of southern tarplant (see discussion in Section 3.7-3.3). The Pioneer Basin is located within the RSA but would not be impacted by construction activities as it is situated on a bluff well above (in elevation) the Metro ROW. In addition, no impacts are anticipated to the City of Torrance storm water retention basins (i.e., sumps) as these areas are located adjacent to, and outside of, the RSA. Therefore, construction of the Proposed Project would result in **no impact**.

TRENCH OPTION

No Impact. Similar to the Proposed Project, construction of the Trench Option is not expected to adversely impact any state or federally protected wetlands, as none occur within the Trench Option footprint. Therefore, construction of the Trench Option would result in **no impact.**

HAWTHORNE OPTION

No Impact. Similar to the Proposed Project, construction of the Hawthorne Option is not expected to adversely impact any state or federally protected wetlands, as none occur within the Hawthorne Option footprint. Therefore, construction of the Hawthorne Option would result in **no impact.**

3.7-4.3.2 Operational Impacts

No Impact. Similar to potential construction impacts to state or federally protected wetlands discussed above, operational activities associated with the Proposed Project are not expected to adversely impact any state or federally protected wetlands, as none occur within the Proposed Project footprint. Therefore, operation of the Proposed Project would result in **no impact**.

TRENCH OPTION

No Impact. Similar to potential construction impacts to state or federally protected wetlands discussed above, operational activities associated with the Trench Option are not expected to adversely impact any state or federally protected wetlands, as none are present within the Trench Option footprint. Therefore, operation of the Trench Option would result in **no impact.**

HAWTHORNE OPTION

No Impact. Similar to potential construction impacts to state or federally protected wetlands discussed above, operational activities associated with the Hawthorne Option are not expected to adversely

impact any state or federally protected wetlands, as none present within the Hawthorne Option footprint. Therefore, operation of the Hawthorne Option would result in **no impact.**

3.7-4.4 Would the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

3.7-4.4.1 Construction Impacts

No Impact. No wildlife movement corridors or nursery sites are found within the RSA of the Proposed Project. Therefore, construction of the Proposed Project would result in **no impact** to the movement of native resident or migratory fish or wildlife species, established native resident and/or migratory wildlife corridors, or wildlife nursery sites.

TRENCH OPTION

No Impact. No wildlife movement corridors or nursery sites are found within the RSA of the Trench Option. Therefore, construction of the Trench Option would result in **no impact** to the movement of native resident or migratory fish or wildlife species, established native resident and/or migratory wildlife corridors, or wildlife nursery sites.

HAWTHORNE OPTION

No Impact. No wildlife movement corridors or nursery sites are found within the RSA of the Hawthorne Option. Therefore, construction of the Hawthorne Option would result in **no impact** to the movement of native resident or migratory fish or wildlife species, established native resident and/or migratory wildlife corridors, or wildlife nursery sites.

3.7-4.4.2 Operational Impacts

No Impact. No wildlife movement corridors or nursery sites are found within the Proposed Project RSA. Therefore, operation of the Proposed Project would result in **no impact** to the movement of native resident or migratory fish or wildlife species, established native resident and/or migratory wildlife corridors, or wildlife nursery sites.

TRENCH OPTION

No Impact. No wildlife movement corridors or nursery sites are found within the Trench Option RSA. Therefore, operation of the Trench Option would result in **no impact** to the movement of native resident or migratory fish or wildlife species, established native resident and/or migratory wildlife corridors, or wildlife nursery sites.

HAWTHORNE OPTION

No Impact. No wildlife movement corridors or nursery sites are found within the Hawthorne Option RSA. Therefore, operation of the Hawthorne Option would result in **no impact** to the movement of native resident or migratory fish or wildlife species, established native resident and/or migratory wildlife corridors, or wildlife nursery sites.

3.7-4.5 Would the Proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

3.7-4.5.1 Construction Impacts

No Impact. Construction of the Proposed Project is not expected to conflict with local policies or ordinances protecting biological resources. Relevant local objectives and policies are described in Section 3.7-1.3 (and include the City of Torrance General Plan's Open Space and Habitat Objectives and Policies, Dominguez WPPM, and the City of Torrance Street Tree Master Plan). As noted in Section 3.7-1.3, the City of Torrance has applicable open space objectives and policies, but construction of the Proposed Project would not infringe on key open space areas identified for protection and preservation by the City. The Open Space Preserve established for southern tarplant protection is located immediately adjacent to the Proposed Project footprint (specifically, the surface parking lot); however, construction related activities will not occur within the boundaries of the Open Space Preserve and no impacts are anticipated. The Dominguez WMMP was developed to manage and enhance water quality and habitats within the watershed, of which construction of the Proposed Project is not expected to significantly impact. The Street Tree Master Plan (City of Torrance, 2015f) was created to enhance and preserve the City's trees by having a set list of recommended trees that would best fit each area of the city. Although loss of non-native trees may occur within the Metro ROW as a result of construction, the Proposed Project alignment does not overlap with any of the eight Special Designated Areas for Tree Conservation and Protection, as designated by the City of Torrance. In addition, local regulations and ordinances do not apply to any existing Metro-owned property. Therefore, no City ordinances require that the Proposed Project replace impacted trees within the Metro ROW.

The Cities of Redondo Beach and Lawndale do not have applicable objectives and/or policies protecting biological resources, including tree preservation ordinances. Therefore, although the Proposed Project could cause a loss of some open space and the loss of some non-native, ornamental trees in the Cities of Redondo Beach and Lawndale, it would not conflict with any relevant policy adopted by those cities. Therefore, construction of the Proposed Project would result in **no impact**.

TRENCH OPTION

No Impact. Similar to the Proposed Project, construction of the Trench Option is not expected to conflict with local policies or ordinances, as it would be constructed in the same location. Therefore, construction of the Trench Option would result in **no impact**.

HAWTHORNE OPTION

No Impact. Similar to the Proposed Project, the Hawthorne Option is not expected to conflict with local policies or ordinances, as it would be constructed in the same cities and under the same local policies and ordinances. Therefore, construction of the Hawthorne Option would result in **no impact**.

3.7-4.5.2 Operational Impacts

No Impact. The operational activities associated with the Proposed Project are not expected to conflict with any of the local policies or ordinances discussed in Section 3.7-1.3. Operation of the Proposed Project is not expected to directly or indirectly impact protected trees, as the Proposed Project alignment does not occur within any of the eight Special Designated Areas for Tree Conservation and Protection, designated by the City of Torrance. In addition, local regulations and ordinances do not apply to the existing Metro-owned property. As a result, any tree trimming and thinning activities associated with operation of the Proposed Project would not need to comply with tree protection ordinances. Operation of the Proposed Project will not occur within open space areas established for protection by

the City of Torrance, including the two-acre Open Space Preserve for southern tarplant, and will not jeopardize water quality and habitats within the watershed of the overarching Dominguez WMMP. Therefore, the operation of the Proposed Project would result in **no impact**.

TRENCH OPTION

No Impact. Similar to the Proposed Project, operation of the Trench Option is not expected to conflict with local policies or ordinances, as it would operate along the same alignment in the same operating pattern. Therefore, operation of the Trench Option would result in **no impact**.

HAWTHORNE OPTION

No Impact. Similar to the Proposed Project, operation of the Hawthorne Option is not expected to conflict with local policies or ordinances, as it would be operated within the same policy context and with the same operating pattern. Therefore, operation of the Trench Option would result in **no impact**.

3.7-4.6 Would the Proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

3.7-4.6.1 Construction Impacts

No Impact. The Proposed Project footprint is not included in any adopted HCPs, NCCPs, or other approved local, regional, or state HCPs. Therefore, construction of the Proposed Project would result in **no impact**.

TRENCH OPTION

No Impact. The Trench Option footprint is not included within any adopted HCPs, NCCPs, or other approved local, regional, or state HCPs. Therefore, construction of the Trench Option would result in **no impact.**

HAWTHORNE OPTION

No Impact. The Hawthorne Option footprint is not included within any adopted HCPs, NCCP, or other approved local, regional, or state HCPs. Therefore, construction of the Hawthorne Option would result in **no impact**.

3.7-4.6.2 Operational Impacts

No Impact. The Proposed Project footprint is not included within any adopted HCPs, NCCP, or other approved local, regional, or state HCPs. Therefore, operation of the Proposed Project would result in **no impact.**

TRENCH OPTION

No Impact. The Trench Option footprint is not included within any adopted HCPs, NCCP, or other approved local, regional, or state HCPs. Therefore, operation of the Trench Option would result in **no impact**.

HAWTHORNE OPTION

No Impact. The Hawthorne Option footprint is not included within any adopted HCPs, NCCP, or other approved local, regional, or state HCPs. Therefore, operation of the Trench Option would result in **no impact.**

3.7-5 MITIGATION MEASURES

MM-BIO-1. General Protection Measures to Avoid and Minimize Impacts on Sensitive Biological Resources

Prior to the initiation of construction activities, construction work limits shall be defined and marked (i.e., by caution tape, temporary fencing, etc.). All temporary fencing or other markers must be clearly visible to construction personnel.

Prior to and during construction, a qualified Biologist, selected by Metro, shall confirm that the outer perimeter of the construction work limits is not within 50 feet of any area where native vegetation and sensitive habitats occur, specifically, the Open Space Preserve established as part of the Torrance TC Project by the City of Torrance and adjacent to the Proposed Project's Torrance TC Station. No native vegetation removal or grading shall occur within areas designated for avoidance.

Fenced impact limits shall include erosion control measures to minimize erosion and siltation during initial vegetation clearing/removal and construction through the use of silt fencing, siltation basins, gravel bags, or other controls necessary to stabilize the soil in cleared or graded areas. Erosion control measures would be installed prior to the onset of vegetation clearing/removal. These measures would be maintained in good repair until the completion of construction. Vegetation clearing/removal during routine maintenance shall also include similar erosion control measures. Specific work areas within the Torrance TC station site, including the surface parking lot, adjacent to the Open Space Preserve shall include specific erosion and run-off control measures necessary to ensure no contaminants enter the Open Space Preserve and consequently degrade habitat for the southern tarplant. These erosion and run-off control measures shall be implemented long-term per Regional Requirements to ensure the continued protection of the Open Space Preserve and quality of habitat within.

MM-BIO-2. Nesting Bird Season Restrictions and Pre-Construction Surveys

The clearance of vegetation or demolition of nesting substrate (i.e., bridge features) during construction shall occur outside of the nesting bird season (nesting bird season defined herein as February 1 through September 15), if feasible. If vegetation removal and/or demolition outside this time period is not feasible, the following additional measures shall be employed to avoid impacts to nesting birds protected under the MBTA and CFGC.

A pre-construction nesting bird survey shall be conducted by a qualified biologist (i.e., a biologist familiar and experienced with the identification and life histories of wildlife and plant species in southern California) within 4 days (96 hours) prior to the start of construction activities to determine whether active nests are present within or directly adjacent to the construction zone. Nests found shall be recorded.

If construction activities must occur within 150 feet of an active nest of any passerine bird or within 300 feet of an active nest of any raptor, a qualified biologist shall monitor the nest on a bi-weekly (twice a week) basis, or at a frequency necessary to determine potential project impacts, and the construction activity shall be postponed until the biologist determines that the nest is no longer active.

If the recommended nest avoidance zone is not feasible, the qualified biologist shall provide justification on a case-by-case basis if a buffer reduction is possible, taking into consideration the location of work and type of activity, distance of nest from work area, surrounding vegetation, and line-of-sight between the nest and work areas, tolerance of species to disturbance, and observations of the nesting bird's reaction to construction activities (including light, noise, dust, and human presence). If the biologist

determines nesting activities may fail as a result of work activities, work activities shall be modified or shall temporarily cease (except access along established roadways) within the recommended no-disturbance buffer until the biologist determines the adults and young are no longer reliant on the nest site.

Buffers shall be delineated (by or under the supervision of the qualified biologist) on-site with bright flagging, for easy identification by staff and the construction team. The perimeter of the buffer (150 feet to 300 feet depending on the species) shall be flagged so as not to draw predator attention to the direct location of the nest itself and flagging will be minimized where feasible. The on-site construction supervisor and operator staff shall be notified of the nest and the buffer limits to ensure it is maintained.

The indirect impacts of night-time construction lighting on nesting birds outside the construction limits shall be reduced by shielding or directing construction lighting to avoid light encroachment into adjacent habitats.

A summary of preconstruction surveys, monitoring efforts, and any no-disturbance buffers that were installed shall be documented in a report by the qualified biologist at the conclusion of each nesting season.

MM-BIO-3. Roosting Bat Restrictions and Survey Requirements

Prior to demolition permit issuance and in preparation for demolition of both bridges at Grant Avenue and Del Amo Boulevard, a bat roost habitat assessment shall be performed by a qualified biologist (i.e., a biologist familiar with bat identification and ecology in southern California) at each location in order to identify both potential day time and nighttime roosting activity and maternity roosts, for bat species with potential to occur. The bat roost habitat assessment shall be conducted during the spring/summer months between April 1 through August 31 to most effectively identify maternity roost activity. Signs indicating active use by bat species may include guano, urine staining, and audible vocalizations; and shall be recorded upon observation for inclusion in a summary report.

If active maternity roosts are identified, consultation shall occur with CDFW and a bat mitigation plan shall be prepared in advance of construction that shall include measures to avoid, minimize, and mitigate project impacts to bat species per conversations with, and recommendations from, CDFW. The bat mitigation plan shall include bat exclusion measures to be implemented outside the California maternity season (the maternity season is defined as April 1 through August 31 in southern California) in order to prevent potential direct impacts to individuals. During the maternity season, a recommended buffer shall be implemented around any active maternity roosts, and no project related activities shall occur within the buffer until a biologist has determined that the roost is no longer in use. In addition, the bat mitigation plan shall require the replacement of lost habitat associated with demolition of the bridges and shall include mitigation addressing loss of roosts; this replacement should be on site when feasible and off site only when on site replacement is not feasible. The mitigation plan shall include required monitoring of mitigation to ensure the success of the proposed mitigation measures.

MM-BIO-4. Pre-Construction Rare Plant Survey

Prior to construction, suitable habitat in the portion of the RSA immediately adjacent to the Open Space Preserve shall be visually surveyed on foot by a qualified botanist (i.e., a botanist familiar with southern tarplant identification) in order to identify potential southern tarplant presence. Surveys should be conducted during the appropriate blooming period for optimal identification (defined as May – November).

If individuals are detected, individuals shall be flagged, and this area shall be clearly marked for avoidance through visible signage and fencing. A buffer zone shall be established of at least 50 feet from the outermost perimeter of the population in order to sufficiently eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including trampling, erosion, and dust. No vegetation removal, grading, or other earthwork shall occur within areas designated for avoidance.

A qualified botanist shall perform bi-weekly (twice per week) site visits, or at a frequency necessary to ensure protection of the Open Space Preserve, during all construction activities occurring immediately adjacent to the Open Space Preserve to ensure construction activities remain within the designated, and delineated, approved construction area; and that construction fencing, and other boundary demarcations remain in the appropriate condition.

3.7-6 PROJECT IMPACTS REMAINING AFTER MITIGATION

3.7-6.1 Proposed Project

With the incorporation of the mitigation measures described in Section 3.7-5, the Proposed Project would not result in any significant impacts related to biological resources. Therefore, impacts from Proposed Project construction and operation would be less than significant after mitigation.

3.7-6.2 Trench Option

With the incorporation of the mitigation measures described in Section 3.7-5, the Trench Option would not result in any significant impacts related to biological resources. Therefore, impacts from Trench Option construction and operation would be less than significant after mitigation.

3.7-6.3 Hawthorne Option

With the incorporation of the mitigation measures described in Section 3.7-5, the Hawthorne Option would not result in any significant impacts related to biological resources. Therefore, impacts from Hawthorne Option construction and operation would be less than significant after mitigation.

3.7-7 CUMULATIVE IMPACTS

The methodology for cumulative analysis and a description of relevant projects and projections are included in Section 3.0, Introduction.

The geographic scope of the cumulative analysis for biological resources is the RSA described in Section 3.7-2.1. Six of the identified projects described in the project list in Section 3.0 are located within the biological resources RSAs.

3.7-7.1 Proposed Project

Historically, development and rapid urbanization has been occurring in the surrounding region since the late 1800s. Continued development relating to infrastructure improvement, housing construction, and other community needs is regularly, and frequently, occurring. There is an existing cumulative impact related to biological resources as a result of the highly urbanized setting and both historic and present development throughout the region. Today, the region is an established metropolitan setting consisting of a mostly highly urbanized landscape including both industrial and residential communities, resulting in an existing impact to the biological setting of the RSA. The Proposed Project could contribute to the existing cumulative impact.

The analysis of biological resources in Section 3.7-4 identifies less than significant impacts after mitigation resulting from construction of the Proposed Project. Implementation of mitigation measures MM-BIO-1 through MM-BIO-4 would avoid impacts to southern tarplant, nesting birds, and bats. Operation of the Proposed Project would have less than significant impacts to biological resources. Therefore, the Proposed Project's incremental contribution to cumulatively significant impacts on biological resources would not be cumulatively considerable during construction or operation.

3.7-7.2 Trench Option

The Trench Option would be constructed in the same location as the Proposed Project using similar equipment, methods, and timeframe as the Proposed Project. While it would require deeper and more extensive excavation and construction of structures than the Proposed Project, with implementation of mitigation measures MM-BIO-1 through MM-BIO-4, these activities are not anticipated to cause a greater disturbance to biological resources than the Proposed Project. The Trench Option's potential for cumulative effects would largely be similar to that that of the Proposed Project. Similarly, the Trench Option would operate along the same alignment and in the same operating pattern as the Proposed Project. Therefore, the Trench Option's incremental contribution to cumulatively significant impacts on biological resources would not be cumulatively considerable during construction or operation.

3.7-7.3 Hawthorne Option

The Hawthorne Option would be constructed along Hawthorne Boulevard, a built-out major arterial largely devoid of any natural or biological resource, using similar equipment, methods, and timeframe as the Proposed Project. While it would require more construction of structures than the Proposed Project, with implementation of mitigation measures MM-BIO-1 through MM-BIO-4, these activities are not anticipated to cause a greater disturbance to biological resources than the Proposed Project. The Hawthorne Option would have the same operating pattern as the Proposed Project. The Hawthorne Option's potential for cumulative effects would largely be similar to that that of the Proposed Project. Therefore, the Hawthorne Option's incremental contribution to cumulatively significant impacts on biological resources would not be cumulatively considerable during construction or operation.