3.3 Biological Resources

This section is based on the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report,* incorporated into this DEIR as Appendix I.

3.3.1 Regulatory and Policy Framework

Several regulations have been established by federal, state, and local agencies to protect and conserve biological resources. The following information describes agency regulations that may be applicable to the resources that occur within the Sepulveda Transit Corridor Project (Project) Study Area, and, therefore, requires an analysis. The final determination of whether permits are required is made by the regulating agencies.

3.3.1.1 Federal

Endangered Species Act

The federal Endangered Species Act (ESA) (16 United States Code [U.S.C.] Section 1536) and subsequent amendments provide for the conservation of threatened and endangered species and the ecosystems upon which they depend. Section 7 of the ESA 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 U.S. Fish & Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service are responsible for the administration of the ESA based on the species under their respective purview. Consultation with the USFWS for terrestrial species under Section 7 of the ESA would be required if the Project has the potential to affect a federally listed species or its designated Critical Habitat and has a federal nexus. It is anticipated the Project would have a federal nexus and therefore qualify for Section 7 if consultation is necessary.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. Sections 703-712) fully protects migratory birds and their parts (including eggs, nests, and feathers). Under the MBTA, taking, killing, or possessing migratory birds is unlawful. The majority of avian species native to the U.S. are protected under the provisions of the MBTA. Introduced species and non-migratory upland game birds are not protected by the MBTA. The removal of nesting habitat during the bird nesting season (generally extending between February 1 and September 1) when eggs or young may be present can result in take of migratory birds protected under the MBTA. Permits for take of non-game migratory birds can be issued for specific activities, including scientific collecting, rehabilitation, propagation, and falconry among others; however, none of these situations apply to the Project. Many avian species that are not federal- or state-listed receive legal protection through MBTA, which protects hundreds of non-game migratory bird species. Protection for these species would be covered under specific mitigation measures associated with the proposed work.

The Project would need to employ measures that would avoid or minimize the potential for take of protected migratory birds and avoid destruction of habitats or nesting areas due to Project construction or operations.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. Sections 668-668c), enacted in 1940, and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior,

from "taking" bald or golden eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle or any golden eagle, alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, and if upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment. If it is determined at any point that either bald or golden eagles may be impacted by operation or construction of the Project, measures would need to be implemented to avoid and minimize the potential for take of either species.

Clean Water Act

The goal of the Clean Water Act (CWA) is to eliminate the discharge of pollutants and to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Permits pursuant to the CWA are required only if U.S. Army Corps of Engineers (USACE)-jurisdictional waters are impacted. The CWA also established the National Pollutant Discharge Elimination System (NPDES) permit system in Section 402. NPDES permits are required for the discharge of pollutants from point sources into navigable waters.

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into Waters of the United States (WOTUS), including wetlands. Activities in WOTUS 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 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

Section 401(a)(1) of the CWA specifies that an applicant for a federal license or permit will obtain a certification from the state in which the discharge originates to obtain authorization to conduct any activity (i.e., construction or operation of facilities that may result in any discharge into navigable waters). Section 401 of the CWA requires a water quality certification from the state for all permits issued by the USACE under Section 404 of the CWA. In California, Regional Water Quality Control Boards (RWQCB) must certify that a project will comply with water quality standards by issuing a CWA Section 401 water quality certification or waiver.

The U.S. Environmental Protection Agency (EPA) and USACE revised the definition of WOTUS (88 Federal Register [FR] 61964) on September 8, 2023, as regulated under Section 404 of the CWA. The following are defined as WOTUS and, in general, USACE will assert jurisdiction over:

(1) Waters that are:

  (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all Waters that are subject to the ebb and flow of the tide;

  (ii) Territorial seas; or

  (iii) Interstate waters;

(2) Impoundments of Waters otherwise defined as WOTUS under this definition, other than impoundments of waters identified under paragraph (5) of this section;

(3) Tributaries of waters identified in paragraphs (1) or (2) of this section that are relatively permanent, standing, or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:

(i) Waters identified in paragraph (1) of this section; or

(ii) Relatively permanent, standing, or continuously flowing bodies of water identified in paragraph (2) or (3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (1) or (3) of this section.

The following are not defined as WOTUS (88 FR 61964), and in general USACE does not assert jurisdiction over:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of WOTUS;

(8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow; and

(9) Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are generally not WOTUS because they are not tributaries, or they do not have a significant nexus to a traditional navigable water (TNW). Even when not considered WOTUS, these geographic features (e.g., swales, ditches) may still contribute to a surface hydrologic connection between an adjacent wetland and a TNW.

The Los Angeles River is considered a WOTUS because it supports relatively permanent surface flow and is a tributary to the San Pedro Bay/Pacific Ocean (territorial sea). However, impacts to the Los Angeles River are not anticipated and, therefore, a CWA permit is not anticipated.

Section 10 of the Rivers and Harbor Act

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 322) requires authorization from the Secretary of the Army, acting through the USACE, for the construction of any structure in, over, or under any navigable WOTUS. Structures or work outside the limits defined for navigable WOTUS require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable WOTUS, and applies to all structures, from the smallest floating dock to the largest commercial undertaking. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction.

Portions of the Los Angeles River that are considered navigable WOTUS are limited to the mouth of the river at San Pedro Bay to the point of the mean high tide (2.5 feet Mean Sea Level) line, which occurs just below the Pacific Coast Highway Bridge in Long Beach, California (USACE, 1978). However, impacts to the Los Angeles River are not anticipated and, therefore, a Section 10 permit is not anticipated.

Section 14 of the Rivers and Harbor Act (Section 408 Program)

The USACE Section 408 Program requires permission for a local government, company, or individual to alter or occupy a USACE civil works project and their associated lands (33 U.S.C. Section 408). Projects that require Section 408 permission include work on a levee, adding hydropower to a dam, building a bridge across a navigable waterway maintained and surveyed by USACE, or construction within the footprint of the USACE easement for a levee. The Section 408 program verifies that changes to authorized civil works projects shall not be injurious to the public interest and will not impair the usefulness of the project.

This Project may require Section 408 permission following further coordination with, and review from, the USACE. When a permit issued by USACE is required for a project, pursuant to the federal ESA and prior to issuance of a permit, USACE would consult with USFWS regarding a project's potential to affect federally listed species. If during consultation it is determined that a project may affect a federally listed species, authorization from USFWS pursuant to the ESA would also be required.

Habitat Conservation Planning

The USFWS Habitat Conservation Plan (HCP) Program provides a pathway forward to balancing wildlife conservation and development. The primary objective of the HCP Program is to conserve species and the ecosystems they depend on while streamlining permitting process for economic development. An HCP is typically prepared under Section 10 of the ESA and is designed for non-federal entities to obtain an Incidental Take Permit (ITP). HCPs are successful conservation tools because they can anticipate, prevent, and resolve controversies and conflict associated with project permitting (USFWS, 2023b).

The Project does not occur within the boundaries of any existing regional HCPs that would influence implementation of the Project, nor would preparation of an HCP be applicable to the Project.

Santa Monica Mountains National Recreation Area

The Santa Monica Mountains National Recreation Area (SMMNRA) is under jurisdiction of the National Park Service (NPS) but is a cooperative effort that joins federal, state, and local park agencies with private preserves and landowners to protect the natural and cultural resources of the Santa Monica Mountains. Stretching for 50 miles across the northwestern boundary of the Los Angeles Basin, the

California State Parks (CSP) system owns 42,000 acres, the NPS controls 23,620 acres, and the rest of the recreation area is in local agency, parks, and private property conservation easements. Within the SMMNRA boundary, NPS only regulates lands that are NPS owned. However, certain activities detailed in Title 36 Code of Federal Regulations (CFR) Chapter 1, such as mineral rights, are subject to regulations imposed by NPS on all land within the national park unit land regardless of ownership.

Over 20 individual state and municipal parks occur in SMMNRA, including Topanga State Park, Leo Carrillo State Park, Malibu Creek State Park, Point Mugu State Park, and Griffith Park. SMMNRA protects some of the most significant examples of terrestrial Mediterranean-type ecosystems and coastal marine environments anywhere in the world, with over 1,000 plant species providing habitat for approximately 500 mammal, bird, reptile, and amphibian species (NPF, 2021). The various parks and other conserved areas under SMMNRA protection provide scenic vistas, nature viewing, hiking, biking, and horseback riding opportunities, often through undisturbed native chaparral habitats. Multiple management plans for lands within SMMNRA may apply to the Project.

The General Management Plan for SMMNRA ensures that park managers are guided by policy, science, and public opinion to safeguard the mission of the park. Three agencies administer this plan and manage SMMNRA: the NPS, CSP, and the Santa Monica Mountains Conservancy (SMMC). The general plan includes five separate management areas; the Project falls within the “moderate intensity area”, which describes two goals that are applicable:

- Preserve natural and cultural resources of area
- Allow harmonious development with natural settings

The SMMNRA Action Plan provides a model for a climate-friendly park to encourage sustainable planning. SMMNRA aims to reduce the emissions via three strategies that will apply to the Project:

- Strategy 1: Identify and implement mitigation actions that the park can independently take to reduce greenhouse gas emissions resulting from activities within and by the park;
- Strategy 2: Increase climate change education and outreach efforts; and
- Strategy 3: Monitor progress with respect to reducing emissions and identify areas for improvement.

The Trail Management Plan was being prepared by the NPS, CSP, SMMC and the Mountains Recreation and Conservation Authority. The intention of this plan is to establish a vision for future development and management of the SMMNRA trail network. However, the SMMNRA Trail Management Plan has been placed on indefinite hold, as the NPS has moved away from broad general plans. Therefore, this plan does not apply to the Project.

The Invasive Plant Management Plan and Environmental Assessment for Redwood National Park and SMMNRA was established as an approach for protecting natural and cultural resources from the impacts of nonnative invasive plants. The document outlines best management practices (BMPs) that will be applied to the Project within SMMNRA.

The NPS enforces Title 36 CFR and U.S.C. Titles 16, 18, and 21. With these codes, it is prohibited to possess, destroy, injure, deface, remove, dig, or disturb plants or plant parts or products thereof from their natural state (NPS, 2023). Additionally, it is prohibited to use or possess wood gathered from within the park area except in designated areas where dead wood on the ground may be collected for use, such as for campfire fuel. All trees, regardless of species, are protected within SMMNRA; trees can

be removed upon authorization by the applicable entity based on landowner and based on location within SMMNRA (e.g., NPS, County of Los Angeles).

3.3.1.2 State

California Endangered Species Act and California Fish and Game Code

The California Fish and Game Code (CFGC) regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, and includes the California Endangered Species Act (CESA) under Sections 2050 through 2115. The California Department of Fish and Wildlife (CDFW) is responsible for administration of the CESA. Section 2081 of the CESA allows CDFW to issue an Incidental Take Permit (ITP) for state-listed threatened or endangered species, should the Project have the potential to "take" a state-listed species that has been detected within or adjacent to the Project. Certain criteria are required under CESA prior to the issuance of such a permit, including the requirement that impacts of the take are minimized and fully mitigated. Unlike the federal ESA, there are no state agency consultation procedures under the CESA. For projects that affect species listed under both the federal and California ESAs, compliance with federal regulations shall satisfy California's regulations if the CDFW determines that the federal incidental take authorization is "consistent" with the CESA. Projects that result in a take of a state-only listed species require an ITP pursuant to Section 2081 of the CESA.

Further, Sections 3503 and 3503.5 of the CFGC prohibit the taking of nesting birds, their nests, eggs, or any portion thereof during the nesting season. Typically, the breeding/nesting season is from February 1 through September 1, which captures the various breeding/nesting durations for bird species that occur within the region. Depending on each year's seasonal factors, the breeding season can start earlier and/or end later.

Additionally, the CFGC regulates impacts to streambeds and associated riparian vegetation, and includes Lake and Streambed Alteration Agreement (LSAA) regulations under Section 1600 et seq. If CDFW jurisdictional areas are impacted by a project that would divert, obstruct, or change the natural flow or bed, channel or bank of any river, stream, or lake, a Notification for an LSAA is required to be submitted to CDFW.

Should take of state-listed species potentially occur as a result of operation or construction of the Project, coordination with CDFW would be required, as would issuance of an ITP and/or concurrence with federal incidental take authorization, which would ultimately be determined by the agency. Additionally, should the Project result in potential impacts to streambeds and their associated riparian vegetation, coordination with CDFW and the issuance of an LSAA would be required.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

If it is determined through future focused survey efforts that plants protected under the NPPA are present and may be impacted by operation or construction of the Project, CDFW must be notified, and measures would need to be implemented to avoid and minimize the potential for take.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne), 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 extent of waters subject to the authority of RWQCBs (Waters of the State [WOTS]) is considered to be the same as and include all WOTUS. However, RWQCBs may also issue WDRs for impacts to isolated wetlands that are not under jurisdiction of the USACE (e.g., isolated wetlands, isolated or ephemeral waters).

Recently, the RWQCB approved "new procedures," also known as the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" (CSWRCB, 2019). This policy defines what constitutes a wetland and how wetlands should be delineated and protected in the state.

Should the operation or construction of the Project result in the discharge of waste, a Report of Waste Discharge (ROWD) must be filed and reviewed by the RWQCB, after which they will respond by issuing a WDR.

Natural Community Conservation Planning and Habitat Conservation Planning

CDFW's Natural Community Conservation Planning (NCCP) Program is an effort by the State of California and private and public partners that takes a broad, ecosystem-based approach to planning for the protection of biological diversity. An NCCP identifies and provides regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. An HCP allows for local agencies to work in endangered species' habitat by extending their federally acquired endangered species permit (i.e., take authorization) to all projects or activities that are covered.

The Project does not occur within the boundaries of any existing regional NCCPs or HCPs that would influence implementation of the Project nor would preparation of a NCCP or HCP occur. It is assumed that any impacts to federally or state-listed species would require consultation with the USFWS and CDFW.

3.3.1.3 Regional and Local

Significant Ecological Area Program

Los Angeles County first began to inventory biotic resources and identify important areas of biological diversity in the 1970s. Today, the primary mechanism used by Los Angeles County to conserve biological diversity is a planning overlay called Significant Ecological Areas (SEAs) designated in Los Angeles County's *General Plan Conservation and Natural Resources Element* (LA County, 2022). SEAs are ecologically important land and water systems that support valuable habitat for plants and wildlife species; these areas are often integral to the preservation of rare, threatened, or endangered species and conservation of biological diversity in Los Angeles County.

While SEAs are not preserves, use of a SEA must avoid conflicts with the goals of the SEA Program since the County of Los Angeles deems these areas important to facilitate a balance between development

and resource conservation. The SEA Program, which helps guide development within SEAs, is a combination of the General Plan overlay with the SEA conditional use permit process. The SEA Program's objective is to conserve genetic and physical diversity of biological resources for long-term sustainability. Development activities in the SEAs are reviewed closely to conserve water and biological resources such as streams, oak woodlands, and threatened or endangered species and their habitat. The intent of the proposed SEA Program regulations is not to preclude development, but to allow controlled development without jeopardizing the biotic diversity of Los Angeles County. Development within the boundaries of a SEA requires a conditional use permit, which is reviewed by the Significant Ecological Area Technical Advisory Committee, an advisory committee to the County's Regional Planning Commission with members from private and public sectors who have a range of expertise in ecology and habitat restoration.

Discussion and spatial representation of the SEA within the Project Study Area can be found in Section 3.3.4.1.

Los Angeles County General Plan

The *Los Angeles County General Plan 2035*, adopted in October 2015 and updated in July 2022, provides the policy framework and establishes the long-range vision for how and where the unincorporated areas of the county will grow (LA County Planning, 2024). Chapter 9, Conservation and Natural Resources Element, presents guidelines for the conservation of natural resources and preservation of open space areas, including SMMNRA. Section III Biological Resources states that the main types of biological resources within the area include "regional habitat linkages; forests, coastal zone; riparian habitats; streambeds and wetlands; woodlands; chaparral; desert shrubland; alpine habitats; SEAs; and Coastal Resource Areas (CRAs)". The plan sets two goals applicable to the Project:

- Goal C/NR 3: Permanent, sustainable preservation of genetically and physically diverse biological resources and ecological systems, including: habitat linkages, forests, coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and SEAs.
- Goal C/NR 4: Conserved and sustainably managed woodlands.

Project components that occur on unincorporated land within Los Angeles County would consider the preservation and conservation goals of the *Los Angeles County General Plan*.

Los Angeles Countywide Sustainability Plan "OurCounty"

Within unincorporated areas of Los Angeles County, the *Los Angeles Countywide Sustainability Plan "OurCounty"* (LA County, 2019) presents an inclusive sustainability plan to balance values of environment, equity, and economy for present and future generations. The Project would contribute to attaining the goal to reduce car dependency by providing convenient, safe, and affordable transportation systems, including public transit, that would reduce the number of miles people travel in private vehicles.

Actions related to trees are included in three of the 12 goals presented within OurCounty, including targets to increase urban tree canopy, increasing the number of native trees on public properties, and improving pedestrian health and safety through reducing urban heat and stormwater runoff with installation of street trees as part of a "living streets" approach. Short-term, direct actions in OurCounty include development of a Community Forestry Management Plan (CFMP) that would strengthen protection of native tree species and provide guidelines for planting new trees in the County, excluding those that are naturally forested (such as state or federal forests). The CFMP, called *Room to Grow*, was adopted in late summer 2024. The CFMP details future actions that would affect tree mitigation from

the Project within unincorporated County land. The plan calls for an update to the County Oak Tree Ordinance within the next 1 to 5 years and development of an Oak Woodlands Ordinance based on the County Plan (discussed previously). While OurCounty and the CFMP provide goals and targets for trees within unincorporated County land, they do not protect trees or specify measures to quantify impacts and, therefore, are not included in mitigation number calculations for the Project.

Los Angeles County Oak Tree Ordinance

The Los Angeles County Oak Tree Ordinance (Ordinance 22.46.2100 Oak Tree Regulations; hereafter referred to as the County Oak Tree Ordinance) applies to unincorporated areas of the county and recognizes oak trees as significant historical, aesthetic, and ecological resources. The goal of the ordinance is to create favorable conditions for the preservation and propagation of this unique and threatened heritage plant. Under the ordinance, "a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus" (LA County, 2023a) within 200 feet of proposed construction. To qualify as protected under this ordinance, single stem oaks must have a diameter at breast height (DBH), defined as 4.5 feet above natural grade, measuring 8 inches or more. Oaks with multiple trunks must have a combined DBH of the two largest trunks totaling 12 inches or more. Trees meeting these criteria are protected under the County Oak Tree Ordinance; a permit from the Director of Public Works is required prior to any modifications to the tree. The ordinance defines heritage oak trees as those that are 36 inches or more in diameter at DBH or any oak tree that has significant historical or cultural importance regardless of DBH (Ordinance 22.56.2090). Replacement of affected oak trees is at least 2:1 ratio on- or off-site. Alternatively, the ordinance allows for payment of an in-lieu fee, which would be subject to evaluation through CEQA. The ordinance does not provide a replacement ratio for heritage oak trees. Any oak trees that were planted, grown, or held for sale by a licensed nursey are considered exempt from the County Oak Tree Ordinance jurisdiction (LA County, 2023a).

Los Angeles County Oak Woodlands Conservation Management Plan

Within unincorporated lands of Los Angeles County, the County Oak Tree Ordinance (discussed in Section 2.3.2) protects individual oak trees while additional protections are provided to groups of oak trees through the Los Angeles County Oak Woodlands Conservation Management Plan (hereafter referred to as the County Plan)[1] (LA County Planning, 2011). The County Plan applies to contiguous groups of two or more native trees of the genus *Quercus* (including scrub oaks) that have at least a 5-inch DBH. To qualify as an oak woodland, the County Plan matches the California Fish and Game Code Section 1361 definition of "an oak stand with greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover" (LA County Planning, 2011). Canopy cover is calculated in the County Plan by establishing if 10 times the size of each tree's canopy overlap; where they do, the oak stand is considered to have 10 percent or greater relative cover and therefore qualifies as an oak woodland. One or more oaks along a street or in a parking lot on unincorporated county land without other associated oak woodland species do not qualify as a woodland regardless of canopy cover. These trees are protected by the County Oak Tree Ordinance.

The County Plan requires no net loss of oak woodlands within Los Angeles County. A permit and mitigation are required for any action with the potential to impact oak woodlands since they would be considered a significant impact. When impacts to oak woodlands are unavoidable, one of the following mitigation measures must be implemented:

[1] Joseph Decruyenaere, email message to Marie Solis, Robert Glaser, Jose De La Rosa, and William Chen. February 27, 2024.

- Acquire oak woodland habitat comparable to the habitat that was impacted. The recommended replacement ratio for off-site mitigation is a 2:1 ratio (i.e., providing 2 acres of oak woodland protection for every acre lost).
- Restore degraded oak woodlands on-site when circumstances at the site allow for long-term sustainability. When not feasible, off-site restoration should be prioritized by purchasing oak woodland habitat or conducting replacement planting.
- Contribute to Los Angeles County's Oak Forests Special Fund at a rate based on the estimated value of oak woodland to be lost.
- Follow other mitigation measures developed by the County.

City of Los Angeles General Plan

The City of Los Angeles intends to preserve natural resources, manage outdoor recreation, and maintain open space. Chapter 6 of the General Plan, "Open Space and Conservation" (DCP, 2001), describes the goals and policies to address issues faced by the city related to these elements. One goal set by the General Plan is applicable to the Project:

- GOAL 6A - An integrated citywide/regional public and private open space system that serves and is accessible by the city's population and is unthreatened by encroachment from other land uses.

Policies identified to accomplish Goal 6A that the Project would consider include:

- Coordinate city operations and development policies for the protection and conservation of open space resources by preserving habitat linkages, where feasible, to provide wildlife corridors and to protect natural animal ranges.
- Reassess the environmental importance of the County of Los Angeles designated SEAs that occur within the City of Los Angeles and evaluate the appropriateness of the inclusion of other areas that may exhibit equivalent environmental value.
- Conserve and manage the undeveloped portions of the city's watersheds, where feasible, as open spaces that protect, conserve, and enhance natural resources.
- Provide for an on-site evaluation of sites located outside of targeted growth areas, as specified in amendments to the community plans, for the identification of sensitive habitats, sensitive species, and an analysis of wildlife movement, with specific emphasis on the evaluation of areas identified on the Biological Resource Maps contained in the Framework Element's Technical Background Report and Environmental Impact Report.
- Encourage an increase of open space where opportunities exist throughout the city to protect wild areas such as the Sepulveda Basin and Chatsworth Reservoir.

City of Los Angeles Protected Tree and Shrub Ordinance

Protected Trees under the City of Los Angeles' Native Tree Protection Ordinance (Ordinance No. 177404 Protected Tree Relocation and Replacement) (City of LA Ordinance) include the following (Section 17.02 of the Los Angeles Municipal Code):

- Any tree in the oak genus indigenous to California excluding scrub oak (*Quercus berberidifolia*)
- Southern California black walnut (*Juglans californica*)
- Western sycamore (*Platanus mexicana*)

- California bay (*Umbellularia californica*)

The Native Tree Protection Ordinance was amended by Ordinance No. 186873 in December 2020 to include two shrub species:

- Mexican elderberry (*Sambucus mexicana*)[2]
- Toyon (*Heteromeles arbutifolia*)

This ordinance protects individual trees and shrubs within city limits, including on properties owned by private landowners, the University of California, Los Angeles (UCLA), and the California Department of Transportation (Caltrans).[3] To be considered protected, trees and shrubs must measure 4 inches DBH for a single stem plant or cumulative for all trunks in multi-stem individuals. This ordinance excludes any tree or shrub grown or held for sale by a licensed nursery, or trees or shrubs planted or grown as a part of a planting program.

Under this ordinance, the Board of Public Works must issue a permit before any protected trees or shrubs are damaged, relocated, or removed. This includes pruning, which must comply with the pruning standards set forth by the Western Chapter of the International Society of Arboriculture to avoid adversely affecting the health of any tree.

Issuance of a permit under this ordinance requires a Tree Report to be submitted by a Tree Expert. A Tree Expert is defined as a person with at least four years of experience in the business of transplanting, moving, caring for, and maintaining trees. Additionally, this expert must have qualifications that meet one of the requirements below:

- A certified arborist with the International Society of Arboriculture who holds a valid California license as an agricultural pest control advisor,
- A certified arborist with the International Society of Arboriculture who is a licensed landscape architect, or
- A registered consulting arborist with the American Society of Consulting Arborists.

A Tree Expert Tree Report is required for stand-alone removal permits from the Department of Public Works, Urban Forestry Department and shall require additional data collection within the preferred alternative's Ground Disturbance Area after landowner access is granted and an assessment of indirect impacts. The Tree Report must include field survey methods and details of each protected tree or shrub in height, diameter, canopy spread, physical condition, and locations of protected trees and shrubs. When removal/replacement is required for more than two protected trees or shrubs, the permit must be considered at a Board of Public Works public hearing. If a protected tree or shrub must be removed, a permit for protected tree/shrub removal must be obtained from the Los Angeles Board of Public Works in accordance with the City of Los Angeles's Native Tree Protection Ordinance. Per the ordinance, the tree/shrub removal permit may require replanting of native trees or shrubs of the protected species within the Project vicinity or at another location within the City of Los Angeles as mitigation. This ordinance requires replacement of protected trees and shrubs at a 4:1 ratio per individual. Replacement of any protected tree must also be a protected tree species defined by the ordinance; the same is true for protected shrubs. The size of each replacement tree shall be a 15-gallon or larger individual,

[2] For purposes of this assessment, naming convention follows the Santa Monica Mountain National Recreation Area's Vegetation Classification system (NPS, 2006). *Sambucus mexicana* is synonymous with scientific names *Sambucus caerulea (*Raf.) and *S. nigra* L. *caerulea* (Raf.) Bolli and common name "blue elderberry."

[3] Teresa Estrada, phone call by C. Hargreaves to LA Dept of Urban Forestry Division, July 19, 2024.

measuring 1 inch or more in diameter 1 foot above the base, and not less than 7 feet in height as measured from the base. The size and number of replacement trees shall approximate the value of the tree being replaced (DCP, 2020).

City of Los Angeles Street Tree Policy

The City of Los Angeles Department of Public Works, Bureau of Street Services, Urban Forestry Division (Urban Forestry) manages removal, replacement and maintenance of street trees and landscaped median islands within the Los Angeles city boundaries through enforcement of the City of Los Angeles Street Tree Policy (City of LA Policy) (City of Los Angeles, 1980). Street trees are those of any species occurring in the public right-of-way (ROW); trees on private property are not covered by this policy. A permit from Urban Forestry is required for removal of a street tree. Under the City of Los Angeles Municipal Code Section 62.170, the permittee may be required to plant a replacement tree within 40 days of the permit issuance as a condition of the permit; selection of species will be coordinated with the Urban Forestry Division on a case-by-case basis. Replacement of removed street trees is mitigated at a 2:1 replacement to removal ratio. Replacement trees species and location of replacement will be determined by a City-selected investigator. Maintenance of replacement trees, including watering, pruning, general care, and replacement of trees as needed, will be required for 5 years after installation. While the City of Los Angeles Municipal Code Section 62.177 allows for a payment of in-lieu fees when the required replacement trees cannot be feasibly planted on-site, the in-lieu fee must be evaluated by CEQA to adequately satisfy mitigation for removed street trees.

Metro Tree Policy

Per the Metro Tree Policy (Metro, 2022a), the Los Angeles County Metropolitan Transportation Authority (Metro) assumes responsibility to protect trees impacted by their construction projects, which includes a sustainable tree replacement and establishment program for unavoidable tree removals. Prior to the start of construction, Metro will prepare a tree protection plan identifying Tree Protection Zones for all trees within Metro property lines designated for retention. The Metro Tree Policy is applicable to trees impacted by construction that are not already protected by any other ordinance or the LA Street Tree Policy, such as tree species on private property that are not protected. To the degree feasible, Metro will plan and design new construction or additions so that well-established trees are preserved. Well-established trees will be protected from long- and short-term construction-related damage, such as direct damage from equipment and root loss caused by soil compaction. A Mitigation Plan will be prepared for any damaged or removed trees in consultation with a Certified Arborist.

Street trees removed by Metro will be replaced with 36-inch standard box trees at a minimum 2:1 ratio per individual, at or near the location of removal. Removal of heritage trees and protected trees (designated by pertinent local ordinances) are to be avoided whenever possible but, when unavoidable, will be replaced at a 4:1 ratio by trees of the same variety. In addition, Metro will coordinate with the applicable entities as needed, in the event a tree must be removed. Metro will also hold responsibility for a 3-year establishment period for replacement trees located within Metro property lines or Metro's ROW, as well as those associated with LA Metro capital projects that are installed outside of Metro property and ROW. During the establishment period, a Certified Arborist will assist in tree maintenance through regular inspections and recommended actions needed to retain or recover a tree's health. For long-term maintenance, Metro will hold responsibility of trees located only within Metro property lines or ROWs.

City of Santa Monica General Plan

The City of Santa Monica incorporates citizens' goals and an evaluation of the city's natural resources into "The Conservation Element" of the General Plan (City of Santa Monica, 1975), which describes the goals and policies to address issues faced by the City related to conservation. Three goals set by the plan are applicable to the Project when on land owned by City of Santa Monica, including the following:

- Preservation of the ecological balance and natural resources of the city and conservation of the energies and materials without serious interference with community needs
- An atmosphere free of air pollution
- A community whose appearance is in harmony with itself and setting

City of Santa Monica Tree Code

The City of Santa Monica's Municipal Code (Chapter 7.40.110, Tree Code Permit Requirements) states that no person shall remove, cut, trim, prune, plant, injure, or interfere with any tree, shrub, or plant upon any street, sidewalk, parkway, alley, or other public property without having first obtained a city permit authorizing such work. Trees located within the City of Santa Monica (within city boundaries or on parcels owned by the City of Santa Monica) are under the jurisdiction of the City of Santa Monica Tree Code. The permit may be granted by the Santa Monica City Director on the condition that the owner or authorized representative bears the cost of the permitted work and the cost of replanting and maintenance of any tree, shrub, or plant.

Natural Community Conservation Planning and Habitat Conservation Planning

NCCPs and HCPs are regulatory frameworks designed to protect species and habitats while allowing for compatible land use and development. To date, only one NCCP/HCP, the City of Rancho Palos Verdes NCCP/HCP, is finalized and being implemented in Los Angeles County (CDFW, 2023c). This plan area occurs on the Palos Verdes Peninsula, 15 miles to the south of the Project and does not coincide with the Project. Therefore, there are no applicable NCCP/HCP regulations to the Project.

Western Bat Working Group

The Western Bat Working Group (WBWG) is a non-profit organization with members from agencies, organizations, and individuals interested in bat research, management, and conservation in North America across 10 regions. Conservation work conducted by WBWG is funded through state and federal management agencies, non-governmental organizations, and private donations. WBWG has developed a Western Bat Species Regional Priority Matrix to provide details on the overall status for bat species within western North America by region. The matrix provides a ranking (High, Medium, Low, or Periphery) to indicate conservation risk for a species within a region.

The WBWG does not have any regulatory authority; however, it provides important guidelines and recommendations for bat conservation that can be applied to operation or construction of the Project, should impacts to Medium or High-risk species be anticipated.

3.3.2 Methodology

The following sections describe the desktop and field assessment methodologies used for the biological resource evaluation. The biological resource evaluation was conducted to document the existing biological resources and to evaluate the potential to occur for sensitive vegetation communities and special-status plant and wildlife species. Additional details on methodology and studies conducted can

be found in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

For the purposes of analysis, the following terms were defined, listed in order of decreasing size.

Project Study Area

The Project Study Area represents the area in which the transit concepts and ancillary facilities are proposed, including the Transportation Analysis Zones from Metro's travel demand model that are within 1 mile of the alignments. The Project Study Area is approximately 15.5 miles long and 7 miles wide and is approximately centered on Interstate 405 (I-405).

Resource Study Area

The Resource Study Area (RSA) is defined for each project alternative, excluding the No Project Alternative. Each RSA includes that project alternative's disturbance footprint (composed of all underground, surface, and aerial project components) plus a 500-foot radius buffer around areas of surface-level disturbance. The ground-disturbance buffer captures all areas subject to potential indirect impacts from implementation of the Project; temporary and permanent ground disturbance is discussed in the following section, Ground Disturbance Area. Direct or indirect effects are not anticipated at the surface from underground tunnel construction due to the depth of activities; accordingly, the buffer was not applied to underground tunnel segments. Activities associated with tunnel construction that have surface-level equipment usage have potential for surface-level effects, so are incorporated into temporary or permanent ground disturbance areas and buffered. Specifically for grouting operations associated with underground tunnel construction, activities will occur either underground without associated surface-level disturbance and so are not buffered, or will occur at surface level and are buffered to account for potential surface-level disturbances.

Discussion of specifics for underground configurations including locations, tunnel depth, installation, and associated at-grade components are presented in the Chapter 2, Project Description section for applicable alternatives. Indirect impacts may include elevated noise and dust levels, soil compaction, and increased human activity, among others. Indirect impacts beyond 500 feet would be diffuse and are not anticipated to significantly impact biological resources.

While indirect impacts are anticipated to be less than significant beyond the 500-foot radius buffer, home ranges for some wildlife in the vicinity (e.g., mountain lions) are large enough so that additional area needs to be considered to capture the geographic extent of wildlife movement and migratory patterns and analyzed for movement-related impacts. For the purposes of this analysis, non-developed areas of the Santa Monica Mountains were considered. The boundary for the mountain range near the Project was derived from the NPS *Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs in Ventura and Los Angeles Counties, California* (Keeler-Wolf and Evens, 2006) and is approximated by the area between Sunset Boulevard in the south and Valley Vista Boulevard in the north (Figure 3.3-4).

Ground Disturbance Area

The Ground Disturbance Area is one component of the RSA; it includes aboveground project components that would require surface-disturbance activities such as drilling, excavating, clearing, grading, pile driving, topsoil stripping, and/or vegetation removal to execute the Project. The Ground Disturbance Area comprises both temporary and permanent impacts, including surface impacts associated with aerial and underground components (e.g., access points, staging locations, cut-and-cover station construction, aerial alignment support structures and guideway, etc.). Impacts to

vegetation within the Ground Disturbance Area have the potential to affect special-status wildlife or plant species both directly and through modifications to their habitat. Within the Ground Disturbance Area, areas of impact are defined and demarcated as either temporary or permanent in nature; areas of temporary and permanent impacts do not spatially overlap.

Specifically, aerial and underground components were classified as either temporary or permanent ground disturbance as follows:

- Aerial guideways and their components (i.e., support structure columns, spans the monorail and heavy rail travels between columns) are considered permanent ground disturbance for the length of the aerial guideway. Surface impacts associated with aerial guideway construction (e.g., staging locations, construction access, etc.) were categorized as either permanent or temporary ground disturbance.
- Underground features (e.g., the tunnel, traction power station substations [TPSS] built into tunnel-adjacent caverns) were excluded from the Ground Disturbance Area. Surface impacts associated with underground construction (e.g., staging locations, launch sites for the boring machine, etc.) were categorized as either permanent or temporary ground disturbance.

Impacts are anticipated from project construction activities such as clearing, grading, excavating, drilling, and/or vegetation removal. The limits of the Ground Disturbance Area were determined by reviewing project plans, aerial photography, and evaluating potential construction limits.

Tree Survey Area

The Tree Survey Area comprises the Ground Disturbance Area (where direct impacts are anticipated) and an associated 10-foot buffer to account for variance in Global Positioning System (GPS) accuracy. Within unincorporated Los Angeles County land, the Tree Survey Area is extended out to 200 feet from the Ground Disturbance Area for trees in the genus *Quercus* (to be compliant with requirements of the Los Angeles County Oak Tree Ordinance). Field surveys for an initial inventory assessment were completed within the Tree Survey Area (refer to Appendix B of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* [Metro, 2025a]); the inventory includes trees whose canopy or trunk intersected the Tree Survey Area that also meet the size requirements for the applicable ordinance or policy.

Legal Protections and Definitions

Special-status species, special-status vegetation communities, wetlands and riparian habitat, and wildlife corridors designations and categorizations used herein follow the definitions below:

- Plant species designated by the California Native Plant Society (CNPS) as California Rare Plant Ranks (CRPRs) 1B and 2
  - CRPR 1B: Plants that are rare, threatened, or endangered in California and elsewhere
  - CRPR 2: Plants that are rare, threatened, or endangered in California, but more common elsewhere
- Sensitive natural vegetation communities with a state ranking of S1 to S3
  - S1 = Critically Imperiled — Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

  - S2 = Imperiled — Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.
  - S3 = Vulnerable — Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
- Wildlife species designated as endangered, threatened, or a candidate for listing under the ESA
- Wildlife species designated as endangered, threatened, a candidate for listing, or a Species of Special Concern under the CESA
- Essential wildlife connectivity areas protected by CDFW
- Nesting birds protected under the MBTA
- WOTUS, wetlands, and riparian habitats all protected under the CWA
- Bald and golden eagles protected under the BGEPA
- Bats considered Medium or High Priority by the WBWG

3.3.2.1 Literature Review

A desktop literature review was conducted prior to any field work to understand both the historical and existing conditions associated with the Project Study Area in order to evaluate Project impacts more effectively. Historical imagery available on Google Earth (2023) was utilized for comparisons of the Project Study Area back to 1985 to provide a visual reference of physical changes undergone through this time period. A search of applicable public databases was conducted to obtain information about the presence of, or lack thereof, sensitive biological resources including wildlife, plants, wildlife movement corridors, and aquatic features.

The information associated with the literature review was used to characterize the Project Study Area and further inform the potential for sensitive biological resources to occur under current conditions. The data gathered herein was consolidated and utilized as a reference to inform the subsequent biological field survey.

The literature review included a review of the following databases to identify special-status plants and wildlife with the potential to occur:

- CDFW California Natural Diversity Database (CNDDB)
- USFWS online Information for Planning and Consultation (IPaC) environmental review program
- Cornell Lab of Ornithology eBird
- CNPS Rare Plant Inventory
- iNaturalist
- WBWG for ranking of bat species with potential to occur

Applicable search area was defined using 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle (quad) maps that correspond with project component locations, with adjacent quad maps being included in the search area when a project component was within 2 miles of the boundary; the specific quad maps searched varied per alternative. Details on the search area are presented in each project alternative's respective chapter.

The CDFW's CNDDB tracks observations of species subject to conservation concern within California, many of which are not federally or state listed. The CDFW uses additional designations for species not listed as endangered and threatened to aid in their goal of maintaining viable populations of native species. One of these, "Fully Protected" (CFP), includes legal protections; CFP species may not be taken or possessed except for under special permit from the CDFW for scientific purposes, relocation of a bird species for the protection of livestock, or if they are a covered species under a NCCP. CDFW Species of Special Concern and Watch List species are afforded no official legal status but may receive special consideration during the environmental review process. Along with ESA- and CESA-covered species, wildlife classified by CDFW as CFP and Species of Special Concern were included in the analysis for potential to occur within each alternative's search area. The January 2024 CNDDB Special Animals List was utilized to determine CDFW special-status wildlife designations (CDFW, 2024a). The State and Federally Listed Endangered, Threatened, and Rare Plants of California list from January 2024 was used to determine CDFW special-status plant designations (CDFW, 2024c).

Many avian species that are not federal or state listed (i.e., not special status) receive legal protection through MBTA, which protects hundreds of non-game migratory bird species from take, including their nests. Protection for these species will be covered under specific mitigation measures associated with the proposed work.

The USFWS's IPaC is a free, digital planning tool that assists in environmental review to assess if a project would impact federally listed or candidate species, designated critical habitat (USFWS, 2024b), and other sensitive resources managed by the USFWS (USFWS, 2024a). Through use of the online mapping tool, an official list of potential resources with potential to occur were evaluated within the appropriate quad map search area for each alternative.

Specific to avian species, the eBird database was queried to determine if special-status avian species had been detected within the Project Study Area. eBird is among the world's largest biodiversity-related science projects, which documents bird distribution, abundance, habitat use, trends, etc. eBird is an avian database that is managed, maintained, and vetted by the Cornell Lab of Ornithology, where the public can record avian species detections on a checklist of likely birds for that date and region. Unusual observations, including species seen out of their normal geographic range, or high numbers of birds, are vetted by regional avian specialists (eBird, 2024a). This database was used as a supplemental resource to augment available data from scientific databases for the purposes of this report.

The CNPS has maintained an inventory of rare and endangered plants of California since 1974; this Rare Plant Inventory is recognized as the authoritative resource of sensitive California plants. The inventory has multiple uses, including as an education tool, in scientific research, for conservation planning, and to prepare environmental documents (CNPS, 2024). Each plant within the list is assigned a CRPR in collaboration with the CNDDB. The rankings categorize the rarity of each species; there are six total ranks. Only plant species with CRPRs of 1B or 2A are included in the analysis herein.

The literature review included a query of iNaturalist — an online citizen science platform established to share biodiversity information on species occurrence and identification — to determine if recent observations of special-status species were documented within each project alternative's RSA. Within the database, observations are recorded and reviewed by members of the community to determine the consensus on species identification; "Research Grade" is the finest level of identification certainty. iNaturalist observations become candidates for Research Grade when (1) they have a photo, date, and GPS coordinates, and (2) species identification is confirmed by at least three community members' assessment and review. Only Research Grade iNaturalist observations were considered herein.

iNaturalist was used as a supplemental resource to augment available data from scientific databases for the purposes of this report.

Evaluation of bat species utilized the WBWG ranking system in addition to database searches (CNDDB and IPaC) to determine if special-status bat species had potential to occur. Although designation under the WBWG does not afford bat species legal status or formal protection at this time, the objectives of the WBWG designations are to identify bat species that are either threatened or at risk and to encourage practices that benefit bat populations, support practices that minimize unavoidable impacts, and recommend mitigation as needed (WBWG, 2017). Therefore, these species may receive special consideration during the environmental review process as well. Bat species were included when ranked Medium or High Priority Species.

Information from the aforementioned databases was used to prepare a comprehensive list of special-status species with potential to occur that warranted further evaluation.

The CNDDB also tracks natural communities; vegetation communities can be classified as sensitive when they are rare and/or under threat, including those that may support special-status plant or wildlife species or receive regulatory protection (i.e., Section 404 of the CWA and/or Sections 1600 et seq. of the CFGC) (CDFW, 2023b). The CDFW and CNPS provide guidance on determining sensitivity of a vegetation community (CDFW, 2024d), and the CNDDB tracks their occurrences. The CDFW provides a ranking system for natural communities at a global (G) and state (S) level with values ranging from 1 through 5, where lower numbers represent the rarest and most threatened; ranking incorporates the rarity of each community and threats to the community at the assessment level. Communities rated S1 (very rare or threatened within the state) through S3 are considered sensitive and are to be considered during the environmental review process (CDFW, 2024d). Classification of vegetation communities for sensitivity follows the *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009) and includes alliances and associations that classify plant composition and site conditions (i.e., habitat conditions, topography, soils, etc.) through a combination of dominant and codominant species. Alliances are broad units of vegetation that are defined by the dominant or characteristic species and reflect recurring patterns of plants across a landscape; they are commonly used in vegetation mapping. An alliance is made up of one or more associations, which are the primary unit of vegetation and reflect patterns of species occurrence and frequency (Jennings et al., 2009). If the alliance is sensitive and ranked S1 to S3, all nested associations are also sensitive. However, if an alliance is not sensitive and has multiple associations, some associations may be considered sensitive while others within the same alliance are not. For the purposes of this report, vegetation mapping was completed at the alliance level, resulting in vegetation communities being considered "potentially sensitive" if any associations within the alliance that would be present (i.e., the associated plant species' ranges overlap with the Project) are ranked S1 to S3. Determination of sensitivity will occur during field surveys after the preferred alternative is selected, when codominant species can be used to determine which association is present and if it is sensitive.

The following resources were referenced during the literature search to evaluate potential presence of wildlife movement corridors within the Project Study Area. These resources provide information on the location, size, and scale (i.e., primary or secondary classification types), and overall function of regional linkages applicable to the Project. Reference materials included the following:

- California Essential Habitat Connectivity Project (CDFW, 2023e)
- Citizens for Los Angeles Wildlife Corridors and Habitat Connectivity (CLAW, 2023)
- South Coast Wildlands (SCW) Missing Linkages (South Coast Wildlands, 2008)

- SMMC's Habitat Linkage Planning Map (SMMC, 2021)
- NPS's Lions in the Santa Monica Mountains (NPS, 2023)
- Pacific Flyway Council of Migratory Bird Management (Pacific Flyway Council, 2023)
- City of Los Angeles Department of City Planning Draft Wildlife Ordinance (DCP, 2022)
- Wildlife Resources Map (DCP, 2023)

SCW is a nonprofit organization dedicated to ensuring functional habitat connectivity across diverse wildland networks. SCW works with respected conservation biologists, ecologists, wildlife agencies, land managers and planners, and other conservation organizations to develop and implement regional conservation strategies. Habitat linkages have been catalogued in Southern California as part of a coordinated statewide effort to identify and preserve or restore these corridors (Penrod et al., 2001).

In an urban context, a wildlife migration corridor can be defined as a linear landscape feature of sufficient width and buffer to allow animal movement between two comparatively undisturbed habitat fragments, or between a habitat fragment and some vital resource that facilitates population growth and diversity. Habitat fragments are isolated patches of habitat separated by otherwise foreign or inhospitable areas, such as urban housing, commercial development, and highways. The two types of wildlife migration corridors seen in urban settings are regional corridors, defined as those linking two or more large areas of natural open space, and local corridors, defined as those allowing resident wildlife to access critical resources (i.e., food, cover, and water) in a smaller area that might otherwise be isolated by urban development. A viable wildlife corridor consists of more than an unobstructed path between habitat areas but also must have the appropriate vegetation to provide food and cover to both transient species and resident populations and a lack of stressors and threats within and adjacent to the corridor for wildlife to use it successfully. Within the City of Los Angeles, traditional wildlife corridors where pieces of habitat that are usually linear link two or more natural habitat patches are uncommon. Instead, wildlife movement is most likely to occur within areas that are protected for wildlife but can also include marginal habitat or developed areas (DCP, 2021). The City of Los Angeles has identified a regional wildlife movement pathway (WMP) between the western Santa Monica Mountains and Griffith Park (known as WMP 13) through fragmented habitat; this pathway has been documented in use by medium and large mammals (DCP, 2021).

A desktop analysis of detailed information on the location and characteristics of aquatic surface water features was completed using available mapping of watersheds, streams, wetlands, and soils within the Project Study Area. To identify areas that may be subject to the jurisdiction of USACE under Section 404 and/or RWQCB under Section 401 of the federal CWA, and CDFW under Section 1600 et seq. of the CFGC, the following databases were queried:

- USGS's National Hydrography Dataset (NHD) (USGS, 2023)
- USFWS's National Wetlands Inventory (NWI) (USFWS, 2023a)
- Web Soil Survey (USDA-NRCS, 2023a, 2023b)
- SoilWeb (UC-ANR, 2023)

The NHD defines spatial locations of surface waters and is designed to provide the most comprehensive coverage of surface water data for the U.S. The NHD contains features such as lakes, ponds, streams, rivers, canals, dams, and stream gages. The NWI was established by USFWS to conduct a nationwide inventory of U.S. wetlands to provide information on the distribution and type of wetlands. As part of the NWI, the USFWS developed a wetland classification system (Cowardin et al., 1979) that serves as the federal standard for wetland classification. The NHD (USGS, 2023) and NWI (USFWS, 2023b) were queried for the occurrences of surface waters that coincide within the RSA.

These data are designed to be used in general mapping and the analysis of surface water systems. Using basic NHD features like flow network, linked information, and other characteristics, it is possible to study cause-and-effect relationships. For example, use of these tools would help determine how a source of poor water quality upstream would affect a fish population downstream.

General biological surveys for a variety of species were historically conducted within the region in association with prior projects in the region, including previous Metro projects. The two primary documents reviewed for relevant biological resources include:

- *North Hollywood to Pasadena Bus Rapid Transit (BRT) Corridor Planning and Environmental Study Biological Resources Technical Report* (Metro, 2020)
- *Recirculated Draft EIR, Eastside Transit Corridor Phase 2, Section 3.3, Biological Resources* (Metro, 2022b)

3.3.2.2 Biological Surveys

Biological surveys comprised a combination of desktop analysis and field surveys for aquatic and biological resources, including a preliminary tree inventory. Data was collected for each project alternative; since field surveys were not conducted for the Project Study Area, combined data from each project alternative's RSA was used for the No Project Alternative. Field surveys were conducted April 10, 2023, through April 14, 2023; May 18, 2023; July 7, 2023; and March 27, 2024. Field survey methodology was a combination of pedestrian, windshield, and binocular surveys, depending on access and visibility. Accessible areas in the public ROW and the Getty Center were surveyed using meandering transects; inaccessible areas visible from the public ROW were scanned with binoculars or through windshield surveys when safe access was not feasible. Data was recorded in the ArcGIS Field Maps mobile application. Property access was limited to public ROW and within the Getty Center; portions of the survey area would not be visually assessed due to access or safety issues (especially around Stone Canyon Reservoir). Inaccessible portions of the survey area that were not visible from the public ROW were assessed through desktop with aerial imagery.

Aquatic Resources

Field surveys were conducted to evaluate the presence of USACE-jurisdictional WOTUS, RWQCB-jurisdictional WOTS, CDFW-jurisdictional streambeds, and any associated riparian habitat. The hydrological field assessment and Aquatic Resources Delineation (Appendix A of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* [Metro, 2025a]) were performed within the Ground Disturbance Area. The field investigation included documenting existing conditions and potential jurisdictional resources within the Ground Disturbance Area for each of the five alternatives. The methods and results of the jurisdictional determination are detailed in Aquatic Resources Delineation (Appendix A of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* [Metro, 2025a]). If appropriate, the Aquatic Resources Delineation will be submitted to USACE as a preliminary jurisdictional determination and will be provided with state and federal streambed/waters permit applications.

Special-Status Species and Vegetation Mapping

Biological field surveys were conducted to document existing conditions and potential for special-status plants, special-status wildlife species, special-status vegetation communities, and birds protected under the MBTA within the Ground Disturbance Area. Resource-specific focused botanical or wildlife surveys were not conducted for the Project at this time and will be completed once a preferred alternative is identified.

Desktop analysis was utilized to map vegetation communities for the Ground Disturbance Area and a 500-foot buffer. Vegetation communities listed in this report are based on the classifications provided in *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009). Vegetation mapping was completed using a combination of publicly available mapping (from the NPS's Santa Monica National Recreation Area) (NPS 2004-2019) where available and high-quality aerial imagery (Google Earth) elsewhere. The minimum mapping unit for the SMMNRA data is 0.5 hectares, and communities present in smaller patches are conservatively assumed to be consistent with surrounding classifications for the purpose of this analysis. No less than 10 percent of the SMMNRA vegetation mapping was field-truthed for the Ground Disturbance Area; if discrepancies between field observations and desktop analysis were 0.5 hectare or greater, field observation data was considered more accurate and presented herein. Vegetation communities within the SMMNRA dataset include classifications into the Calveg (Classification and Assessment with Landsat of Visible Ecological Groupings) system, which is used to classify existing vegetation into categories of vegetated or non-vegetated units for resource planning purposes. Vegetation classified as "urban" was removed from the SMMNRA vegetation mapping dataset to represent the non-developed areas within the Santa Monica Mountains that are presented herein.

Protected Tree and Shrub Inventory

An initial protected tree and shrub inventory was conducted within the Tree Survey Area to determine the quantity and species with potential to be impacted by construction (listed in Appendix B of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* [Metro, 2025a]). Portions of the RSA outside the Tree Survey Area (underground tunnels and the 500-foot buffer on the Ground Disturbance Area) were not inventoried, since ground disturbance is not expected to occur in those areas.

This initial tree inventory recorded trees measuring 4 inches in DBH or greater for a single stem plant or cumulative for trunks in multi-stem individuals; this method encompasses those protected under all potentially applicable ordinances and policies (refer to Section 3.3.1, Regulatory and Policy Framework). The Tree Protection Zone (i.e., dripline or canopy of the tree/shrub) of inventoried trees falls at least partially within the Tree Survey Area; individual trees or shrubs whose Tree Protection Zone was not within the survey area were not inventoried. No shrub species other than toyon and Mexican elderberry of any size were recorded. Each inventoried tree of appropriate size was determined to be protected under one applicable ordinance or policy based on species and landowner (listed in Appendix B of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* [Metro, 2025a]). Inventoried trees with protection include the following:

- Trees from the oak genus as follows:
  - Any oak species indigenous to California (excluding scrub oak) within the City of Los Angeles
  - Any oak species measuring 8-inch DBH or greater for individuals or a combined DBH of the two largest trunks totaling 12 inches or more for multi-stemmed trees within unincorporated County of Los Angeles land
  - Any native oak trees (excluding scrub oak) that occur in a contiguous group of two or more with at least 5-inch DBH within unincorporated County of Los Angeles land
- Southern California black walnut, western sycamore, and California bay within the City of Los Angeles
- Shrub species Mexican elderberry and toyon within the City of Los Angeles
- Street trees occurring within public ROW

- Trees within the City of Santa Monica
- Trees within the SMMNRA

Each tree/protected shrub or cluster of trees and protected shrubs were mapped with an identification number and data collected included scientific, name, common name, and trunk DBH. Species not protected under the regulations above (Section 3.3.1.3, Regional and Local) and trees with a DBH of less than 4 inches were not recorded. Non-protected species typically consisted of ornamental trees and shrubs planted on private property.

Inventoried trees and protected shrubs were mapped individually as points, when possible, while clusters of trees or protected shrubs were mapped as polygons when two or more individuals were proximate, visibility was limited, and/or property access was denied. Each tree or shrub or cluster was assigned to one ordinance or policy based on tree species, size requirements, location, and landowner/jurisdiction. Details on field sampling and desktop analysis methods can be found in Appendix B of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a), and applicable ordinance or policy for each tree is included the detailed tree inventory Appendix B, Attachment 1, Tree Inventory Tables. If a tree or protected shrub did not meet protection criteria of the City of LA Ordinance or County Oak Tree Ordinance, it was still considered protected under either the City of LA Policy or Metro Tree Policy. Trees within SMMNRA and on land owned by City of Santa Monica will have mitigation determined through coordination with or at the discretion of the landowner. For purposes of this analysis, mitigation ratios for these trees is assumed to be within the range of replacement trees for the Metro Tree Policy to the City of LA Ordinance for a preliminary estimate, between 2:1 and 4:1. The mitigation requirements and maintenance periods vary depending on the ordinance or policy governing the tree (refer to Table 3.3-9). If retention of a heritage or protected tree (as defined by local ordinance or policy) is not possible, the Metro Tree Policy dictates a 4:1 replacement ratio per individual with trees of the same variety.

3.3.2.3 CEQA Threshold of Significance

For the purpose of this Draft Environmental Impact Report (DEIR), impacts are considered significant if the Project would:

- 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.
- 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.
- 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.
- 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.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

3.3.3 Project Measures

The following permitting approach is anticipated:

PM BIO-1: ***Stormwater Pollution Prevention Plan Development***

- *A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared prior to the start of construction. The SWPPP shall identify the design features and best management practices that shall be used:*
  - *To manage drainage-related issues (e.g., erosion, sedimentation, and non-stormwater discharges) during construction activities. Erosion-control measures shall be regularly checked by inspectors, biologist(s), and/or resident engineer. Fencing and erosion-control measures in all construction areas shall be inspected a minimum of once per week.*
  - *To establish material handling and staging areas and prevent discharges or spills from entering waterways, including vehicle fueling practices and waste management as follows:*
    - *For refueling guidelines: Fueling of equipment shall occur in designated fueling zones within the construction staging areas. Drip pans, drip cloths, or absorbent pads shall be used during fluid replacements. All equipment used within the approved construction limits shall be maintained to minimize and control fluid and grease leaks. Provisions shall be made to contain and immediately clean up unintentional spills of fuel, oil, or fluid. When handling toxic substances, construction vehicles shall carry a Hazardous Material Spill Kit for use in the event of a spill. All construction personnel working on-site shall be trained in using these kits. Spill containment materials must be on-site or readily available for any equipment maintenance or refueling.*
    - *For waste management: Spoils, trash, and any construction-generated debris shall be removed to an approved off-site disposal facility. Trash and food items shall be contained in closed containers and removed daily to prevent discharges or spills from entering waterways. Litter and debris will be cleaned up daily from the site. Hazardous waste shall be stored in appropriately labeled containers in a proper staging area (i.e., with secondary containment or indoors or under cover). Any hazardous spills shall be immediately cleaned up and reported.*

PM BIO-2: ***Regulatory Requirements***

- *Special-Status Species: Once a preferred alternative is selected, coordination with California Department of Fish and Wildlife (CDFW) and U.S. Department of Fish and Wildlife (USFWS) will be required to determine what, if any, permitting is required for the Project. The State may require an ITP (Fish & Game Code Section 2081(b)), and consultation with USFWS may be required per Section 7 of the Endangered Species Act.*

- *Aquatic Resources: Prior to approval of the Project plans and specifications, Public Works shall coordinate with USACE to confirm CWA regulatory compliance and integrate permit conditions into the plans and specifications. USACE may authorize the Project per a Section 14 of the Rivers and Harbors Act Section 408 Program permission. The Regional Water Quality Control Board may authorize the Project per a Section 401 Water Quality Certification. CDFW may authorize the Project per a Streambed Alteration Agreement pursuant to California Fish and Game Code Section 1602.*

3.3.4 Existing Conditions

3.3.4.1 Project Study Area

General Characterization of the Project Study Area

The northern and southern portions of the Project Study Area are comprised of highly developed and urbanized neighborhoods. These urbanized areas contain limited biological resources that are generally restricted to parks and undeveloped areas that contain predominantly non-native landscaped vegetation; occasional patches of native vegetation are present, typically as plantings rather than naturally occurring vegetation. Habitat in this condition is primarily suitable for species that can tolerate at least some level of urbanization and are acclimated to human influence, including numerous bird species protected under the MBTA and wildlife (e.g., racoons, skunks, Virginia opossum, and coyote).

The Los Angeles River flows west to east through the Project Study Area, mostly in a box channel (i.e., concrete walls forming a rectangular channel). Within Sepulveda Basin however, a swath of riparian habitat approximately 2 miles long is present along the Los Angeles River; this area would provide suitable habitat for plants and wildlife. Riparian habitat is also present in the Basin along four north-to-south–flowing creeks that feed into the Los Angeles River (Haskell Creek, Woodley Creek, Hayvenhurst Channel, and Bull Creek east to west).

I-405 is a major arterial freeway running north-south through the middle of the Project Study Area, connecting communities in the San Fernando Valley with the Los Angeles Basin through the Sepulveda Pass in the Santa Monica Mountains. The freeway serves as a blockage for wildlife movement within the Santa Monica Mountains, as roads in urban areas threaten wildlife by acting as barriers to movement through increased mortality, reduced habitat quality and connectivity, changes in behavior, and restrictions to genetic flow (Riley et al., 2014; Coffin, 2007; Riley et al., 2006).

The middle portion of the Project Study Area bisects the Santa Monica Mountains, which run east–west through the Project Study Area. This area is less developed and is composed of steep slopes covered by remnant native chaparral habitats and non-native grassland. Native habitat is interspersed with upscale single-family residences along north-south–oriented roadways running atop ridgelines and through canyons and valleys. Portions of the SMMNRA are within the Santa Monica Mountains in the Project Study Area; the SMMNRA consists of approximately 150,000 acres and provides habitats to more than 1,000 different plant and 500 wildlife species (National Park Conservation Association, 2023).

Elevations and Topography

Elevations range within the Project Study Area from approximately 800 feet above mean sea level (amsl) at the northern end to 1,600 feet amsl in the middle and approximately 160 feet amsl at the southern end of the Project Study Area. The general topography of the Project Study Area includes several, parallel north-to-south-oriented inland valleys that run through the Santa Monica Mountains. The Santa

Monica Mountains, including the Sepulveda Pass, are composed of rugged steep mountain terrain with narrow canyons that are located between two flat urbanized valleys.

Climate

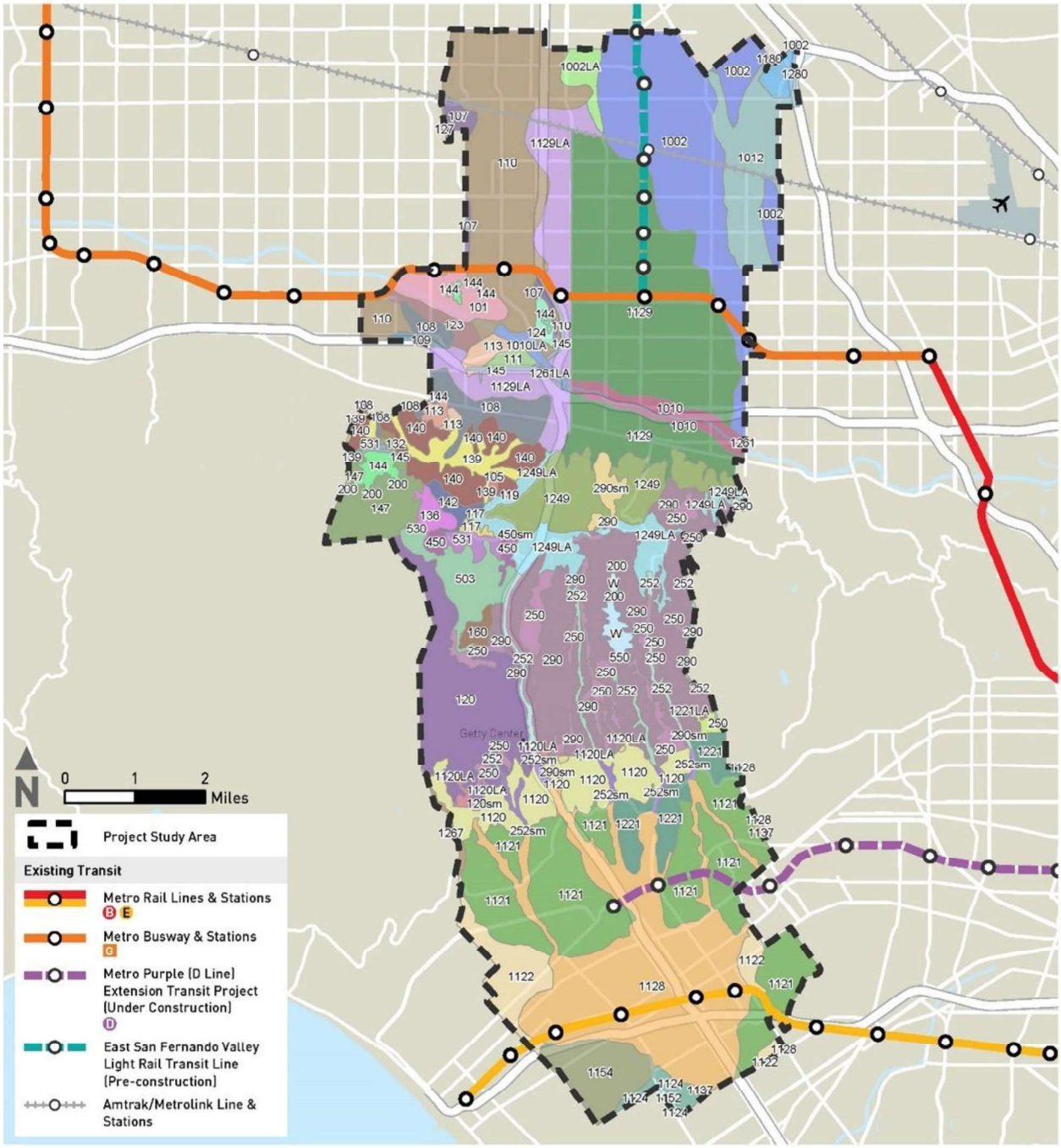
Precipitation in Los Angeles County is derived from frontal low-pressure systems that originate over the Pacific Ocean and generally travel southeast into southern California. Precipitation normally occurs during the cooler months of the year from November through March and is infrequent during the summer months. As throughout southern California, rainfall in the Los Angeles River Watershed and the Ballona Creek Watershed alternates between wet and dry periods. The average annual precipitation in the Project Study Area is approximately 13 to 18 inches. Differences in topography are responsible for large variations in temperature, humidity, precipitation, and cloud cover throughout the region. The Project Study Area is located within a Mediterranean climate zone, characterized by dry, warm summers and mild, wet winters. The mean temperature range for the months of November through April is 41 degrees Fahrenheit (°F) to 73°F. The mean temperature range for the months of May through October is 58°F to 79°F.

Between October 2022 and September 2023, approximately 26.46 inches of precipitation were recorded at the Los Angeles International Airport (LAX) approximately 5 miles south of the Project Study Area; 88 percent of the precipitation occurred between November and March. Compared to the 30-year average for this location, the 2023 water year was 206 percent above normal (NOAA, 2023), indicating the 2023 biological and wetlands and waters surveys were conducted during an above-average rainfall season.

Soils

The Project Study Area comprises numerous soil types that serve as a reservoir for water and nutrients essential for the success of biological resources such as plants and wildlife. Soil analysis was included in the Aquatic Resources Delineation to evaluate for presence or absence of hydric soils that would form under anerobic conditions, such as those that occur in wetlands. An in-depth detailed analysis of subsurface components, including soils, is presented in the *Sepulveda Transit Corridor Project Geotechnical, Subsurface, Seismic, and Paleontological Technical Report* (Metro, 2025b). According to the U.S. Department of Agriculture, Natural Resources Conservation Service *Soils Report* for Los Angeles County, California, part of the Project Study Area falls in the Los Angeles County, California, Southeastern soil survey area, with the remaining portions in the West San Fernando Valley soil survey area and the SMMNRA soil survey area (USDA-NRCS, 2023a). Soil types in these soil survey areas are shown on Figure 3.3-1 with the figure legend on Figure 3.3-2.

Figure 3.3-1. Project Study Area Soils Map



Source: USDA-NRCS, 2023a

Figure 3.3-2. Project Study Area Soils Map Legend

Source: USDA-NRCS, 2023a

Biological Resources within the Project Study Area

This section describes biological resources known to or with potential to occur within the Project Study Area. The search area for biological resources with potential to occur was defined as all USGS 7.5-minute quadrangles that co-occur with the Project Study Area, and all adjacent quadrangles. Searches were conducted for Beverly Hills, Van Nuys, and Canoga Park quadrangles and surrounding 11 quadrangles:

Topanga, Calabasas, Malibu Beach, Santa Susana, Oat Mountain, San Fernando, Sunland, Burbank, Hollywood, Venice, and Inglewood.

Wildlife, vegetation communities, plant species, and jurisdictional aquatic features are described in the following subsections.

Wildlife

Most wildlife expected in the urbanized areas of the Project Study Area, such as the San Fernando Valley to the north and the westside communities of Los Angeles to the south, are regionally common species adapted to human disturbances. These common species include birds (most of which are protected by the MBTA), reptiles (e.g., common snakes, common lizards), small mammals (e.g., squirrels, rabbits, opossums, racoons, skunks, bats), and larger mammals such as coyotes.

One of the primary indicators of wildlife distribution within the Project Study Area is the location of permanent and ephemeral water sources. Overall, there are few water sources within the Project Study Area, thereby limiting diversity of species. Water is present in the Los Angeles River (predominantly within a concrete-lined drainage), Encino Reservoir, Stone Canyon Reservoir, and at lakes on the UCLA campus. Water is also present within the Sepulveda Basin in Haskell, Woodley and Bull Creeks and human-made lakes, including Lake Balboa, Wildlife Lake, and several smaller ponds. These waterbodies provide foraging, breeding, migrating, and wintering habitat for a variety of wildlife species such as amphibians, birds, bats, and others.

The middle portion of the Project Study Area coincides with the Santa Monica Mountains where there is greater wildlife diversity than the developed urban areas of the Project Study Area. Native habitat is present in large tracts of undeveloped land that can provide suitable conditions for additional local, native species compared to urban environments, as well as potential for less common local, native species to exist. Approximately 450 wildlife species occur across the Santa Monica Mountains (NPS, 2019a), although not all species are expected to occur within the Project Study Area. The Santa Monica Mountains provide important core habitat for wildlife species to reproduce and connect to other open space areas essential for wildlife dispersal. Additionally, avian species migrate into the Santa Monica Mountains during the summer for breeding and others during the fall to overwinter.

A list of wildlife species detected during the spring 2023 field surveys is included in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

Special-Status Wildlife Species

Special-status wildlife species include those listed as endangered, threatened, or candidate for listing under the ESA and those designated as endangered, threatened, or candidate for listing under the CESA. Additionally, species receive federal protection under BGEPA (i.e., bald eagle, golden eagle), the MBTA, and state protection under California Environmental Quality Act (CEQA) Guidelines Section 15380(d).

Many other species are considered by CDFW to be California Species of Special Concern (SSC) and others are on a CDFW watch list. The CNDDB tracks species within California for which there is conservation concern, including many that are not formally listed, and assigns them a CNDDB Rank. Although CDFW SSC and Watch List species and species that are tracked by the CNDDB but not formally listed are afforded no official legal status, they may receive special consideration during the environmental review process. CDFW further classifies some species as “Fully Protected,” indicating that the species may not be taken or possessed except for scientific purposes, under special permit from CDFW. Additionally, CFGC Sections 3503, 3505, and 3800 prohibit the take, destruction, or possession of any bird, nest, or egg of any bird except English house sparrows and European starlings unless authorization is obtained

from CDFW. Bat species defined by the Western Bat WBWG as Medium or High Priority Species are also included in the analysis.

Based on the CNDDB and IPaC database searches, 69 special-status wildlife species were identified (CDFW, 2023a; USFWS, 2024a). Since the database search covers a wide area surrounding the Project Study Area, results included three pelagic species that are not considered herein. The remaining 66 special-status wildlife species are listed in Table 3.3-1 with an assessment of their potential to occur within the Project Study Area. Within Table 3.3-1, rows discussing species that were determined to be present or to have a high potential to occur within the Project Study Area are highlighted blue.

Table 3.3-1. Special-Status Wildlife Species Potential to Occur within Project Study Area

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Invertebrates				
Bombus crotchii	Crotch's bumble bee	SC	Occurs primarily throughout southwestern California in the coastal, desert, valley, and adjacent foothill regions. Is a dietary generalist but often prefers to forage in grasslands and shrublands with abundant milkweeds, wild buckwheat, dusty maidens, lupines, medics, and sages.	**Present.** Suitable habitat for the species occurs in the Project Study Area and the species has been documented historically and recently in the Project Study Area (iNaturalist, 2024a; CDFW, 2023a). Historic observations are from the northern and southern ends of the Project Study Area; a recent 2019 observation is located in the northern end of the Santa Monica Mountains at Deervale-Stone Canyon Park in Sherman Oaks (iNaturalist, 2024a).
Branchinecta lynchi	Vernal pool fairy shrimp	FT	Restricted to vernal pools in grasslands, sandstone depressions. Found in Contra Costa County, Shasta County to Riverside County, early December–early May.	**No Potential.** Suitable habitat is not present in the Project Study Area.
Danaus plexippus pop. 1	Monarch	FC	Two subpopulations within the United States; within California, monarchs are considered *Danaus plexippus* pop 1, California overwintering population (CDFW, 2023a). Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress; occasionally western sycamore and coast live oak) with nectar and water sources nearby. Winter roost sites extend along the coast from northern Mendocino County to Baja California, Mexico; small aggregations also observed inland in Inyo and Kern Counties. Typically within 1.5 miles of the Pacific Ocean.	**Low.** Suitable habitat such as eucalyptus tree groves occur within the Project Study Area; however, the species normally overwinters in dense eucalyptus tree groves along the coastal plain near the Pacific Ocean. There are no known overwintering locations within the Project Study Area (CDFW, 2023a).
Euphilotes battoides allyni	El Segundo blue butterfly	FE	Restricted to remnant coastal dune habitat in Southern California. Host plant is coast buckwheat (*Eriogonum parvifolium*); larvae feed only on the flowers and seeds while adults use it as a major nectar source.	**No Potential.** No suitable habitat is present in the Project Study Area.

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Streptocephalus woottoni	Riverside fairy shrimp	FE	Restricted to deep vernal pools and ponds within annual grasslands that may be found within sage scrub and chaparral habitats. Range is limited to Ventura, Los Angeles, Riverside, Orange, and San Diego Counties; occurrences also in Baja California, Mexico.	**No Potential.** No suitable habitat is present in the Project Study Area. The nearest observation is from 2005, approximately 4 miles south of the Project Study Area (CDFW, 2023a).
Fish				
Catostomus santaanae	Santa Ana sucker	FT	Endemic to Southern California and only found within the Los Angeles, San Gabriel, Santa Ana, and Santa Clara River systems. This species was once historically present throughout the Los Angeles and Santa Ana basins in southern California but is now restricted to three geographically separate populations. Specifically, within the Los Angeles River Watershed, known populations occur at Big Tujunga Creek in the Hansen Reach, two tributaries in the Hansen Reach, and one tributary in either the Big Tujunga Reach or Los Angeles Reach (potentially including but not limited to Fall Creek, Mill Creek, Arroyo Seco Creek, and Bell Creek) (USFWS, 2017).	**Low.** The Project Study Area falls within the geographic range for Santa Ana sucker and suitable habitat in the form of the Los Angeles River is present. However, the portion of this body of water that occurs within the Project Study Area demonstrates common habitat degradation symptoms characteristic of urban areas, including degraded water quality and hydrological modifications. The majority of the river within the Project Study Area is a concrete-lined channelized river and, therefore, does not provide the habitat characteristics preferred by this species (i.e., substrates that are generally coarse and consist of gravel, rubble, and boulders with growths of algae) (USFWS, 2010). The combination of limited known population extent, poor habitat quality, and presence of movement barriers within the Project Study Area, greatly limit potential for this species to occur
Eucyclogobius newberryi	Tidewater goby	FE	Brackish water habitats along the California coast. Found in shallow lagoons and lower stream reaches with still water with high oxygen.	**No Potential.** No suitable habitat is present in the Project Study Area.
Gasterosteus aculeatus	Unarmored threespine stickleback	FE	Found in slow-moving freshwater streams or rivers shaded with dense vegetation.	**No Potential** No suitable habitat is present in the Project Study Area.

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Gila orcuttii	Arroyo chub	SSC	Prefers slow-moving sections of permanent, small to moderate-sized streams with sand or mud substrate with more than half of the habitat as runs and pools approximately 10 cm deep and reaches of permanent water more than 2 km long.	**Low.** Suitable habitat is present in the Project Study Area in the soft bottom portion of the Los Angeles River within the Sepulveda Basin. In 1993, arroyo chub at this location were reported as present but scarce (Swift et al., 1993). However, several rounds of recent sampling within the Basin in the Los Angeles River and Bull Creek (2012-2014, 2016, 2019) found no arroyo chub present (Drill et al., 2023; O'Brien and Barabe, 2022). The current distribution appears to be upstream, at headwater sections of streams; this species may be extirpated from the Sepulveda Basin.
Oncorhynchus mykiss irideus pop. 10	Steelhead – Southern California Distinct Population Segment	FE	Requires freshwater streams and creeks with access to coastal estuaries and the ocean.	**No Potential.** No suitable habitat is present in the Project Study Area.
Amphibians				
Anaxyrus californicus	Arroyo toad	FE/SSC	Gravelly or sandy washes, stream and riverbanks, and arroyos. Also, upland habitat near washes and streams such as sage scrub, mixed chaparral, Joshua tree woodland, and sagebrush habitats.	**No Potential.** No suitable habitat is present in the Project Study Area.
Rana draytonii	California red-legged frog	FT/SSC	Inhabits quiet pools of streams, marshes, and occasionally ponds usually below 1,200 m (3,936 feet). Requires permanent or nearly permanent water bodies and is associated with dense vegetation close to water.	**No Potential.** No suitable habitat is present in the Project Study Area.
Rana muscosa	Southern mountain yellow-legged frog	FE/SE	Found above 1,800 m (5,940 feet) in the Sierra Nevada. Associated with streams, lakes, and ponds, in montane riparian with various pine species and wet meadow habitats.	**No Potential.** No suitable habitat is present in the Project Study Area.
Spea hammondii	Western spadefoot	SSC	Temporary ponds, vernal pools, and backwaters of slow-flowing creeks. Also, upland habitats such as grasslands and coastal sage scrub where burrows are constructed.	**No Potential.** No suitable habitat is present in the Project Study Area.

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Taricha torosa	Coast Range newt	SSC	Found in a variety of habitats typically associated with wet forests, oak forests, chaparral, and rolling grasslands.	**No Potential.** No suitable habitat is present in the Project Study Area.
Reptiles				
Actinemys pallida	Southwestern pond turtle	FP/SSC	Found in marshes, rivers, streams, ponds, and similar water sources, usually with aquatic vegetation.	**Present.** Suitable habitat is present and recent observations are documented throughout the Project Study Area from the Sepulveda Basin Recreation Area in the north in 2021 to UCLA in the south in 2018 (iNaturalist, 2024b).
Anniella stebbinsi	Southern California legless lizard	SSC	Habitat in the Coast Ranges from Antioch, Contra Costa County to south of the Mexican border. May occur in several habitats such as coastal dune, valley-foothill, chaparral, and coastal scrub types. Lives mostly underground, burrowing in loose sandy soil.	**Moderate.** Suitable habitat is present, and the species was observed approximately 3 miles southeast of the Project Study Area at Kenneth Hahn State Recreation Area in 2018 and about 2 miles south of the Project Study Area at Los Angeles Airport in 2010 (iNaturalist, 2024c).
Arizona elegans occidentalis	California glossy snake	SSC	Occurs in Southern California and as far south as Baja California. Often observed in a variety of habitats including deserts, chaparral, sage scrub, woodlands, open dry forests, and riparian habitats.	**Low.** Suitable habitat is present in the Project Study Area; however, there are no records of observations within the Project Study Area. Two historical records (1937 and 1946) located individuals approximately 6 miles east of the Project Study Area (CDFW, 2023a).
Aspidoscelis tigris stejnegeri	Coastal whiptail	SSC	A variety of habitats including coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas.	**Present.** Suitable habitat is present, and several recent observations exist within the southern portion of the Project Study Area (CDFW, 2023a; iNaturalist, 2024d).
Phrynosoma blainvillii	Coast horned lizard	SSC	Occurs in coastal sage scrub, chaparral, and woodland habitats within open vegetation. Occurs throughout the central and Southern California coast. Ants are the main food source but also spiders, beetles, and termites. Forages on the ground in open areas, usually between shrubs and often near ant nests.	**Present**. Suitable habitat is present, and several recent observations exist throughout the Project Study Area (iNaturalist, 2024e). Additionally, one historical CNDDB occurrence is present in the northern end of the Project Study Area (1947) (CDFW, 2023a).

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Thamnophis hammondii	Two-striped garter snake	SSC	Ranges from near Salinas in Monterey County south along the coast, mostly west of the Southern Coast Ranges, to Southern California where it ranges east through the Transverse Ranges and south through the coastal area and the Peninsular Ranges into northern Baja California. This species is primarily aquatic and diurnal but may also be active at night and at dusk during hot weather.	**Present**. Suitable habitat and multiple recent sightings (2017 through 2021) are present within the northern half of the Project Study Area (iNaturalist, 2024f). Also, a 2010 CNDDB occurrence with an obscured location is present immediately west of the Project Study Area in a flood control debris basin (CDFW, 2023a).
Birds				
Agelaius tricolor	Tricolored blackbird	ST/SSC	Historically breeds in freshwater marshes with cattails and other emergent vegetation; increasingly breeds in agricultural fields when traditional wetlands are not present. Forages in wetlands, cultivated fields, grasslands, and at dairies and feedlots.	**Present.** Suitable habitat is present within the Project Study Area. This species is documented multiple times (2021, 2022, 2023) in the Sepulveda Basin Recreation Area (iNaturalist, 2024g; eBird, 2024b), predominantly around Lake Balboa, as recently as May 2023.
Aquila chrysaetos	Golden eagle	CFP	Nests on cliff ledges and trees on steep slopes. Hunting grounds include nearby grasslands, sage scrub, or broken chaparral. Require very large territories.	**Low**. Suitable nesting habitat is not present in the Project Study Area; however, this species has potential to fly over or forage locally while in transit to preferred habitat and/or during migration in the isolated grasslands or sparsely vegetated hillsides within the Project Study Area. Two CNDDB nest observations from the 1980s are more than 10 miles west of the Project Study Area (CDFW, 2023a).
Asio otus	Long-eared owl	SSC	Occupies a variety of habits including forested areas or groves of deciduous trees or conifers with expansive meadows, or isolated groves and streamside groves in deserts.	**No Potential**. No suitable habitat is present in the Project Study Area.

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Athene cunicularia	Burrowing owl	SC/SSC	Found mainly in grassland and open scrub from the seashore to foothills. Strongly associated with California ground squirrel (*Otospermophilus beecheyi*) burrows.	**Present**. Isolated patches of suitable habitat are present within the Project Study Area (particularly in the Sepulveda Basin Recreation Area in the northwestern section). This species has been recorded within the Project Study Area as recently as 2020 at Woodley Park in the Sepulveda Basin Recreation Area (eBird, 2024c); observations at this location were documented during the non-breeding season.
Buteo swainsoni	Swainson's hawk	ST	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	**Present**. Suitable migration habitat is present within the Project Study Area; suitable breeding habitat is not present. The species may transit through the Project Study Area during migration and migrating individuals were documented within the Project Study Area in Woodley Park in the Sepulveda Basin Recreation Area (eBird, 2024d).
Charadrius montanus	Mountain plover	SSC	Inhabits flat open areas with sparse vegetation, short grass, or bare ground.	**No Potential**. No suitable habitat is present in the Project Study Area.
Charadrius nivosus nivosus	Western snowy plover	FT/SSC	Found primarily in open, sandy areas adjacent to water including ocean beaches and barrier islands. May also be found on barren shores of saline lakes inland. Ranges from Western United States to South America.	**No Potential**. No suitable habitat is present in the Project Study Area.
Circus hudsonius	Northern harrier	SSC	Breeds predominantly in wetland habitats but shall also use upland habitats. Prefers grasslands and agricultural fields during migration and in winter. The species occurs year-round in Los Angeles County.	**Present**. Suitable migration habitat is present within the Project Study Area; suitable breeding habitat is not present. The species does transit through the Project Study Area during migration and shall forage over grasslands and lightly vegetated hillsides. Individuals have been recently observed within the Project Study Area in the north at Woodley Park in the Sepulveda Basin Recreation Area and centrally located in the Santa Monica Mountain foothills near Stone Canyon Reservoir and Bel Air (iNaturalist, 2024h; eBird, 2024e).

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	FT/SE	Riparian woodlands scattered throughout Southern California. Riparian forests are integral to this subspecies' persistence.	**No Potential**. No suitable habitat is present in the Project Study Area. One historical record from 1894 located an individual approximately 3 miles north of the Project Study Area is presumed extirpated (CDFW, 2023a).
Contopus cooperi	Olive-sided flycatcher	SSC	Breeds in coniferous forests throughout California from sea level to high mountain elevations.	**Present.** Suitable migration habitat is present within the Project Study Area; suitable breeding habitat is not present. This species can briefly use areas in the Project Study Area as stopover habitat during migration. Individuals have been observed in the Project Study Area in the north at Woodley Park at Sepulveda Basin Recreation Area as recently as 2023, and centrally located in the Santa Monica Mountain foothills south of Bel Air in 2022 (iNaturalist, 2024i; eBird, 2024f).
Cypseloides niger	Black swift	SSC	Preferred nesting locations are behind or beside waterfalls, or cliffs near water.	**No Potential**. No suitable roosting or nesting habitat is present in the Project Study Area.
Empidonax traillii extimus	Southwestern willow flycatcher	FE/SE	Restricted to a few colonies in riparian woodlands scattered throughout Southern California. Riparian forests are integral to this subspecies' persistence.	**No Potential**. No suitable habitat is present in the Project Study Area.
Gymnogyps californianus	California condor	FE/SE/CFP	Open oak savanna grasslands and foothills, and beaches with coastal mountains.	**No Potential.** No suitable habitat is present in the Project Study Area.
Haliaeetus leucocephalus	Bald eagle	SE/CFP	Nests in old growth trees near the coast or other bodies of water where fish or other prey sources are available.	**Present**. This species is known to occur within the Project Study Area with recent observations in 2021 and 2023 at Woodley Park in the Sepulveda Basin Recreation Area during the non-breeding season (eBird, 2024g). No suitable breeding habitat is present. The closest breeding pair is in Orange County, over 25 miles to the south (CDFW, 2024b).
Lanius ludovicianus	Loggerhead shrike	SSC	Uncommon year-round resident of Southern California. Found in grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for concealing and protecting nests.	**Present.** Suitable habitat is present within the Project Study Area. This species is known to occur within the Project Study Area with recent observations (2022) at Woodley Park in the Sepulveda Basin Recreation Area (eBird, 2024h).

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Laterallus jamaicensis coturniculus	California black rail	ST/CFP	Found in some coastal, brackish, and freshwater marshes of California.	**No Potential**. No suitable habitat is present in the Project Study Area.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	SE	Found only in coastal salt marshes of Southern California down into Baja California, Mexico.	**No Potential**. No suitable habitat is present in the Project Study Area.
Polioptila californica	Coastal California gnatcatcher	FT/SSC	Prefers Diegan coastal sage scrub dominated by California sagebrush (*Artemisia californica*) and flat-topped buckwheat (*Eriogonum fasciculatum*). Generally avoids steep slopes above 25% and dense, tall vegetation.	**Low**. While the Project Study Area is located within the species range, suitable breeding habitat is generally absent. Low quality chaparral habitat is present in small patches in the Project Study Area that may be used for dispersal. There are species records as recent as 2023 over 1 mile south of the Project Study Area (Kenneth Hahn State Recreation Area and Ballona Ecological Wetland Reserve [eBird, 2024i]). Since the species is a short-distance disperser and suitable habitat is lacking north of the Project Study Area, individuals are not likely to occur within the Project Study Area. Furthermore, the species appears to be rare within the Santa Monica Mountains with few recent records, all located over 5 miles away (CDFW, 2023a; iNaturalist, 2024j; eBird, 2024i).
Pyrocephalus obscurus	Vermilion flycatcher	SSC	Inhabits a variety of habitats associated with open country and stream systems including deserts, farmlands, scrublands, parks, and cemeteries.	**Present.** Suitable habitat is present within the Project Study Area. This species was observed as recently as 2024 within the Project Study Area at Woodley Park in the Sepulveda Basin Recreation Area, and Los Angeles National Cemetery (eBird, 2024j).
Rallus obsoletus levipes	Light-footed Ridgway's rail	FE/SE/CFP	Found in Southern California in coastal salt marshes, especially those dominated by cordgrass.	**No Potential**. No suitable habitat is present in the Project Study Area.
Riparia riparia	Bank swallow	ST	Inhabits riverbanks and gravel pits where sandy, vertical bluffs are available for the birds to dig their burrows and nest in colonies.	**No Potential**. No suitable habitat is present in the Project Study Area.
Sterna antillarum browni	California least tern	FE/SE/CFP	Nests on open, sandy, or shelly beaches and dunes with limited vegetation along the Pacific coast of California and Baja California, Mexico.	**No Potential**. No suitable habitat is present in the Project Study Area.

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Strix occidentalis occidentalis	California spotted owl	SSC	Generally found in coniferous forests, and oak and riparian woodlands.	**No Potential.** No suitable habitat is present in the Project Study Area.
Vireo bellii pusillus	Least Bell's vireo	FE/SE	Migrate into California in late March/early April and depart for their winter grounds in September. Nest in low, dense riparian thickets along water or along intermittent streams. Forages in riparian and adjacent shrubland in the nesting season.	**Present**. Occupied nesting and foraging habitat are present within the Project Study Area within the Sepulveda Basin Recreation Area in riparian habitat along the Los Angeles River and the connecting Bull Creek (eBird, 2024k). Specifically, the species was detected in Haskell and Bull Creeks for at least the last 9 years (eBird, 2024k). Also, this species was documented by several observers along I-405 occur within the Sepulveda Pass, precise locations would not be determined as they are obscured (observations recorded in 2015, 2022, and 2023) (iNaturalist, 2024k).
Mammals				
Antrozous pallidus	Pallid bat	SSC/WBWG – High Priority	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**No Potential**. No suitable habitat is present in the Project Study Area.
Corynorhinus townsendii	Townsend's big-eared bat	SSC/WBWG – High Priority	Coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands, and deserts. Most common in mesic sites with caves or other roost cavities.	**No Potential**. No suitable habitat is present in the Project Study Area.
Euderma maculatum	Spotted bat	SSC/WBWG – High Priority	Occurs in foothills, mountains, grasslands, and deserts in Southern California. Requires large, isolated cliffs for roosting (Luce and Keinath, 2007). Distribution is patchy, likely due to roosting habitat requirements.	**Low**. Suitable habitat is present in the Project Study Area, although with limited distribution. One CNDDB occurrence exists from 2007, approximately 14 miles west of the Project Study Area.
Eumops perotis californicus	Western mastiff bat	SSC/WBWG – High Priority	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	**Low**. Suitable habitat is present in the Project Study Area. One recent observation from 2021 was located approximately 3 miles east of the Project Study Area (iNaturalist, 2024l) and two historical records (1921 and 1925) without precise locations exist within the Project Study Area (CDFW, 2023a).

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Lasionycteris noctivagans	Silver-haired bat	WBWG – Medium Priority	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	**Present**. Suitable foraging and roosting habitat are present in the Project Study Area. Two observations from 1985 are within the Project Study Area (CDFW, 2023a).
Lasiurus frantzii	Western red bat	SSC/WBWG – High Priority	Generally associated with stands of riparian habitat consisting of mature sycamores and cottonwoods. orages over grasslands, shrublands, open woodlands, forests, croplands, and occasionally urban settings. Roosts primarily in trees.	**Low**. Suitable habitat is present in the Project Study Area. One recent observation from 2019 is known 6 miles east of the Project Study Area (iNaturalist, 2024m) and a second from 2007 was made approximately 9 miles west of the Project Study Area during acoustical surveys (CDFW, 2023a).
Lasiurus cinereus	Hoary bat	WBWG – Medium Priority	Most widespread bat species in the Americas, with a transcontinental range stretching from southeastern Canada to Hawaii. Prefers open habitats or habitat mosaics; requires water. Spends winter months in warmer habitats such as Southern California, Mexico, and Central America while summer is typically spent in the northern portions of California and north into Canada (Bolster, 1998). Roosts in dense foliage associated with medium to large trees situated in open or mosaic habitat with large mature trees.	**Present.** Portions of the Project Study Area provide suitable foraging and roosting habitat in the form of trees, vegetation, and human-made structures. One recent (2022) observation in the Santa Monica Mountains near Sherman Oaks (iNaturalist, 2024n) and one observation from 1986 (CDFW, 2023a) are located within the Project Study Area.
Lasiurus xanthinus	Western yellow bat	SSC/WBWG – High Priority	Found in valley foothills riparian, desert riparian, desert wash, and palm oases. Forages among trees and over water. Roosts in foliage, tree holes and buildings.	**Low.** Suitable habitat is present in the Project Study Area; however, the species prefers more arid desert regions.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	SSC	Typical habitats include early stages of chaparral, open coastal sage scrub, and grasslands near the edges of brush.	**Low.** Suitable habitat is present in the Project Study Area; however, it is fragmented from contiguous potentially suitable habitats. One CNDDB occurrence of this species in 2008, from Big Tujunga Wash, south of Interstate 210, approximately 6 miles from the Project Study Area (CDFW, 2023a).

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Macrotus californicus	California leaf-nosed bat	SSC/WBWG – High Priority	Lowland desert scrub. Uses caves or abandoned mine tunnels for rest sites during the day. May use natural rock shelters in canyon walls. Also uses open buildings, bridges, rocks, and mines for temporary night roosts.	**No Potential**. No suitable habitat is present in the Project Study Area.
Microtus californicus stephensi	South coast marsh vole	SSC	Found in tidal marshes in Los Angeles, Orange, and southern Ventura counties.	**No Potential**. No suitable habitat is present in the Project Study Area.
Myotis ciliolabrum	Western small-footed myotis	WBWG – Medium Priority	Caves or crevices in or near forested areas. Prefers moist areas.	**No Potential**. No suitable habitat is present in the Project Study Area.
Neotoma lepida intermedia	San Diego desert woodrat	SSC	Common to abundant in Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats.	**No Potential**. No suitable habitat is present in the Project Study Area.
Nyctinomops femorosaccus	Pocketed free-tailed bat	SSC	Rugged cliffs, rocky outcrops and slopes in desert shrub and pine oak forests.	**No Potential**. No suitable habitat is present in the Project Study Area.
Nyctinomops macrotis	Big free-tailed bat	SSC	Pinyon-juniper and Douglas fir forests, chaparral and oak forests in rugged, rocky habitats, low-lying arid areas.	**No Potential**. No suitable habitat is present in the Project Study Area.
Onychomys torridus ramona	Southern grasshopper mouse	SSC	This species inhabits a variety desert and temperate shrubland habitats. It is found in hot, arid valleys; and semi-desert areas that may include desert scrub; creosote, and shortgrass prairies.	**No Potential**. No suitable habitat is present in the Project Study Area.
Perognathus longimembris pacificus	Pacific pocket mouse	SSC	Fine sandy substrates of coastal dunes, river alluvium, and sage scrub habitats. Typically ranging approximately 2 miles from the ocean on marine terraces.	**No Potential**. No suitable habitat is present in the Project Study Area.

Scientific Name[a]	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Perognathus longimembris brevinasus	Los Angeles pocket mouse	SSC	Sparsely vegetated areas with alluvial deposits of sandy soils.	**Low**. Suitable habitat is present in the Project Study Area; however, the species has only been found historically in the San Fernando Valley which is now highly urbanized. One historical observation from 1903 of a collected male specimen was immediately east of the Project Study Area (CDFW, 2023a).
Puma concolor	Mountain lion	SC	Generally found throughout California in temperate coniferous/deciduous forest, coastal chaparral, foothills, and mountains. Often found where native or introduced ungulate prey such as mule deer, elk, bighorn sheep, or feral hogs are present. Within the Santa Monica Mountains, mule deer make up the bulk of mountain lions' diet (87 percent of 700 kills analyzed by NPS), although smaller prey can supplement when opportunity arises, preferentially coyotes then raccoons (NPS, 2023).	**Present.** Mountain lions are known to occur within the Project Study Area, specifically in the Santa Monica Mountains where an estimated population of 10 to 15 adult individuals is well documented by the National Park Service (NPS, 2023). Several GPS-collared mountain lions have been tracked within the Project Study Area, predominantly west of I-405 throughout the Sepulveda Pass (NPS, 2023). Lion movement is hindered by I-405 and mortality is documented on the freeway (NPS, 2023). In July 2019, the NPS documented that one collared mountain lion (P-61) successfully crossed I-405 in the Sepulveda Pass area for the first time in the 17 years of study (NPS, 2019b); he was struck and killed on I-405 two months later (NPS, 2022). More recently, an uncollared mountain lion was found deceased on northbound I-405 near The Getty Museum on July 4, 2024 (Darling, 2024).
Sorex ornatus salicornicus	Southern California saltmarsh shrew	SSC	Coastal marshes in Los Angeles, Orange, and Ventura Counties. Requires dense vegetation and woody debris for cover.	**No Potential**. No suitable habitat is present in the Project Study Area.
Taxidea taxus	American badger	SSC	Most abundant on drier open stages of shrub, forest, and herbaceous habitats with friable soils to dig burrows. Often associated with vast tracts of grassland areas but also occurs in grassy canyons. Needs sufficient food, friable soils, and uncultivated ground. Preys on burrowing rodents, especially California ground squirrels. Uncommon, permanent resident found throughout most of the state.	**No Potential**. No suitable habitat is present in the Project Study Area due to the lack of vast open, grassy habitat.

Source: Metro, 2025a

[a]Special-status wildlife species identified during reviews of the CNDDB (CDFW, 2023a) for the Beverly Hills, Canoga Park, Topanga, Van Nuys, Calabasas, Malibu Beach, Santa Susana, Oat Mountain, San Fernando, Sunland, Burbank, Hollywood, Venice, and Inglewood quadrangles; a review of IPaC (USFWS, 2024a) for the Project region; and eBird and iNaturalist for the Project Study Area.

Federal Status Designations
FE – Federally Endangered
FT – Federally Threatened
FP – Federal Proposed

State Status Designations:
SE – State Endangered
ST – State Threatened
SC – State Candidate Species for Listing
CFP – CDFW Fully Protected
SSC – Species of Special Concern designated by CDFW

Western Bat Working Group Priority Levels:
WBWG-High = Designated by the WBWG as High Priority – species that are imperiled or are at high risk of imperilment.

WBWG-Medium = Designated by the WBWG as Medium Priority – a level of concern that should warrant closer evaluation, more research, and conservation actions of both species and possible threats.

Potential to Occur Guidelines:
Present = Species is documented by the CNDDB, eBird, iNaturalist, or another database as occurring in the Project Study Area. Rows discussing these species have been highlighted blue.

High = High-quality habitat is present within the Project Study Area; however, no records occur directly within the Project Study Area. Species has been detected within 1 mile of the Project Study Area. Rows discussing these species have been highlighted blue.

Moderate = Suitable habitat is present within the Project Study Area is of marginal quality. No records occur in Project Study Area, but the species has been documented over 1 mile from the Project Study Area.

Low = Suitable habitat within the Project Study Area is of low quality. There are no known recent occurrences within or near the Project Study Area.

No Potential = Suitable habitat is not present for the species.

Thirty of the wildlife species were concluded to be known or have potential to occur within the Project Study Area; the remaining 36 were determined to have no potential to occur. Species with no potential to occur due to a lack of suitable habitat within the Project Study Area are excluded from each project alternative's RSA analysis and are not discussed further in this document. Species with a low potential are considered unlikely to be detected within the Project Study Area or impacted by any of the project alternatives due to the lack of known recent occurrences and suitable habitat within the Project Study Area; therefore, they are not described in detail. Species known to occur or with moderate or high potential to occur are listed below and discussed in detail in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

- Crotch's Bumble Bee
- Southwestern Pond Turtle
- Southern California Legless Lizard
- Coastal Whiptail
- Coast Horned Lizard
- Two-Striped Garter Snake
- Tricolored Blackbird
- Burrowing Owl
- Swainson's Hawk
- Northern Harrier
- Olive-sided Flycatcher
- Bald Eagle
- Loggerhead Shrike
- Vermilion Flycatcher
- Least Bell's Vireo
- Silver-haired Bat
- Hoary Bat
- Mountain Lion

Wildlife Corridors

Within the heavily urbanized areas that comprise the northern and southern portions of the Project, opportunities for wildlife movement are limited. No landscape habitat linkages were identified within the Project Study Area by the SCW; instead within this highly urbanized area, animal movement will be facilitated by remnant riparian habitat, underpasses, culverts and stretches of contiguous or semi-contiguous habitat. Ornamental vegetation may provide some opportunities for cover, resting, foraging, and nesting to localized bird and wildlife populations; however, such areas do not function as major wildlife movement corridors.

The Santa Monica Mountains are located in the middle of the Project Study Area and serve as both a regional and local wildlife movement corridor; they are present in 36 percent (15,537.8 of 43,460.2 acres) of the Project Study Area. The Santa Monica Mountains are lacking connection with other mountain ranges in the area, largely due to urbanization. However, they retain open areas and native habitats that provide east-west movement opportunities; to the west are large undeveloped areas of natural vegetation and to the east are the Verdugo Mountains and San Gabriel Mountains. The City of Los Angeles has identified a regional pathway within this mountain range that is not represented by one single route but instead incorporates multiple options through natural and developed areas: Wildlife Movement Pathway 13—Santa Monica Mountains-Griffith Park. Within the mountain range, natural, open spaces are interspersed with areas of development. While the majority of the Santa Monica Mountains within the Project Study Area contains scattered residential development, 44 percent is considered non-developed (as defined by removing "urban" classified categories from the SMMNRA vegetation mapping; refer to Section 3.3.2.2 for details). This patchwork of development intersecting with natural areas creates fragmented habitat and poses a threat to species due to lack of space and movement (i.e., habitat to travel between) and threatens wildlife survival from increased risk of inbreeding and loss of genetic diversity.

Mammals including mule deer (*Odocoileus hemionus*), mountain lions (*Puma concolor*), and bobcats (*Lynx rufous*) can have large territorial ranges that span many miles; these species are documented as

present in the Santa Monica Mountains. In their current state, I-405 and other major roads in the Project Study Area act as functional barriers to movement for most terrestrial wildlife. If wildlife is able to successfully cross I-405, small-scale refugia are present east of the freeway within Stone Canyon Reservoir (750 acres) and Franklin Canyon Park (Mountains Recreation and Conservation Authority [MRCA] land, 605 acres), or Griffith Park (4,210 acres). Within the Project Study Area, west-to-east wildlife movement is aided by native habitat on both sides of I-405, providing shelter and cover to approach and exit the freeway corridor, but vehicle presence and speed on the freeway are major impediments to crossings. There are limited opportunities for wildlife to move north to south due to the urban landscape surrounding the mountains in both directions. Currently, the permeability of I-405 and other major roads in the Project Study Area is limited for most terrestrial wildlife, contributing to habitat fragmentation and restricted breeding and hunting opportunities, especially for large mammals. Impacts to gene flow resulting from movement barriers and subsequent signs of inbreeding depression have been observed in Southern California mountain lions (Huffmeyer et al., 2022), decreasing overall population health.

The SMMC's Eastern Santa Monica Natural Resource Protection Plan states habitat connectivity, particularly leading up to and east of I-405, is in danger (ESMM-NRPP, 2021). The SMMC has published a habitat linkage map indicating the presence of four wildlife corridors along I-405 in the Santa Monica Mountain: Mulholland Drive bridge, Skirball Center bridge, Bel Air Crest Drive underpass, and Sepulveda Boulevard underpass by the Getty Center (SMMC, 2021); they are also identified as wildlife movement pathways by the City of Los Angeles (DCP, 2021). NPS research before, during, and after the I-405 Freeway Widening Project studied the use of these potential corridors and found that while wildlife used all four during the preconstruction and early construction phases, fewer animals and species used them post-construction (NPS, 2024a). Species that were observed post-construction included raccoon, Virginia opossum, coyote, mule deer, and fox squirrel. Cameras placed in the vicinity of the crossings showed that the species who were no longer observed crossing were still present in the area; this includes mountain lions, although they were not observed at any of the crossings during the study. On January 22, 2025, a wildfire began east of I-405, adjacent to the Sepulveda Boulevard underpass and burned through adjacent vegetation, reducing cover for wildlife attempting to cross here. It is likely that wildlife movement in this area will be temporarily altered until the habitat recovers.

Mountain lions utilize the Santa Monica Mountains as a major linkage corridor between the surrounding mountain ranges in Southern California. Freeways, roads, buildings, and fencing have created barriers to mountain lion, along with other wildlife movement, resulting in the remaining undeveloped land becoming highly fragmented habitat (CLAW, 2023). The major causes of death among mountain lions are vehicle collisions, rodenticide poisoning, depredation permits, and mountain lions killing other mountain lions.

I-405 creates a major barrier to mountain lion movement. At present time, I-405 is generally considered impermeable to mountain lions inhabiting land east of I-405, preventing their movement to the western portion of the Santa Monica Mountains (NPS, 2023). However, a few mountain lions have made it across I-405 successfully. Examples of mountain lions crossing I-405 include mountain lions P-22, P-61, and P-97. P-22 was born in the Santa Monica Mountains and was determined to have crossed both the I-405 and U.S. Highway 101 (US-101) freeways to make his way to Griffith Park; he was not collared at the time of his crossing (NPS, 2019b). The NPS also documented one collared mountain lion (P-61) crossing I-405 in the Sepulveda Pass successfully on July 19, 2019. However, these examples are few and far between since many mountain lions who attempt to cross I-405 are unsuccessful, such as P-97, who was struck and killed in the Sepulveda Pass near Getty Center Drive in 2022 (NPS, 2023), and an uncollared

lion that was killed off Sepulveda Boulevard near The Getty Museum in July 2024 (Darling, 2024). As of December 2022, at least 32 mountain lions are documented as struck and killed by vehicles in the SMMNRA in the last 20 years, two of which occurred on I-405 (NPS, 2023). Mountain lions have been documented traveling up to the edge of I-405 but not crossing (NPS, 2023), further indicating freeways and other physical barriers are affecting wildlife behavior. Mountain lions in the Santa Monica Mountains are experiencing exacerbated impacts of edge effects and limited habitat and are suffering from territorial fighting, low genetic diversity, and low prey populations. Furthermore, escape routes during wildfires may be blocked and migration into previously burned areas may be restricted due to roads and other urban development. A study conducted by University of California (UC) Davis and partners concluded the Santa Monica Mountains lion population is at risk of becoming locally extinct within the next 50 years. The study recommended increases in landscape connectivity to maintain healthy lion populations in the greater Los Angeles metropolitan area (Benson et al., 2019).

In general, wildlife species are likely to use habitat within the Project Study Area for local movement related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover) versus regional movement due to the highly urbanized nature of most of the Project Study Area and the barrier created by I-405. Due to the size of the Project Study Area, it is likely to be part of the home range of many species, which may be present at different times of year depending on available resources.

Water bodies within the Project Study Area support local wildlife movement, such as Encino Reservoir and Sepulveda Basin in the western portion and Stone Canyon Reservoir in the eastern portion. These areas provide resting, foraging, and nesting opportunities for wildlife species. Collectively these waterbodies provide habitat for wildlife species to move through the Los Angeles Basin and San Fernando Valley. Furthermore, several species of warblers, sparrows, and raptors that breed in northern latitude spend the winter months in the Project Study Area. This includes species covered by the MBTA such as the yellow-rumped warbler (*Setophaga coronata*), white-crowned (*Zonotrichia leucophrys*) and golden-crowned sparrows (*Zonotrichia atricapilla*), and several raptor species.

The Project Study Area occurs along the Pacific Flyway, a major north-south flyway for migratory birds moving between breeding grounds and overwintering sites or following food sources. Within the Project Study Area, the potential stopover locations for migratory birds are generally correlated with vegetation cover and are near water, such as the Sepulveda Basin Recreation Area and Stone Canyon Reservoir. These areas are particularly important for migrating waterfowl. Within the Sepulveda Basin, the Los Angeles River flows west to east through the Project Study Area. The majority of the river within the Project Study Area is a concrete-lined channelized river, approximately 2.5 miles within the Sepulveda Basin with a natural, earth bottom and is vegetated with riparian habitat. The narrow riparian corridor along the Los Angeles River includes a variety of plant and habitat layers (i.e., mature trees, shrubs, and herbaceous vegetation) that facilitate bird movement along the river. Within the Sepulveda Basin Recreation Area, several water bodies occur that support wildlife movement through the Project Study Area, including Lake Balboa, Woodley Creek, Haskell Creek, Japanese Garden Lake, and Wildlife Lake.

Bats

There are 24 species of bats found in Los Angeles County, 18 of which are considered rare or sensitive by a variety of entities (NHMLA, 2023). In particular, the WBWG identifies several species as High and Medium priority for consideration of conservation measures. Bat species found in Los Angeles County are known to have behavioral and ecological interactions with transportation structures, especially those involving bridges. Bat species responses to anthropogenic disturbances differ, with some

responding positively and some negatively. Anthropogenic disturbances that can affect bats include the following (Caltrans, 2019):

- Habitat loss, fragmentation, and degradation
- Chemical pollution to drinking water from construction waste and to air from construction vehicle emissions
- Light pollution resulting from artificial lighting
- Noise pollution from construction activities
- Increased predation
- Introduced diseases, such as white-nose syndrome
- Climate change
- Vehicular collisions

The Project Study Area provides habitat for day and night roosting bats such as trees, bridges, culverts, buildings, and other structures. The tree-lined streets found throughout the Project Study Area would potentially support roosting bats, such as the hoary bat and western mastiff bat. Large bridges spanning the Los Angeles River may provide suitable bat roosting habitat and foraging habitat for species such as Mexican free-tailed bat and *Myotis* species. However, no sign of bats, including individuals, guano (i.e., scat), staining on walls from urine, or vocalizations, were detected during the spring 2023 reconnaissance-level field surveys.

Plants

Vegetation Communities

Vegetation communities in the highly urbanized areas of the northern and southern portions of the RSA are generally absent and consist mainly of the land use cover class developed. Developed, ruderal, agricultural, and cleared land classifications are generally considered to provide lower quality habitat due to absent or sparse vegetation, limited plant diversity, and regular disturbance associated with human activities. Special-status wildlife species may use these areas for activities such as foraging or while in transit and special-status plants would be present, but they are more likely to be found in vegetated habitats subject to less disturbance. Habitat types are described in detail in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

Vegetation communities in the Santa Monica Mountains, which are less developed and run east–west through the middle of Project Study Area, include ceanothus chaparral, laurel sumac shrubland, toyon shrubland, coast live oak woodland, and various other native vegetation communities. Vegetation communities listed below are presented in descending order of abundance within the Project Study Area; spatial representation of their locations is provided in Appendix B of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a). A comprehensive list of plant species observed during field surveys is included in Appendix D of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a); the list is comprehensive for the various types of biological surveys across the six alternatives. Since field surveys were not conducted for the No Project Alternative, a compiled list of vegetation communities and acreages observed across the combined alternatives is presented in Table 3.3-2.

Table 3.3-2. Vegetation Community Acreage within Project Study Area

Vegetation Community/Land Cover Type [a]	Sensitive Natural Vegetation Community (Authority)	Acres [b]	Percent of Total Vegetation
Developed	—	3,888.3	82.7
Post Fire Shrub Regeneration and Undifferentiated Categories including Artificial Cuts/Embankments, Exotic Vegetation, Firebreaks	—	296.6	6.3
Ceanothus Chaparral	—	111.3	2.4
Agricultural Land	—	66.0	1.4
California Walnut Woodland	Yes (CDFW)	63.1	1.3
Laurel Sumac Shrubland	Potentially depending on codominant species (CDFW)	57.5	1.2
California Annual Grassland		49.3	1.0
Black Sage Shrubland	Potentially depending on codominant species (CDFW)	30.7	0.7
Coast Live Oak Woodland	—	21.6	0.5
Ruderal	—	18.3	0.4
Undifferentiated Categories including Riparian Vegetation and Chaparral Shrubland	Potentially depending on species composition (CDFW)	16.9	0.4
Toyon Shrubland	Potentially depending on codominant species (CDFW)	16.6	0.4
Coyote Brush Shrubland	Potentially depending on codominant species (CDFW)	9.8	0.2
Open Water		9.8	0.2
Chamise-Black Sage Shrubland	Potentially depending on codominant species (CDFW)	9.1	0.2
Scrub Oak Shrubland	Potentially depending on codominant species (CDFW)	6.9	0.1
Bush Mallow Shrubland	Potentially depending on codominant species (CDFW)	4.6	0.1
California Buckwheat Shrubland	Potentially depending on codominant species (CDFW)	4.5	0.1
Cleared Land	—	4.0	0.1
Sugar Bush Shrubland	Yes (CDFW)	4.0	0.1
California Sagebrush Shrubland	Potentially depending on codominant species (CDFW)	3.2	0.1
California Encelia Shrubland	Potentially depending on codominant species (CDFW)	3.0	0.1
California Sycamore Woodland	Potentially depending on codominant species (CDFW)	2.5	0.1
California Sagebrush-California Buckwheat Shrubland	Potentially depending on codominant species (CDFW)	2.4	0.1
Mexican Elderberry Shrubland	—	0.9	<0.1
Total	—	**4,701.0**	**100**

Source: Metro, 2025a

[a]Vegetation communities based on the classifications provided in *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009).

[b] Inconsistencies in total calculation due to rounding.

— = not applicable
CDFW = California Department of Fish and Wildlife

Trees Within Proposed Construction Areas

Numerous trees occur within the Project Study Area, although field assessments were only conducted on trees within the combined Tree Survey Area for all alternatives. The northern and southern portions of the Project Study Area are highly urbanized and dominated by non-native, ornamental trees planted within residential, commercial, and roadside ornamental landscapes. Native trees, such as coast live oak, western sycamore, and southern California black walnut, occur in smaller numbers in various locations throughout the northern and southern portions of the Project Study Area. In the central, less developed portion of the Tree Survey Area, native trees are more frequent, especially east and west of I-405, from Valley Vista Boulevard to Getty Center Drive, and are dominant within the Stone Canyon Reservoir. No impacts associated with the Project would occur from the No Project Alternative. The Tree Inventory Report (Appendix B of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* [Metro, 2025a]) contains information about the protected trees and shrubs that were mapped during spring 2023 and 2024 field surveys. Since tree and shrub inventories were not conducted for the Project Study Area but instead for each alternative's Tree Survey Area where direct impacts are anticipated, results in the Tree Inventory Report are presented per alternative.

Of the six local ordinances, plans, or policies with potential to protect trees or shrubs within combined Tree Survey Area (detailed in Section 3.3.1.3), the Los Angeles County Oak Woodlands Conservation Management Plan does not have jurisdiction, since inventoried trees did not meet the requirements (i.e., there were no native oak tree stands on unincorporated County land with current or historical canopy cover greater than 10 percent). Therefore, the County Plan will not be discussed further in this report.

Within SMMNRA, trees within the Tree Survey Area were located on lands owned or managed by the County of Los Angeles and the MRCA within the Sepulveda Pass Open Space, Mission Canyon Open Space, and the MRCA Mountaingate Conservation Easement.

Sensitive Natural Vegetation Communities

Based on a review of the CNDDB (CDFW, 2023a), 10 sensitive vegetative communities ranked S1 through S3 are known to occur within the Beverly Hills, Canoga Park, Van Nuys and the surrounding 11 quadrangles. Two of these (southern dune scrub and southern coastal salt marsh) do not occur within the Project Study Area as they are coastal or estuarine in nature and are found west of the Project Study Area. An additional Inland Waters vegetation community, Southern California Arroyo Chub/Santa Ana Sucker Stream, does have potential to occur within the Project Study Area but is not yet ranked by the state; this will be included as a sensitive community if identified within the Project Study Area, as it would be ranked as sensitive in the future, resulting in a total of nine sensitive natural vegetation communities with potential to occur within the Project Study Area (CDFW, 2024d).

Two sensitive vegetation communities, California walnut woodland (S3) and sugar bush shrubland (S3) are present within the Project Study Area. An additional 12 identified communities and two undifferentiated categories have the potential to be considered sensitive depending on the associated plants present, i.e., associations (refer to Section 3.3.2.1 for additional details). For these communities, classification of vegetation associations is required to determine sensitivity, since not all associations within the community are sensitive. Metro is conservatively considering impacts to these communities to be significant pending further analysis and refinement of vegetating mapping. The identified communities include laurel sumac shrubland, black sage shrubland, toyon shrubland, coyote brush

shrubland, chamise-black sage shrubland, scrub oak shrubland, California buckwheat shrubland, bush mallow shrubland, California sagebrush shrubland, California sagebrush-California buckwheat, California encelia shrubland, and California sycamore woodland. The two undifferentiated categories include riparian vegetation and chaparral shrubland. For the purposes of this analysis, these 14 communities will be marked as potentially sensitive and will be included in acreage calculations of impacts to sensitive communities. The majority of the Project Study Area is outside the area where vegetation mapping was conducted, since vegetation mapping was focused on areas with potential direct or indirect biological impacts for each alternative. Therefore, it is possible additional sensitive vegetation communities may be present with the Project Study Area but outside of the assessment area for impacts.

Special-Status Plant Species

Forty-nine special-status plant species with either federal and/or State-listed status or with a CRPR of 1B and 2 (eligible candidates) were identified as having a potential to occur within the Project Study Area based on CNDDB, CNPS, and IPaC database searches (CDFW, 2023a; CNPS, 2024; USFWS, 2023a). Table 3.3-3 includes these species and an assessment of their potential to occur within the Project Study Area.

Most special-status plant species identified through database searches have no potential to occur within the Project Study Area due to lack of suitable habitat, primarily from urban development. Species with no potential to occur within the Project Study Area are not discussed further herein. Native vegetation habitats located within the Santa Monica Mountains provide potentially suitable habitat for a few special-status plants within the Project Study Area. Of the 49 special-status plants identified during the database searches, one species, slender mariposa lily, has moderate potential to occur; one species, Sonoran maiden fern, has high potential; and six species are present within the Project Study Area, including Braunton's milk-vetch, Nevin's barberry, Davidson's bushmallow, chaparral nolina, Nuttall's scrub oak, and Sanford's arrowhead. These special-status plant species are discussed in further detail below.

Table 3.3-3. Special-Status Plant Species with Potential to Occur within Project Study Area

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Arenaria paludicola	Marsh sandwort	FE/SE 1B.1	Marshes, swamps, and areas wet, year-round.	**No Potential.** No suitable habitat is present in the Project Study Area.
Astragalus brauntonii	Braunton's milk-vetch	FE 1B.1	Fire-dependent chaparral habitat dominated by chamise (*Adenostoma fasciculatum*), yucca (*Yucca whipplei*), and the rare Tecate cypress (*Cupressus forbesii*).	**Present**. Suitable habitat occurs within the Project Study Area and recent observations of the species have been observed 0.25 mile east of I-405 in Bel Air Crest in 2022 and within Fossil Ridge Park approximately 1 mile south of US-101 in 2019 (iNaturalist, 2024o).
Astragalus pycnostachyus var. *lanosissimus*	Ventura Marsh milk-vetch	FE/SE 1B.1	Associated with well-drained soils in coastal shrublands, marshes, swamps, and coastal dune swales with a relatively high-water table near bodies of fresh or brackish water.	**No Potential**. No suitable habitat is present in the Project Study Area. Multiple historical records between 1880s and 1951 located the Project Study Area believed to be extirpated as of 1964 (CDFW, 2023a).
Astragalus tener var. *titi*	Coastal dunes milk-vetch	FE/SE 1B.1	Coastal dunes, bluffs, and coastal terrace grassland. There has not been a sighting or collection in San Diego County or Los Angeles County in over 50 years	**No Potential**. No suitable habitat is present in the Project Study Area.
Atriplex coulteri	Coulter's saltbush	1B.2	Associated with areas of saline and alkaline soils, such as ocean bluffs.	**Low.** Suitable habitat is present in the Project Study Area. One historical record (1881) within 1 mile west of the Project Study Area and a second (1902) was approximately 10 miles south are presumed extirpated (CDFW, 2023a). One recent observation approximately 12 miles west of the Project Study Area was made in 2009 (CDFW, 2023a).
Atriplex pacifica	South coast saltscale	1B.2	Associated with areas of saline and alkaline soils on immediate coastline, such as ocean bluffs.	**No Potential.** No suitable habitat is present in the Project Study Area. One historical observation occurred within the Project Study Area in the City of Santa Monica in the late 1800s and is now listed as possibly extirpated (CDFW, 2023a).
Atriplex parishii	Parish's brittlescale	1B.1	Typically found at the edges of dry lakes or vernal pools temporarily inundated with water in the wet season and have high concentrations of alkali salts.	**No Potential.** No suitable habitat is present in the Project Study Area.
Atriplex serenana var. *davidsonii*	Davidson's saltscale	1B.1	Coastal bluff scrub, coastal scrub. Alkaline soil. Blooms from April to October at elevations ranging from 30 to 655 feet.	**Low.** Suitable habitat is present within the Project Study Area; however, no records of the species are found within the Project Study Area.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Baccharis malibuensis	Malibu baccharis	1B.1	Chaparral, coastal sage scrub, and oak woodlands.	**Low.** Suitable habitat is present in the Project Study Area in the Santa Monica Mountains; however, the closest records are approximately 10 miles west of the Project Study Area (CDFW, 2023a). The plant is only known from 10 occurrences (CNPS, 2024).
Berberis nevinii	Nevin's barberry	FE/SE 1B.1	Chaparral, cismontane woodland, coastal scrub, and riparian scrub. Found in gravelly or sandy micro habitats. Blooms from February (March) to June at elevations ranging from 230 to 2,750 feet.	**Present**. Suitable habitat is present within the Project Study Area. One record from 2019 is inside the Project Study Area; it appears to be landscaping based on location inside a maintained yard. Two additional observations are within 1 mile of the Project Study Area, located to the east along the Los Angeles River (iNaturalist, 2024p).
Calochortus clavatus var. *gracilis*	Slender mariposa lily	1B.2	Chaparral, coastal scrub, and valley and foothill grasslands, on shaded foothill canyons within the Transverse Ranges and the San Gabriel Mountains. Occurs between 1,050 and 3,280 feet.	**Moderate**. Suitable habitat is present within the Project Study Area and records nearby of the species observed in Topanga Canyon in 2017, approximately 4 miles west of the Project Study Area (CDFW, 2023a) and in 2023 at the Hansen Dam Golf Course 2.5 miles north of the Project Study Area (iNaturalist, 2024q).
Calochortus fimbriatus	Late-flowered mariposa lily	1B.3	Chaparral of coastal mountain ranges from southern Monterey, San Luis Obispo, Santa Barbara, and northern Ventura counties.	**No Potential.** No suitable habitat is present in the Project Study Area.
Calystegia felix	Lucky morning glory	1B.1	Meadows and seeps, riparian scrub. Blooms from March – September at elevations ranging from 100 to 705 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Centromadia parryi ssp. *australis*	Southern tarplant	1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also, in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. Blooms from May to November at elevations ranging from 0 to 1,575 feet.	**Low.** Suitable habitat is present in the Project Study Area. One recent record from 2022 was located in Kenneth Hahn State Recreation Area, just over 3 miles southeast of the Project Study Area (iNaturalist, 2024r). One historical record from 1957 located on a brushy hill east of The Getty was within the Project Study Area (CDFW, 2023a).
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	1B.1	Coastal bluff scrub, coastal dunes. Prefers sandy sites. Blooms from January to August at elevations ranging from 6 to 262 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Chenopodium littoreum	Coastal goosefoot	1B.2	Coastal dunes. Generally, on sandy soils and on dunes. Blooms from May to October at elevations ranging from 10 to 120 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Chloropyron maritimum ssp. *maritimum*	Salt marsh bird's beak	FE/SE 1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. Blooms from May to October at elevations ranging from 0 to 100 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	SE 1B.1	Sandy portions of coastal scrub, valley, and foothill grassland, between 490 and 4,005 feet. Blooms April to July.	**Low.** Suitable habitat is present within the Project Study Area, although the closest recent observation (2022) is more than 5 miles west of the Project Study Area (iNaturalist, 2024s). Multiple historical occurrences from the early 1900s are located within 2 miles of the Project Study Area to the north, east and south; these may all be possibly extirpated from urban development (CDFW, 2023a).
Deinandra minthornii	Santa Susana tarplant	SR 1B.2	Rocky outcroppings and in sandstone crevices, from 980 to 1,640 feet in elevation.	**No Potential.** No suitable habitat is present in the Project Study Area.
Dithyrea maritima	Beach spectaclepod	ST 1B.1	Coastal dunes, coastal scrub. Sea shores, sand dunes, and sandy places near the shore. Blooms from March to May at elevations ranging from 5 to 165 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Dodecahema leptoceras	Slender-horned spineflower	FE/SE 1B.1	Found in sandy sites within chaparral, cismontane woodland, or alluvial fans within coastal scrub. Occurs between 655 and 2,495 feet.	**Low.** Suitable habitat is present within the Project Study Area; however, there are no occurrences of the species recorded in the Project Study Area. Two recent sightings in 2022 (iNaturalist, 2024t) and one historical observation (1906) (CDFW, 2023a) are located approximately 1.75 miles east of the Project Study Area (iNaturalist, 2024t).
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's dudleya	1B.1	Open, rocky slopes and on serpentine or clay-dominated soils, typically below an elevation of 1,475 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Dudleya cymosa ssp. *marcescens*	Marcescent dudleya	FT/SR 1B.2	Steep, shady hillsides of exposed volcanic rock, often associated with ferns, mosses and lichens.	**Low**. Suitable habitat is present in the Project Study Area; however, the plant is currently known from fewer than 10 populations in the Santa Monica Mountains. The nearest occurrence is approximately 12 miles west of the Project Study Area (CDFW, 2023a).

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Dudleya cymosa ssp. *ovatifolia*	Santa Monica dudleya	FT 1B.1	Chaparral, coastal sage scrub, on shaded, rocky slopes.	**Low**. Suitable habitat is present in the Project Study Area, although the plant is only currently known from 10 total locations. The nearest location is 5 miles to the west in Topanga State Park, reported in 1987 and 2012 (CDFW, 2023a).
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/SE 1B.1	Annual/perennial herb. Mesic environments in coastal scrub, valley and foothill grassland, vernal pools. Blooms April to June. Occurs 65 to 2035 feet.	**No Potential.** No suitable habitat is present in the Project Study Area. Currently is found only on mesas near San Diego and Santa Rosa Plateau (Preston, 2023).
Horkelia cuneata var. *puberula*	Mesa horkelia	1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Blooms from February to July at elevations ranging from 225 to 2,655 feet.	**Low.** Suitable habitat is present in the Project Study Area; records exist within the search area but are all historical from 1895 to 1956 (CDFW, 2023a).
Isocoma menziesii var. *decumbens*	Decumbent goldenbush	1B.2	Sandy soil in chaparral and coastal sage scrub.	**No Potential.** No suitable habitat is present in the Project Study Area.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. Blooms from February to June at elevations ranging from 0 to 4,005 feet.	**Low.** Suitable habitat is present in the Project Study Area; however, records nearby are from the early 1900s (CDFW, 2023a).
Lupinus paynei	Payne's bush lupine	1B.1	On sandy soils in coastal scrub, riparian scrub, and valley and foothill grasslands. Occurs 720 to 1,380 feet. Blooms March to April (May-July)	**No Potential.** No suitable habitat is present in the Project Study Area.
Malacothamnus davidsonii	Davidson's bushmallow	1B.2	On slopes of chaparral, oak woodland, and other habitats.	**Present**. Suitable habitat is present in the Project Study Area. A recent (2021) observation was located 0.25 mile west of the RSA in the Sepulveda Basin Recreation Area (Calflora, 2021).
Monardella hypoleuca ssp. *hypoleuca*	White-veined monardella	1B.3	Chaparral and cismontane woodlands. Known only from the Santa Monica, Santa Ynes, and Sierra Madre Mountains.	**Low.** Suitable habitat is present in the Project Study Area. The nearest observation is from 2008 and is approximately 3 miles west of the Project Study Area near the Santa Ynez Canyon Trailhead (CDFW, 2023a).
Nama stenocarpa	Mud nama	2B.2	Marshes and swamps. Blooms from January to July at elevations ranging from 15 to 164 feet.	**No Potential.** Suitable habitat is not present in the Project Study Area. The last known occurrence within the Project Study Area is from 1902 around the VA Hospital Site (CDFW, 2023a); the area is now highly developed.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Nasturtium gambellii	Gambel's water cress	FE/ST 1B.1	Marshes and swamps. Blooms from April to October at elevations ranging from 15 to 1,085 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Navarretia fossalis	Spreading navarretia	FT 1B.1	Freshwater marsh and vernal pools.	**No Potential.** No suitable habitat is present in the Project Study Area.
Navarretia ojaiensis	Ojai navarretia	1B.1	Open areas of chaparral, coastal sage scrub, and grasslands.	**No Potential.** No suitable habitat is present in the Project Study Area.
Navarretia prostrata	Prostrate vernal pool navarretia	1B.2	Coastal scrub, valley and foothill grassland, vernal pools, meadows, and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. Blooms from April to July at elevations ranging from 5 to 3,970 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Nolina cismontana	Chaparral nolina	1B.2	Coastal mountain ranges in dry chaparral and coastal sage scrub habitat on rocky sandstone substrates.	**Present**. Suitable habitat is present, and species was detected in the Project Study Area in Deervale-Stone Canyon Park in 2020 (iNaturalist, 2024u).
Orcuttia californica	California Orcutt grass	FE/SE 1B.1	Freshwater wetlands.	**No Potential.** No suitable habitat is present in the Project Study Area.
Pelazoneuron puberulum var. *sonorense*	Sonoran maiden fern	2B.2	Wetlands, meadows, and seeps.	**High.** Suitable habitat is present in the Project Study Area. One 2010 observation of 6 plants in a rustic creek was within 1 mile of the Project Study Area (CDFW, 2023a).
Pentachaeta lyonii	Lyon's pentachaeta	FE/SE 1B.1	Chaparral, valley grasslands on rocky clay soils of volcanic origin.	**No Potential.** No suitable habitat is present in the Project Study Area.
Phacelia stellaris	Brand's star phacelia	1B.1	Coastal scrub, coastal dunes. Found in open areas. Blooms from March to June at elevations ranging from 9 to 1,213 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Potentilla multijuga	Ballona cinquefoil	1A	Found in brackish meadows and seeps. Blooms from June to August at elevations ranging from 0 to 6 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Pseudognaphalium leucocephalum	White rabbit-tobacco	2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Blooms from August (July) to November (December) at elevations ranging from 0 to 6,890 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.

Scientific Name	Common Name	Status	Habitat	Potential for Occurrence in Project Study Area
Quercus dumosa	Nuttall's scrub oak	1B.1	Generally found on sandy soils near the coast, often found in chaparral and coastal sage scrub communities between 50 and 1,300 feet.	**Present**. Suitable habitat is present in the Project Study Area and a recent observation from 2024 was made within the Project Study Area immediately east of UCLA's campus (iNaturalist, 2024v). Additional observations from 2009 are less than 2 miles south of the Project Study Area in Kenneth Hahn State Recreation Area (CDFW, 2023a).
Sagittaria sanfordii	Sanford's arrowhead	1B.2	Freshwater wetlands. Occurs between 0 and 2,135 feet. Blooms May to October (November).	**Present.** Suitable habitat is present in the Project Study Area. One recent observation (2021) from the Los Angeles River within the Sepulveda Basin Recreation Area (CDFW, 2023a) and another from 2022 in the southern portion of the Project Study Area adjacent to Holmby Park (iNaturalist, 2024w).
Sidalcea neomexicana	Salt spring checkerbloom	2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Blooms from March to June at elevations ranging from 50 to 5,020 feet.	**No Potential.** No suitable habitat is present in the Project Study Area.
Spermolepis lateriflora	Western bristly scaleseed	2A	Rocky or sandy sections within Sonoran Desert scrub between 1,200 and 2,200 feet. Blooms March to April.	**No Potential.** No suitable habitat is present in the Project Study Area.
Symphyotrichum defoliatum	San Bernardino aster	1B.2	Streambanks in coastal scrub, cismontane woodland, lower montane coniferous forest, meadows, marshes and swamps and vernally mesic grasslands. Occurs between 5 and 6,695 feet. Blooms between July and November.	**No Potential.** Suitable habitat is not present within the Project Study Area. Also, two historical records located 3 to 6 miles east of the project are presumed extirpated due to development since the observations around the early 1900s (CDFW, 2023a).
Symphyotrichum greatae	Greata's aster	1B.3	Within mesic microhabitats in chaparral, cismontane woodland, broadleaved upland forest, lower montane coniferous forest, riparian woodland. Occurs between 985 and 6,595 feet. Blooms June to October.	**Low**. Suitable habitat is present in the Project Study Area and the species was observed in an undated historical sample from Benedict Canyon in the Project Study Area (precise location data not available) (CDFW, 2023a). The area is currently developed with private residences. Recent observations are in the San Gabriel Mountains, approximately 15 miles north and east of the Project Study Area (CDFW, 2023a; iNaturalist, 2024x).

Source: Metro, 2025a

[a] Special-status plant species identified during reviews of the CNDDB (CDFW, 2023a), CNPS database (CNPS, 2024), and iNaturalist (iNaturalist, 2024p to 2024x) for the Beverly Hills, Canoga Park, Topanga, Van Nuys, Calabasas, Malibu Beach, Santa Susana, Oat Mountain, San Fernando, Sunland, Burbank, Hollywood, Venice, and Inglewood quadrangles; and a review of IPaC (USFWS, 2024a) for the project region.

Federal Status Designations
FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate for Listing

State Status Designations:
SE – State Endangered
ST – State Threatened
SC – State Candidate Species for Listing
SR – State Rare

California Native Plant Society Ranks:
1A. — Presumed Extirpated in California and either rare or extinct elsewhere.
1B. – Rare or Endangered in California and elsewhere.
1B.1 – Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat) and elsewhere.
1B.2 – Fairly endangered in California (20-80% occurrences threatened) but more common elsewhere.
2A. – Presumed extirpated in California but common elsewhere.
2B. – Rare, Threatened, or Endangered in California but more common elsewhere.

Potential to Occur Guidelines:
Present = Species is documented by CNDDB, CNPS, iNaturalist, or another database as occurring in the Project Study Area.

High = High-quality habitat is present within the Project Study Area; however, no records occur directly with the Project Study Area. Species has been detected within 1 mile of the Project Study Area.

Moderate = Suitable habitat present within the Project Study Area is of marginal quality. No records occur in Project Study Area, but the species has been documented over 1 mile from the Project Study Area.

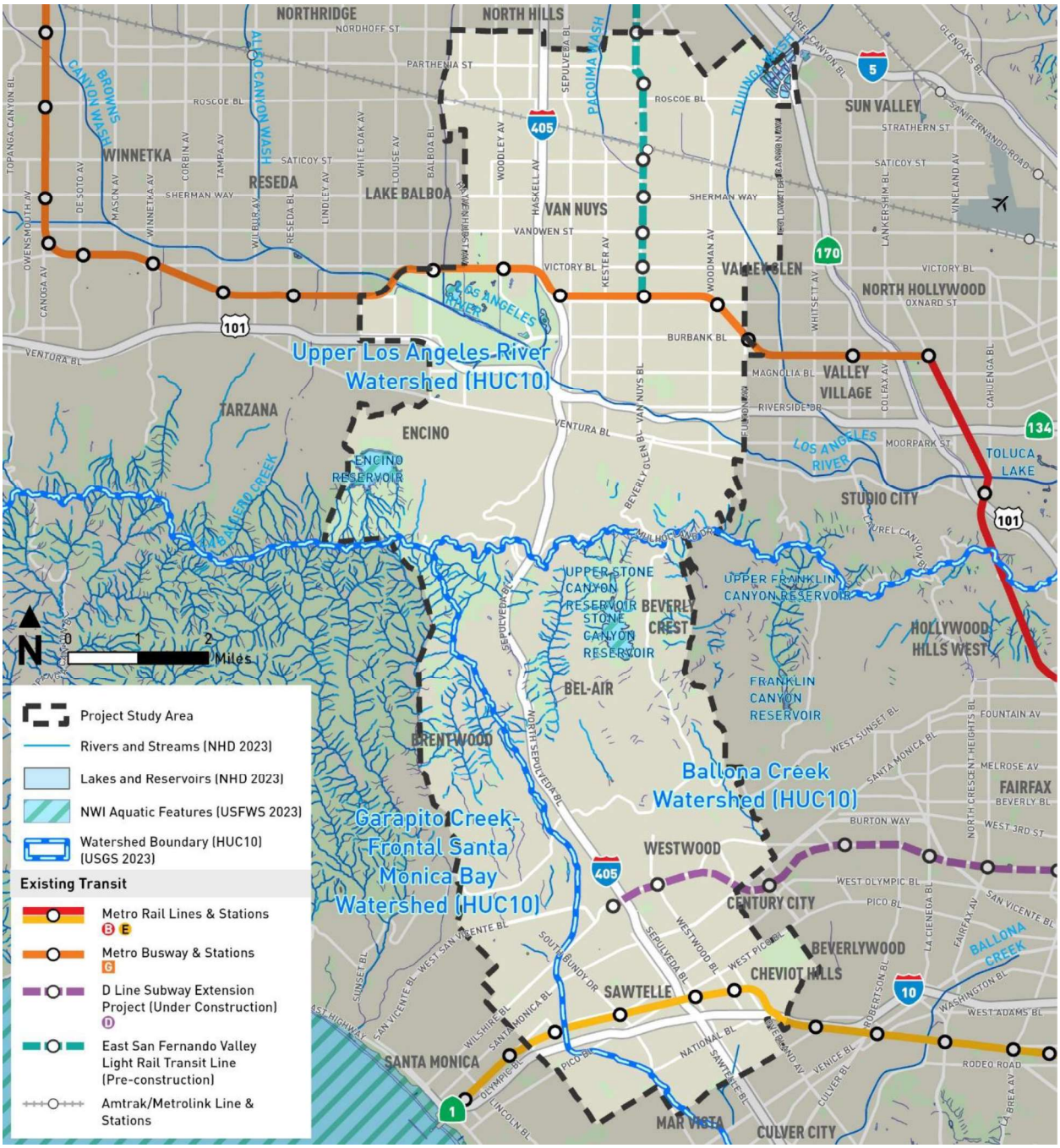
Low = Suitable habitat within the Project Study Area is of low quality. There are no known recent occurrences within or near the Project Study Area.

No Potential = Suitable habitat is not present for the species.

Jurisdictional Resources

An online review of the NHD (USGS, 2023) and NWI (USFWS, 2023b) indicates the presence of mapped aquatic features within the Project Study Area. This includes a variety of creeks, rivers, human-made reservoirs, and concrete channels (Figure 3.3-3). Named aquatic resources within the Project Study Area include the Los Angeles River, Pacoima Wash, Encino Creek, and the Sepulveda Channel.

Figure 3.3-3 National Hydrography Dataset and National Wetlands Inventory Aquatic Features



Source: USFWS, 2023b, 2023e

Upper Los Angeles River Watershed

The Upper Los Angeles River Watershed is located is the northwest portion of Los Angeles County and covers an area of over 613 square miles. This watershed includes the San Fernando Valley and portions of the San Gabriel and Santa Susana Mountains. The six major tributaries along the river include Tujunga Wash, Burbank Western Storm Drain, Verdugo Wash, Arroyo Secco, Rio Hondo, and Compton Creek. The primary source of input into the Los Angeles River watershed is wet weather runoff originating from direct precipitation, and dry weather inputs from urban runoff, and groundwater upwelling (LADPW, 2022).

Ground elevations range from 10,000 feet in the San Gabriel Mountains approximately 15 miles east of the RSA, to mean sea level at the mouth of the Los Angeles River approximately 22 miles south of the RSA. The majority of the coastal plain is less than 1,000 feet in elevation (GLAC, 2014), while the upper portion of the watershed is covered by forest and open space. The majority of land in the Upper Los Angeles River Watershed is developed with urban uses, including the portion of the river that traverses the RSA (LA County, 2023b).

The northern portion of the Project Study Area crosses the Los Angeles River in Reach 5, where the river flows west to east, at the base of the Santa Monica Mountains in the San Fernando Valley. Reach 5 of the Los Angeles River runs through low density residential neighborhoods, the Sepulveda Basin, other commercial developed areas, and under I-405, Sepulveda Boulevard, and Van Nuys Boulevard.

Topography throughout the coastal plain area of Upper Los Angeles River Watershed is generally defined by gradually sloping land from the foothills of the San Gabriel Mountains to the Pacific Ocean.

Ballona Creek Watershed

Ballona Creek consists of a 9-mile-long flood protection channel that drains the Los Angeles Basin south of the Project Study Area. The Ballona Creek Watershed covers approximately 130 square miles in the western portion of the Los Angeles Basin and is made up by the Culver City, Wilshire, and Hollywood sub-watersheds. The headwaters of the watershed are located in the Santa Monica Mountains, including a portion in the Project Study Area, and Baldwin Hills to the southeast of the Project Study Area. Most of the Ballona Creek drainage network consists of storm drains, underground culverts, and open concrete channels. However, Ballona Creek does not traverse the Project Study Area. Ballona Creek is an open channel between Venice Boulevard and Pickford Street and its confluence with Santa Monica Bay (a length of approximately 9 miles) is approximately 4 miles south of the Project Study Area. A few natural channels remain in the Santa Monica Mountains and Baldwin Hills. The Sepulveda Channel, which is mostly channelized and underground within the Project Study Area, runs along I-405 and continues to the south outside of the Project Study Area, is a major tributary to the Ballona Creek Watershed.

Riparian Habitats

Although not mapped in the NWI, riparian habitats may be present along many of the jurisdictional features identified in the NWI database. Riparian habitats fall under CDFW jurisdiction, which generally extends to the outer limits of riparian habitats occurring around aquatic features. Such habitats provide valuable buffers around aquatic features and specific habitat requirements for many plant and wildlife species, including many of the special-status species identified above.

Other Protected or Managed Biological Resources

This section provides an overview of other protected or managed biological resources that may occur within the Project Study Area and were considered in this analysis.

USFWS Critical Habitat

Critical habitat is designated by USFWS for threatened or endangered species listed under the ESA; these areas are considered essential for species conservation (USFWS, 2024b). Critical habitat provides protection to locations necessary for life processes and reproduction where individuals and populations can thrive in habitat that is protected from disturbances. Specifically, it provides cover, shelter, food, water, light, minerals and other nutritional or physiological requirements for survival of the species, along with sites for breeding and rearing offspring (USFWS, 2024b). Areas currently unoccupied may be included in critical habitat boundaries if it would be needed for species recovery (USFWS, 2024b).

No USFWS-designated critical habitat coincides with the Project Study Area. The nearest critical habitat for plant species listed under the federal ESA is for Braunton's milk-vetch; this unit is located approximately 4 miles west of the Project Study Area in Topanga State Park. The nearest critical habitat for wildlife includes: western snowy plover (*Charadrius nivosus nivosus*), located approximately 3 miles west of the Project Study Area along the coastline in the City of Santa Monica; southwestern willow flycatcher (*Empidonax extimus*), located approximately 5 miles northeast of the Project Study Area near Hansen Dam in the Valley; Santa Ana sucker (*Catostomus santaanae*), located approximately 5 miles northeast of the Project Study Area near Hansen Dam in the Valley; and tidewater goby (*Eucyclogobius newberryi*), located approximately 7 miles west of the Project Study Area along Topanga Creek in the Santa Monica Mountains.

Santa Monica Mountains National Recreation Area

The majority of SMMNRA is located in large core areas west of the Project Study Area, which has large tracts of connected habitat. SMMNRA land is patchy within the eastern end of the Santa Monica Mountains, where the Project is located. West of I-405, within the Project Study Area, SMMNRA includes conserved lands (Mission Canyon Open Space, Hilton Open Space) and Mountaingate Conservation Easement. East of the I-405 within the Project Study Area, SMMNRA consists of a corridor along Mulholland Drive (Mullholland Scenic Parkway and Corridor), including Fossil Ridge Park. Spatial representation of SMMNRA with the Project Study Area is presented in the No Project Alternative, Figure 3.3-4. The SMMNRA intersects the middle of the Project Study Area before continuing eastward along the Mulholland Scenic Parkway and Corridor. Within the Project Study Area, SMMNRA constitutes 3,500 acres, of which approximately 82 percent (2,862.1 acres) are non-developed areas (i.e., not urban), which would have native vegetation present and would constitute natural areas. Resources provided by SMMNRA within these 3,500 acres include scenic vistas such as Johnson Overlook and Stone Canyon Overlook, nature and wildlife viewing throughout the Project Study Area, patches of wilderness used by wildlife, and hiking trails including Getty View Trail, Tiger Tail Trail, and Rioridan Trail west of I-405 and Davana Road Lookout Trail to the east.

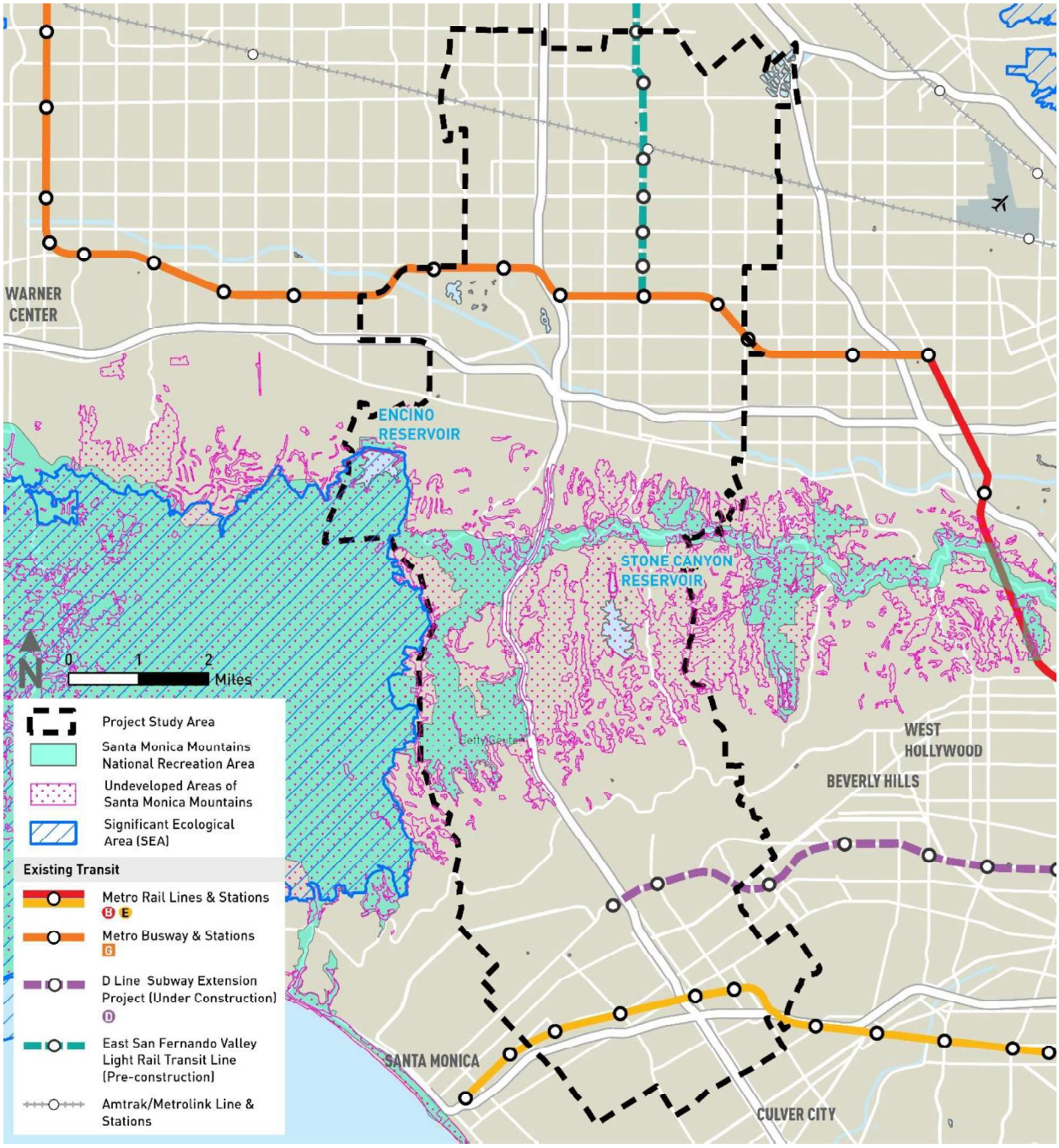
Significant Ecological Areas

One Los Angeles County-designated SEA, the Santa Monica Mountains SEA, intercepts 761.1 acres of the Project Study Area in the central part along the western boundary (Figure 3.3-4); the SEA falls mostly within the larger SMMNRA. The overlap with the Project Study Area is approximately 1.5 miles in length from north to south and 1 mile wide from west to east and includes the Encino Reservoir.

The SEA is approximately 99,431 acres and covers most of the Santa Monica Range to the west. This area is ecologically important for wildlife movement between Malibu Creek State Park to Simi Hills, Topanga State Park, and Mugu State Park. The SEA is home to numerous special-status species including but not limited to Braunton's milk-vetch, Santa Monica dudleya, Southern California steelhead trout, tidewater goby, western yellow-billed cuckoo, and bald eagle. The Santa Monica Mountains SEA meets

the criterion for designation including providing core habitat for federally endangered plants and animals. Several regions which are particularly diverse (Upper La Sierra Canyon, Malibu Lagoon and Malibu Canyon), provide a vital migratory bird refuge (Malibu Lagoon), or act as a major drainage and support a wealthy riparian community (Zuma Canyon) are present within the SEA outside of the Project Study Area (LA County Planning, 2000). When the area was evaluated in 2000 for inclusion in the SEA program, the habitat surrounding the Encino Reservoir was considered to be the best undisturbed stand of inland chaparral remaining on the inland slope of the Santa Monica Mountains.

Figure 3.3-4. Los Angeles County Significant Ecological Areas, Undeveloped Areas within the Santa Monica Mountains, and Santa Monica Mountains National Recreation Area



Source: LA County Planning, 2009

Natural Community Conservation Plan/Habitat Conservation Plan Areas

The Project Study Area is not located within the boundary of an adopted HCP, NCCP, or other approved local, regional, or state HCP. Therefore, there is no further discussion of NCCPs or HCPs in this document.

3.3.5 Environmental Impacts

3.3.5.1 Impact BIO-1: Would the 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 US Fish and Wildlife Service?

Project Alternatives

No Project Alternative

Impact Statement

Operational Impact: Less than Significant Impact

Construction Impact: Less than Significant Impact

Operational Impacts

Operational impacts from the Project would not occur under the No Project Alternative, since the project alternatives would not be constructed.

Within the Project Study Area, the only foreseeable transit improvement under the No Project Alternative would include changes to Metro Line 761. Although the route would continue to operate on existing streets and highways, special-status birds (including those protected by the MBTA) and special-status bats listed in Table 3.3-1 have potential to be significantly impacted during operations of the improved Metro Line 761 when trees and/or shrubs located along the route would require routine maintenance trimming. However, maintenance activities to vegetation on streets along the bus route are not under the purview of Metro. Maintenance at the stations, which is Metro's responsibility, would primarily occur within developed or paved areas. Therefore, operation of the improved Metro Line 761 is anticipated to result in less than significant impacts to special-status species from tree trimming. No other special-status species are anticipated to have operational impacts with changes to the route for Metro Line 761. Operational impacts to special-status species associated with Metro Line 761 would be addressed in project-specific environmental documentation.

Construction Impacts

Construction impacts from the Project would not occur under the No Project Alternative. Changes to the Metro Line 761 would require minimal or no construction activities, as the existing Metro bus line would simply be rerouted to between the Metro E Line Expo/Sepulveda Station and the Van Nuys Metrolink/Amtrak Station. These potential termini already include transit infrastructure supporting bus feeder lines and would not require construction of new facilities to support the rerouted bus service. Minor bus stop modifications along the Metro Line 761 may be required; however, construction activities associated with these improvements would consist of minimal or no ground disturbance within existing sidewalks and street ROW. It is not anticipated that special-status species within the Project Study Area would be impacted since construction activities would be confined to areas of existing pavement. Impacts to special-status species associated with the No Project Alternative are anticipated to be less than significant during construction.

Alternative 1

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

The potential for operational impacts such as injury or mortality due to collisions with vehicles, behavioral and habitat usage modifications due to exposure to noise and vibration from passing trains or the electric bus, habitat degradation due to edge effects, and impacts on movement due to infrastructure are limited for most wildlife species for Alternative 1 since both the aerial and at-grade portions of the alignment occur in developed areas. Anticipated impacts are described below.

Special-Status Invertebrates and Reptiles

Special-status invertebrates, such as Crotch's bumble bee, and special-status reptiles that may occur in habitats along the alignment are not anticipated to be subject to operation-associated direct impacts, including injury or mortality due to collision with vehicles, since the alignment is primarily aerial and occurs in mostly developed areas that are not suitable for these species. The electric bus would be routed within the roadways of Wilshire Boulevard and Westwood Boulevard and stops would be at the Wilshire Boulevard/Metro D Line Station and UCLA Gateway Plaza, all of which are within existing development. Therefore, the areal extent of suitable habitat for special-status invertebrates and reptiles that overlaps with Alternative 1 is very limited.

Habitat degradation due to edge effects where native habitats are removed to facilitate construction (refer to Section 6.3.1.2) will be similarly limited due to the low amount of suitable habitat present along the alignment. Edge effects may include changes to the microclimate due to increased exposure to sun and wind, incursion by nonnative, weedy plant species that alter the vegetation structure, and changes in the distribution and diversity of foraging plant species (for bumble bees) and prey species (for reptiles). These habitat alteration impacts would persist through operation of the facility; however, due to the limited areal extent, is anticipated to constitute a less than significant impact. Further, indirect habitat degradation would be mitigated through the habitat restoration measures related to construction of Alternative 1.

For these reasons, operations-related impacts to special-status invertebrates and reptiles are anticipated to be less than significant.

Special-Status Birds and Bats

Special-status birds (including those protected by the MBTA) and special-status bats listed in Table 3.3-1 would potentially be significantly impacted during operations of Alternative 1 when nesting birds or roosting bats are present in trees and/or shrubs located within the Alternative 1 RSA that require routine maintenance trimming. Adult birds and bats are highly mobile and are anticipated to be able to relocate away from maintenance trimming activities of their own volition; however, nests, eggs, and nestlings, and bat pups, would be injured, killed, or destroyed by maintenance activities if they are located in the vegetation slated for removal. Additionally, if breeding birds or bats are present in the adjacent areas, individuals may be subject to indirect impacts including exposure to noise, human presence, and dust, which would disrupt natural breeding behaviors such as incubation of eggs and feeding and care of young. In some cases, habitat changes due to vegetation removal would be sufficient to reduce protective cover, resulting in abandonment of nests and eggs. Impacts from dust and noise to special-status birds or bats are not anticipated during operation, since maintenance activities would primarily occur within developed or paved areas.

Special-Status Mammals

Impacts to special-status bats were previously addressed with special-status birds.

Direct significant impacts are not expected for mountain lions since collisions are not anticipated; aerial monorail vehicle collisions are unlikely due to the height at which vehicles would be traveling (16.5 feet to 32 feet) and electric bus collisions are unlikely since the bus route is not within the Santa Monica Mountains or I-405 where they are known to occur. While operation of Alternative 1 is anticipated to reduce vehicle traffic on I-405, changes in vehicle traffic associated with operation of Alternative 1 are not likely to substantially reduce the risk for a mountain lion attempting to cross the freeway due to the exponentially high risk of collision (i.e., I-405 is considered by NPS to be impermeable to lions; NPS, 2023). Alternative 1 is intended to reduce congestion during rush hour, while collision risk is greatest when vehicles are traveling the fastest during off-peak hours, including dawn and dusk when mountain lions are most active. Within Alternative 1, 11 percent (47.9 acres) of the total impacts are within non-developed natural areas in the Santa Monica Mountains (i.e., suitable habitat for mountain lion); the remaining acreage is either in urban areas within the mountain range or are outside of the mountains. Within suitable mountain lion habitat in the Santa Monica Mountains, the majority of the impacts would be temporary (81 percent of suitable mountain lion habitat impacts, or 39.0 acres), while permanent impacts represent the rest (19 percent of suitable mountain lion habitat impacts, or 8.9 acres). Permanent habitat reductions of this size adjacent to an impermeable highway are anticipated to be less than significant for mountain lions to survive or recover in the wild. However, impacts to native vegetation would affect wildlife movement within the Santa Monica Mountains, which is discussed in Section 3.3.5.4.

Special-Status Plants

Impacts to special-status plants that would occur during operation include crushing or trampling of individual plants during normal maintenance, or tree trimming for maintenance. Since maintenance activities would primarily occur within developed or paved areas, it is unlikely that the operation of Alternative 1 would result in significant impacts to special-status plants, including from exposure to fugitive dust.

One special-status tree, Nuttall's scrub oak (*Quercus dumosa*), has high potential to be present along the Santa Monica Mountains, in landscaping and within pockets of native vegetation in developed areas. Where present, Nuttall's scrub oak would potentially be impacted by required routine maintenance trimming; however, no significant impacts are anticipated since Nuttall's scrub oak was not identified within the Ground Disturbance Area during the initial tree inventory.

Mitigation Measure (MM) BIO-1 and MM BIO-2, presented in Section 3.3.6 are included to reduce potentially significant operations-related impacts to nesting birds and roosting special-status bats from maintenance vegetation trimming to a level less than significant by limiting vegetation removal to outside the nesting bird and roosting bat season where possible, conducting preconstruction nesting bird and bat surveys during the appropriate season, and installation and biological monitoring of no-disturbance buffers around nests or roosts to ensure the resource is adequately protected. MM BIO-3 would reduce operational-related impacts to special-status trees from vegetation maintenance to less than significant through application of mitigation, as determined in the applicable local ordinance or policy where the impact would occur. Therefore, with the implementation of MM BIO-1, MM BIO-2, and MM BIO-3, operational impacts of Alternative 1 on special-status species would be reduced to a less than significant level.

Construction Impacts

Impacts to vegetation within the Ground Disturbance Area have potential to affect sensitive vegetation communities, as well as special-status wildlife or plant species, both directly and through modifications to their habitat. No impacts are anticipated from the electric bus shuttle since the route would be within existing developed roadways and the UCLA Gateway Plaza. Clearing and grading of vegetation would be required for construction of components of Alternative 1, including the structural support beams for the guideway track, staging yards, cut-and-cover construction of TPSSs, and aerial monorail transit (MRT) stations. While most of the vegetation that would be impacted consists of non-native and ornamental landscaping, some native vegetation is also present within the Ground Disturbance Area. Construction activities for Alternative 1 would result in significant impacts to special-status wildlife including nesting birds, special-status plant species, and sensitive vegetation communities if mitigation measures are not implemented. These potentially significant impacts include injury or mortality of individuals, habitat loss due to permanent vegetation removal, behavioral or health modifications from noise pollution or exposure to fugitive dust from prolonged heavy equipment operation, and behavioral modifications extended human disturbances within species habitats during construction.

Other anticipated construction impacts related to the construction along Sepulveda Pass for Alternative 1 include the possibility of increased noise, dust, and vibration during drilling of the aerial track footings. Excessive noise generated from the drilling and heavy equipment operation would significantly disturb nesting avian species. Vibration related disturbance could also disrupt their normal behavioral patterns. Construction-related dust would significantly impact habitat quality by depositing on vegetation, which may reduce photosynthesis and increase leaf temperature, making vegetation more susceptible to drought (Farmer, 1993). Evaluation of the Project's impact on wildfire risk and occurrence is discussed in the wildfire chapter of the *Sepulveda Transit Corridor Project Safety and Security Technical Report* (Metro, 2025c).

Vegetation Communities/Land Cover Types and Sensitive Vegetation Communities

Direct impacts to vegetation communities would occur within the Ground Disturbance Area; acreages of temporary and permanent impacts to vegetation communities within Alternative 1 are detailed in Table 3.3-4. Due to the sparse vegetation, lack of diversity, and continued anthropogenic disturbance, special-status species are less likely to be found in land cover types developed, cleared land, and ruderal vegetation. Excluding these areas, construction of Alternative 1 is anticipated to result in 41 acres of temporary impacts and 9.3 acres of permanent impacts. Approximately 97 percent (442.4 acres) of the acreage in Alternative 1 planned for ground disturbing activities consists of developed, undifferentiated artificial cuts/embankments, cleared land, or ruderal areas. Within the vegetated areas subject to impacts, less than 1 percent (1.9 acres) is undifferentiated exotic vegetation. The remaining vegetation communities are native vegetation across nine communities. These represent approximately 3 percent (12.8 acres) of the impacted area, of which 4.0 acres are anticipated to be permanently impacted and 8.9 acres are anticipated to be temporarily impacted from construction of Alternative 1. Indirect impacts to vegetation communities may also occur during construction activities. For example, fugitive dust deposition on foliage may reduce photosynthesis and increase plant vulnerability to drought. Additionally, vegetation removals may increase edge effects, including incursion of nonnative, weedy plants that compete with natives for space and resources.

Approximately 0.7 acre of identified sensitive vegetation communities California walnut woodland and sugar bush scrubland would be permanently and temporarily impacted by clearing and grading for I-405 highway improvements along Briarwood Drive, as well as construction of the Getty Center MRT Station

and adjacent drainage improvements. An additional five vegetation communities have the potential to be considered sensitive (denoted with ** in Table 3.3-4) depending upon the associated codominant plant species present (as described in Sections 3.3.2.1 and 3.3.4.1). Up to an additional 3.2 acres of potentially sensitive vegetation communities are also within the Alternative 1 RSA along I-405; Metro is conservatively considering impacts to these communities to be significant pending further analysis and refinement of vegetating mapping.

The removal and degradation of native and sensitive vegetation communities would constitute potentially significant impacts.

Table 3.3-4. Alternative 1: Impacts on Land Cover Types and Vegetation Communities

Vegetation Community/Land Cover Type [a]	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Project Impacts (acres) [b]	Percent of Total Project Impacts
Developed	135.6	268.7	404.4	88.4
Ruderal	1.6	1.4	2.9	0.6
Cleared Land	0	0.1	0.1	<0.1
Developed, Ruderal, Cleared Land Total	**137.2**	**270.1**	**407.3**	**89.0**
Post Fire Shrub Regeneration and Undifferentiated Categories including Artificial Cuts/Embankments and Exotic Vegetation	5.3	32.0	37.4	8.2
Ceanothus Chaparral	2.4	5.7	8.1	1.8
Laurel Sumac Shrubland**	0.6	1.3	1.9	0.4
Mexican Elderberry Shrubland	0.6	0.3	0.9	0.2
California Sycamore Woodland**	0.1	0.6	0.7	0.2
Sugar Bush Shrubland*	0.2	0.2	0.4	0.1
California Walnut Woodland*	0	0.3	0.3	0.1
Toyon Shrubland**	0	0.3	0.3	0.1
Black Sage Shrubland**	0.1	0.1	0.2	<0.1
California Sagebrush Shrubland**	0	0.1	0.1	<0.1
Total	**9.3**	**41.0**	**50.3**	**11.0**
GRAND TOTAL	**146.5**	**311.1**	**457.6**	**100.0**

Source: Metro, 2025a

[a]Vegetation communities based on the classifications provided in *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009).

[b]Inconsistencies in calculations due to rounding.

*Sensitive vegetation community
**Potential sensitive vegetation community based on codominant species on-site.

Special-Status Invertebrates

One special-status invertebrate, Crotch's bumble bee, has potential to be present within the Alternative 1 RSA during construction activities. Despite having a relatively narrow range, they are known to occupy a wide variety of natural and disturbed habitat for nesting and foraging and could be present throughout the RSA in undeveloped areas where pavement is not present and the earth is not regularly maintained through grading, tilling or planting. Based on their broad range of suitable habitat and generalist foraging behavior, Crotch's bumble bee are likely to forage throughout the RSA where preferred

flowering plants are present (e.g., native sage species [*Salvia* spp.], milkweeds [*Asclepias* spp.], and plants within the pea family [*Fabaceae*]) and nest where abandoned rodent burrows are present.

Individuals in occupied burrow nests or overwintering queens in surface soils would be crushed or trapped during construction if present within the Ground Disturbance Area. Additionally, foraging Individuals also would be injured or killed if they are foraging during vegetation clearing activities. This species would also be impacted through removal of nectar sources and nests in the Ground Disturbance Area resulting from construction of Alternative 1 features, including structural support beams for the guideway track, stations, I-405 widening, retaining wall reconstructions, and TPSS sites. Ground-disturbing impacts from grading and vegetation clearing throughout the RSA would likely result in loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for Crotch's bumble bee.

The loss of individual Crotch's bumble bees and suitable habitat for this species would constitute a significant impact.

Special-Status Reptiles

Three special-status reptiles known to occur and two have moderate potential to occur within the Alternative 1 RSA individuals of these species may be present during construction activities. Reptiles present during construction activities would be directly injured or killed due to collisions with vehicles and equipment or during vegetation clearing activities. Species that shelter in burrows or under debris would be entrapped and suffocate or be crushed during grading activities; buried nests would be similar crushed or destroyed. Additionally, if individuals become entrapped in open trenches or excavations during construction activities, special-status reptiles would be subject to injury or mortality due to dehydration, opportunistic predation, inability to properly thermoregulate, starvation, or other causes associated with constrained movement. Indirect impacts would include disruption of normal feeding, basking, sheltering, and breeding behaviors due to avoidance of excessive noise and vibration, fugitive dust, and increased human presence. Normal movement patterns throughout a home range also may be disrupted temporarily by avoidance of areas adjacent to construction activities, or permanently by habitat structure modifications. During construction, special-status reptiles also may be subject to higher predation rates by opportunistic predators such as common ravens (*Corvus corax*), coyote, or skunk, that would be attracted to work areas if food debris is present.

Two of the species, southwestern pond turtle and two-striped garter snake, are most likely to occur near aquatic resources such as the ponds in the Sepulveda Basin and UCLA Mathias Botanical Garden. Based on habitat requirements, the remaining three are most likely to be found in the Sepulveda Pass and Santa Monica Mountains. Individuals would be found in or proximate to work areas along I-405 in the Santa Monica Mountains. Roadway realignment along I-405 between Sunset Boulevard and Mulholland Drive would involve clearing and grading of native vegetation adjacent to the freeway. The clearing of vegetation in the Sepulveda Pass would likely result in injury or mortality of individuals, disruptions of natural behaviors, and loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for the following five special-status reptiles:

- Southwestern pond turtle (*Actinemys pallida,* federal candidate for listing)
- Southern California legless lizard (*Anniella stebbinsi*, SSC)
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC)
- Coast horned lizard (*Phrynosoma blainvillii*, SSC)
- Two-striped garter snake (*Thamnophis hammondii*, SSC)

- The loss of individuals and suitable habitat for these special-status species would constitute a significant impact.

Special-Status Birds

Four special-status bird species were identified as likely to be present and five have high potential to occur within the Alternative 1 RSA. Based on habitat requirements for these nine species, special-status birds are likely to be found throughout the RSA in transit, resting, and/or foraging from the Los Angeles National Cemetery in the south to the Sepulveda Basin in the north. Birds in transit are unlikely to be affected by construction activities; adults are highly mobile and can be expected to relocate away from construction activities of their own volition. However, migratory individuals may experience temporary or permanent loss of transitory habitat. If overwintering burrowing owls are present, individuals would be entrapped and suffocate or be crushed if burrows are present in the work areas during grading and vegetation removal. Additionally, grading could result in loss of suitable wintering burrows for migratory burrowing owls. If native birds breeding within or adjacent to work areas, nests, eggs, and nestlings would be vulnerable to destruction, injury, or mortality if special-status birds are present during vegetation clearing and other construction activities. Ground nests may be vulnerable to crushing, trampling, or destruction by pedestrians and vehicles. Nests in adjacent areas also may be exposed to noise, fugitive dust, human presence, and vibration that could disrupt natural breeding behaviors including incubation of eggs and care and feeding of young; these disruptions could result in failure of a nest to successfully produce young. Excessive disruption, or substantial changes in habitat during the nesting period, could also result in abandonment of nest sites, eggs, or young. Further, impacts associated with clearing and grading of vegetation adjacent to I-405 would likely result in loss of suitable habitat that would be used for nesting, breeding, sheltering, and/or foraging for the following nine special-status species and nesting birds protected under the MBTA:

- Tricolored blackbird (*Agelaius tricolor*, state threatened and SSC)
- Burrowing owl (*Athene cunicularia*, state candidate and SSC)
- Swainson's hawk (*Buteo swainsoni*, state threatened)
- Northern harrier (*Circus hudsonius*, SSC)
- Olive-sided flycatcher (*Contopus cooperi*, SSC)
- Bald eagle (*Haliaeetus leucocephalus*, state endangered and fully protected)
- Loggerhead shrike (*Lanius ludovicianus*, SSC)
- Vermilion flycatcher (*Pyrocephalus obscurus*, SSC)
- Least Bell's vireo (*Vireo bellii pusillus*, FE and SE)

The loss of nests, eggs, or nestlings, impacts to natural breeding behaviors, eviction from wintering burrows, and loss of suitable habitat for these special-status species would constitute a significant impact.

Special-Status Mammals

Three special-status mammals were identified as present and one has high potential to occur within the Alternative 1 RSA, including mountain lion, silver-haired bat, and hoary bat. Mountain lions are known to occur within the Santa Monica Mountains, while the silver-haired and hoary bat have broader habitat requirements and have potential to forage in both natural and developed habitats. Within the Sepulveda Pass and Santa Monica Mountains, special-status mammals would occur in or proximate to work areas along I-405. Impacts from roadway realignment along I-405 into existing hillsides between

Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway.

Within the developed northern and southern ends of the projects, special-status bats would be present in ornamental street trees or on existing infrastructure, such as bridges and buildings. Individuals may be subject to injury or mortality if special-status bats are present as roosting adults during vegetation clearing activities. Roosting adults also may be disturbed by construction-related noise and vibration, causing them to flee roosts during daylight hours. Maternal roosts would also be vulnerable to injury or mortality if present, as pups are unable to take flight and would be likely to be killed if present. Suitable foraging, sheltering, and roosting habitats have potential to be removed during vegetation clearing and grading, or temporarily impacts by construction noise, fugitive dust, and increased human presence. Nighttime construction lighting also may impact foraging habitat by attracting prey species, which may attract some bat species and repel others.

Individual larger mammals, including mountain lions, are unlikely to be directly impacted by construction activities as they are highly mobile and can be anticipated to relocate away from work areas of their own volition. Individuals are not likely to be vulnerable to collisions with slower moving construction equipment and vehicles. However, natural foraging, sheltering, and breeding behaviors may be disrupted by construction activities, both temporarily through avoidance of areas with construction-related noise, human presence, vibration, and fugitive dust, and permanently through changes in habitat due to vegetation clearing and grading.

The clearing of vegetation in the Sepulveda Pass and along city streets and demolition of structures with suitable roosts would likely result in loss of suitable habitat that would be used for roosting, breeding, shelter, and/or foraging for the following three special-status mammals:

- Mountain lion (*Puma concolor*; state candidate for listing)
- Silver-haired bat (*Lasionycteris noctivagans*; WBWG Medium priority)
- Hoary bat (*Lasiurus cinereus*; WBWG Medium priority)

Specifically for mountain lions, Alternative 1 is not expected to result in significant impacts to suitable habitat due to the small size and linear nature of the clearing and grading activities in comparison to the species' large home range size. However, the construction of Alternative 1, specifically the widening of I-405 between Sunset Boulevard and Mulholland Drive, has the potential to result in a significant impact to mountain lion movement and usage of wildlife corridors. Impacts to mountain lion movement and usage of wildlife corridors are further discussed in Section 3.3.5.4.

The loss of suitable habitat for silver-haired bats and hoary bats would constitute a significant impact.

Special-Status Plants

Five special-status plant species were identified with medium or high potential to occur within the Alternative 1 RSA; none were present. Based on habitat requirements, these five species are most likely to occur in chaparral and/or coastal sage scrub which occurs on the Project in the Sepulveda Pass and would be in or proximate to work areas along I-405 in the Santa Monica Mountains. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway. Clearing and grading of vegetation would also be required for construction of the structural support beams for the guideway track, staging yards, TPSSs, and aerial MRT stations; although vegetation to be impacted is largely non-native and/or ornamental landscaping, native vegetation is also present. If individuals are present during clearing and grading activities, special-status plants would be subject to trampling, crushing, and

removal. Individuals present in adjacent areas may be exposed to fugitive dust, which can settle on vegetation and interrupt natural photosynthesis. Following vegetation clearing, adjacent areas also may be subject to edge effects including higher exposure to sun, dust, and wind, and incursion by nonnative, weedy species, which can increase competition for space and resources and decrease habitat value for special-status plants.

The clearing of vegetation in the Sepulveda Pass would likely result in loss of suitable habitat for the following special-status plant species:

- Braunton's milk-vetch (*Astragalus brauntonii*, federally endangered, CRPR 1B.1)
- Slender mariposa lily (*Calochortus clavatus* var. *gracilis*, CRPR 1B.2)
- Davidson's bushmallow (*Malacothamnus davidsonii*, CRPR 1B.2)
- Chaparral nolina (*Nolina cismontana*, CRPR 1B.2)
- Nuttall's scrub oak (*Quercus dumosa*, CRPR 1B.1)

Further detail on each species' potential to occur in the Alternative 1 RSA is provided in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

The loss of individuals or suitable habitat for these special-status plants would constitute a significant impact.

As described in Section 3.3.6, mitigation measures would be implemented to reduce construction-related impacts to special-status plant and wildlife species and their habitats to less than significant through establishment of survey and monitoring requirements (MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-17, MM BIO-29); monitoring of bird nests and determination if no-disturbance buffers require adjustments (such as due to noise from construction activities) (MM BIO-4); education and training of personnel about Project 's biological concerns and requirements (MM BIO-18); establishment and demarcation of Environmentally Sensitive Areas (MM BIO-16); and creation of a habitat restoration plan (MM BIO-10). General construction measures to protect special-status species include protection from wildfire (MM BIO-19), domestic pets (MM BIO-20), impacts from night lighting (MM BIO-22), invasive plants (MM BIO-23), entrapment (MM BIO-26), vehicular collisions (MM BIO-25), dust (MM BIO-24), and construction-related trash (MM BIO-27).

Alternative 3

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

The potential for operational impacts such as injury or mortality due to collisions with vehicles, behavioral and habitat usage modifications due to exposure to noise and vibration from passing trains, habitat degradation due to edge effects, and impacts on movement due to infrastructure are limited for most wildlife species for Alternative 3 since the aerial portion of the alignment occurs in developed areas. Anticipated impacts are described below.

Special-Status Invertebrates and Reptiles

Special-status invertebrates, such as Crotch's bumble bee, and special-status reptiles that may occur in habitats along the alignment are not anticipated to be subject to operation-associated direct impacts, including injury or mortality due to collision with vehicles, since the alignment is primarily aerial and

occurs in mostly developed areas that are not suitable for these species. Therefore, the areal extent of suitable habitat for special-status invertebrates and reptiles that overlaps with Alternative 3 is very limited.

Habitat degradation due to edge effects where native habitats are removed to facilitate construction (refer to Section 7.3.1.2) would be similarly limited due to the low amount of suitable habitat present along the alignment. Edge effects may include changes to the microclimate due to increased exposure to sun and wind, incursion by nonnative, weedy plant species that alter the vegetation structure, and changes in the distribution and diversity of foraging plant species (for bumble bees) and prey species (for reptiles). These habitat alteration impacts would persist through operation of the facility; however, due to the limited areal extent, is anticipated to constitute a less than significant impact. Further, indirect habitat degradation would be mitigated through the habitat restoration measures related to construction of Alternative 3.

For these reason, operations-related impacts to special-status invertebrates and reptiles are anticipated to be less than significant.

Special-Status Birds and Bats

Special-status birds (including those protected by the MBTA) and special-status bats listed in Table 3.3-1 would potentially be significantly impacted during operation of Alternative 3 if nesting birds or roosting bats are present in trees and/or shrubs located within the Alternative 3 RSA that require routine maintenance trimming. Adult birds and bats are highly mobile and are anticipated to be able to relocate away from maintenance trimming activities of their own volition; however, nests, eggs, and nestlings, and bat pups, would be injured, killed, or destroyed by maintenance activities if they are located in the vegetation slated for removal. Additionally, if breeding birds or bats are present in the adjacent areas, individuals may be subject to indirect impacts including exposure to noise, human presence, and dust, which would disrupt natural breeding behaviors such as incubation of eggs and feeding and care of young. In some cases, habitat changes due to vegetation removal would be sufficient to reduce protective cover, resulting in abandonment of nests and eggs.

Since Alternative 3 would be an underground alignment between Wilshire Boulevard and the Getty Center, vegetation maintenance is not anticipated in this section. Impacts from dust and noise to special-status birds or bats are not anticipated during operation since maintenance activities would primarily occur within developed or paved areas at ground level and underground in the tunnel segments.

Special-Status Mammals

Impacts to special-status bats were previously addressed with special-status birds.

Direct significant impacts are not expected for mountain lions, since collisions with aerial monorail vehicles are unlikely due to the height at which they would be traveling (16.5 to 32 feet above ground to the base of the column caps). While operation of Alternative 3 is anticipated to reduce vehicle traffic on I-405, changes in vehicle traffic associated with operation of Alternative 3 are not likely to significantly reduce risk for a mountain lion attempting to cross the freeway due to the existing exponentially high risk of collision (i.e., I-405 is considered by NPS to be impermeable to lions; NPS, 2023). Alternative 3 is intended to reduce congestion during rush hour, while collision risk is greatest when vehicles are traveling the fastest during off-peak hours, including dawn and dusk when mountain lions are most active. Within Alternative 3, 13 percent (47.0 acres) of the total impacts are within non-developed natural areas in the Santa Monica Mountains (i.e., suitable habitat for mountain lion); the remaining

acreage is either in urban areas within the mountain range or are outside of the mountains. Within suitable mountain lion habitat in the Santa Monica Mountains, the majority of impacts would be temporary (82 percent of suitable mountain lion habitat impacts, or 38.4 acres) while permanent impacts represent the rest (18 percent of suitable mountain lion habitat impacts; or 8.7 acres). Permanent habitat reductions of this size adjacent to an impermeable highway are anticipated to be less than significant for mountain lions to survive or recover in the wild. Habitat reductions of this size are anticipated to be less than significant for mountain lions to survive or recover in the wild. Impacts to their habitat that would affect movement within the Santa Monica Mountains is discussed in Section 3.3.5.4.

Special-Status Plants

Impacts to special-status plants that would occur during operation include crushing or trampling of individual plants during normal maintenance, or tree trimming for maintenance. Since maintenance activities would primarily occur within developed or paved areas, it is unlikely that the operation of Alternative 3 would result in significant impacts to special-status plants, including from exposure to fugitive dust. One special-status plant, Nuttall's scrub oak (*Quercus dumosa*), has high potential to be present along the Santa Monica Mountains, in landscaping, and within pockets of native vegetation in developed areas. Since Alternative 3 would be an underground alignment between Wilshire Boulevard and the Getty Center, impacts to special-status plants would not be anticipated in this section. Where present, Nuttall's scrub oak would potentially be impacted by required routine maintenance trimming; no significant impacts are anticipated since Nuttall's scrub oak was not identified within the Ground Disturbance Area during the initial tree inventory.

MM BIO-1 and MM BIO-2, presented in Section 3.3.6, are included to reduce potentially significant operations-related impacts to nesting birds and roosting special-status bats from maintenance vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro. MM BIO-3 would reduce operational-related impacts to special-status trees from vegetation maintenance to less than significant through application of mitigation, as determined in the applicable local ordinance or policy where the impact would occur. Therefore, with implementation of MM BIO-1, MM BIO-2, and MM BIO-3, operational impacts of Alternative 3 on special-status species would be reduced to less than significant.

Construction Impacts

Impacts to vegetation within the Ground Disturbance Area have the potential to affect sensitive vegetation communities, as well as special-status wildlife or plant species, both directly and through modifications to their habitat.

Clearing and grading of vegetation would be required for construction of components of Alternative 3, including the structural support beams for the guideway track, staging yards, "cut-and-cover" construction of TPSSs, and aerial MRT stations. While most of the vegetation that would be impacted consists of non-native and ornamental landscaping, some native vegetation is also present within the Ground Disturbance Area. Construction activities for Alternative 3 would result in significant impacts to special-status wildlife, including nesting birds and special-status plant species, if mitigation measures are not implemented. These potentially significant impacts include habitat loss due to permanent vegetation removal, noise pollution from prolonged heavy equipment operation, and extended human disturbances within species habitats during construction.

Other anticipated construction impacts related to the construction along Sepulveda Pass for Alternative 3 include the possibility of increased noise, dust, and vibration during drilling of the aerial track footings. Excessive noise generated from drilling and heavy equipment operation could significantly disturb avian species. Vibration-related disturbance could also disrupt their normal behavioral patterns. Construction-related dust would significantly impact habitat quality by depositing on vegetation, which may reduce photosynthesis and increase leaf temperature, making vegetation more susceptible to drought (Farmer, 1993). Evaluation of the Project's impact on wildfire risk and occurrence is discussed in the wildfire chapter of the *Sepulveda Transit Corridor Project Safety and Security Technical Report* (Metro, 2025c).

Vegetation Communities/Land Cover Types and Sensitive Vegetation Communities

Direct impacts to vegetation communities would occur within the Ground Disturbance Area; acreages of temporary and permanent impacts to vegetation communities within Alternative 3 are detailed in Table 3.3-5. Due to the sparse vegetation, lack of species diversity, and continued anthropogenic disturbance, special-status species are less likely to be found in land cover types developed, cleared land, and ruderal vegetation. Excluding these areas, construction of Alternative 3 is anticipated to result in 40.4 acres of temporary impacts and 9.1 acres of permanent impacts. Approximately 95 percent (358.6 acres) of the acreage in Alternative 3 planned for ground disturbing activities consists of developed, undifferentiated artificial cuts/embankments, cleared land, or ruderal areas. Within the vegetated areas subject to impacts, less than 1 percent (2.5 acres) is undifferentiated exotic vegetation. The remaining vegetation communities are native vegetation across 11 communities. These represent approximately 4 percent (15.1 acres) of the impacts, of which 4.2 acres are anticipated to be permanently impacted and 10.9 acres are anticipated to be temporarily impacted from construction of Alternative 3. Indirect impacts to vegetation communities may also occur during construction activities. For example, fugitive dust deposition on foliage may reduce photosynthesis and increase plant vulnerability to drought. Additionally, vegetation removals may increase edge effects, including incursion of nonnative, weedy plants that compete with natives for space and resources.

Approximately 0.7 acre of identified sensitive vegetation communities California walnut woodland and sugar bush scrubland would be permanently and temporarily impacted by clearing and grading for I-405 highway improvements along Briarwood Drive, as well as construction of the Getty Center MRT Station and adjacent drainage improvements. An additional seven vegetation communities have potential to be considered sensitive (** in Table 3.3-5) depending upon the associated codominant species present (Sections 3.3.2.1 and 3.3.4.1). Up to an additional 5.4 acres of potentially sensitive vegetation communities are also within the Alternative 3 RSA along I-405. For this analysis, Metro is conservatively considering impacts to these communities to be significant pending further analysis and refinement of vegetation mapping.

The removal and degradation of native and sensitive vegetation communities would constitute potentially significant impacts.

Table 3.3-5. Alternative 3: Impacts on Land Cover Types and Vegetation Communities

Vegetation Community/Land Cover Type [a]	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Project Impacts (acres) [b]	Percent of Total Project Impacts
Developed	117.7	206.5	324.3	86.2
Ruderal	1.2	1.0	2.3	0.6
Cleared Land	0	0.1	0.1	<0.1
Developed, Ruderal, Cleared Land Total	**119.0**	**207.6**	**326.6**	**86.8**

Vegetation Community/Land Cover Type [a]	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Project Impacts (acres) [b]	Percent of Total Project Impacts
Post Fire Shrub Regeneration and Undifferentiated Categories including Artificial Cuts/Embankments, Exotic Vegetation, and Firebreaks	4.9	29.5	34.4	9.1
Ceanothus Chaparral	2.4	5.7	8.1	2.2
Laurel Sumac Shrubland**	0.6	2.8	3.4	0.9
Mexican Elderberry Shrubland	0.6	0.3	0.9	0.2
California Buckwheat Shrubland**	0.2	0.5	0.7	0.2
California Sycamore Woodland**	0.1	0.6	0.7	0.2
Sugar Bush Shrubland*	0.2	0.2	0.4	0.1
California Walnut Woodland*	0	0.3	0.3	0.1
Toyon Shrubland**	0	0.3	0.3	0.1
Black Sage Shrubland**	0.1	0.1	0.2	<0.1
California Sagebrush Shrubland**	0	0.1	0.1	<0.1
Scrub Oak Woodland**	0	<0.1	<0.1	<0.1
Vegetation Total	**9.1**	**40.5**	**49.6**	**13.2**
GRAND TOTAL	**128.1**	**248.1**	**376.2**	**100**

Source: Metro, 2025a

[a]Vegetation communities based on the classifications provided in *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009).

[b]Inconsistencies in calculations due to rounding.

*Sensitive vegetation community
**Potential sensitive vegetation community based on codominant species on-site.

Special-Status Invertebrates

One special-status invertebrate, Crotch's bumblebee, is present within the Alternative 3 RSA. Despite having a relatively narrow range, this species is known to occupy a wide variety of natural and disturbed habitat for nesting and foraging and would be present throughout the RSA in undeveloped areas where pavement is not present and the earth is not regularly maintained through grading, tilling or planting. Based on their broad range of suitable habitat and generalist foraging behavior, Crotch's bumble bee are likely to forage throughout the RSA where preferred flowering plants are present (e.g., native sage species [*Salvia* spp.], milkweeds [*Asclepias* spp.], and plants within the pea family [*Fabaceae*]), and may nest where abandoned rodent burrows are present.

Individuals in occupied burrow nests or overwintering queens in surface soils would be crushed or trapped during construction if present within the Ground Disturbance Area. Additionally, foraging Individuals also would be injured or killed if they are foraging during vegetation clearing activities. This species would also be impacted through removal of nectar sources and nests in the Ground Disturbance Area resulting from construction of Alternative 3 features including structural support beams for the guideway track, stations, I-405 widening, retaining wall reconstructions, and at-grade TPSS sites. Ground-disturbing impacts from grading and vegetation clearing throughout the RSA would impact individuals and would likely result in loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for Crotch's bumble bee; this is considered a potentially significant impact.

The loss of individual Crotch's bumble bees and suitable habitat for this species would be considered a significant impact.

Special-Status Reptiles

Three special-status reptiles are present and two have a moderate potential to occur within the Alternative 3 RSA; individuals of these species may be present during construction activities. Reptiles present during construction activities would be directly injured or killed due to collisions with vehicles and equipment or during vegetation clearing activities. Species that shelter in burrows or under debris would be entrapped and suffocate or be crushed during grading activities; buried nests would be similar crushed or destroyed. Additionally, if individuals become entrapped in open trenches or excavations during construction activities, they would be subject to injury or mortality due to dehydration, opportunistic predation, inability to properly thermoregulate, starvation, or other causes associated with constrained movement. Indirect impacts would include disruption of normal feeding, basking, sheltering, and breeding behaviors due to avoidance of excessive noise and vibration, fugitive dust, and increased human presence. Normal movement patterns throughout a home range also may be disrupted temporarily by avoidance of areas adjacent to construction activities, or permanently by habitat structure modifications. During construction, special-status reptiles also may be subject to higher predation rates by opportunistic predators such as common ravens (*Corvus corax*), coyote, or skunk, that would be attracted to work areas if food debris is present.

Two of the species, southwestern pond turtle and two-striped garter snake, are most likely to occur near aquatic resources such as the ponds in the Sepulveda Basin and UCLA Mathias Botanical Garden. Based on habitat requirements, the remaining three are most likely to be found in the Sepulveda Pass and Santa Monica Mountains. Individuals would be found in or proximate to work areas along I-405 in the Santa Monica Mountains. Roadway realignment along I-405 between Sunset Boulevard and Mulholland Drive would involve clearing and grading of native vegetation adjacent to the freeway. The clearing of vegetation in the Sepulveda Pass would likely result in injury or mortality of individuals, disruptions of natural behaviors, and loss of suitable habitat that would be used for nesting, breeding, sheltering, and/or foraging for the following five special-status reptiles:

- Southwestern pond turtle (*Actinemys pallida,* federal candidate for listing)
- Southern California legless lizard (*Anniella stebbinsi*, SSC)
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC)
- Coast horned lizard (*Phrynosoma blainvillii*, SSC)
- Two-striped garter snake (*Thamnophis hammondii*, SSC)
- The loss of individuals and suitable habiting for these special-status species would constitute a significant impact.

Special-Status Birds

Four special-status bird species were identified as present and five have high potential to occur within the Alternative 3 RSA. Based on habitat requirements for these nine species, they are likely to be found throughout the RSA in transit, resting and/or foraging from the Los Angeles National Cemetery in the south to the Sepulveda Basin in the north. Birds in transit are unlikely to be affected by construction activities; adults are highly mobile and can be expected to relocate away from construction activities of their own volition. However, migratory individuals may experience temporary or permanent loss of transitory habitat. If overwintering burrowing owls are present, individuals would be entrapped and suffocate or be crushed if burrows are present in the work areas during grading and vegetation removal.

Additionally, grading would result in loss of suitable wintering burrows for migratory burrowing owls. If native birds breeding within or adjacent to work areas, nests, eggs, and nestlings would be vulnerable to destruction, injury, or mortality if they are present during vegetation clearing and other construction activities. Ground nests may be vulnerable to crushing, trampling, or destruction by pedestrians and vehicles. Nests in adjacent areas also may be exposed to noise, fugitive dust, human presence, and vibration that would disrupt natural breeding behaviors including incubation of eggs and care and feeding of young; these disruptions would result in failure of a nest to successfully produce young. Excessive disruption, or substantial changes in habitat during the nesting period, would also result in abandonment of nest sites, eggs, or young. Further, impacts associated with clearing and grading of vegetation adjacent to I-405 would likely result in loss of suitable habitat that would be used for nesting, breeding, sheltering, and/or foraging for the following nine special-status species and nesting birds protected under the MBTA:

- Tricolored blackbird (*Agelaius tricolor*, state threatened and SSC)
- Burrowing owl (*Athene cunicularia*, state candidate and SSC)
- Swainson's hawk (*Buteo swainsoni*, state threatened)
- Northern harrier (*Circus hudsonius*, SSC)
- Olive-sided flycatcher (*Contopus cooperi*, SSC)
- Bald eagle (*Haliaeetus leucocephalus*, state endangered and fully protected)
- Loggerhead shrike (*Lanius ludovicianus*, SSC)
- Vermilion flycatcher (*Pyrocephalus obscurus*, SSC)
- Least Bell's vireo (*Vireo bellii pusillus*, FE and SE)

The loss of nests, eggs, or nestlings, impacts to natural breeding behaviors, eviction from wintering burrows, and loss of suitable habiting for these special-status species would constitute a significant impact.

Special-Status Mammals

Three special-status mammals were identified as present and one has high potential to occur within the Alternative 3 RSA, including mountain lion, silver-haired bat, and hoary bat. Mountain lions are known to occur within the Santa Monica Mountains, while the silver-haired and hoary bat have broader habitat requirements and have potential to forage in both natural and developed habitats. Within the Sepulveda Pass and Santa Monica Mountains, special-status mammals would occur in or proximate to work areas along I-405. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway.

Within the developed northern and southern ends of the projects, special-status bats would be present in ornamental street trees or on existing infrastructure, such as bridges and buildings. Individuals may be subject to injury or mortality if they are present as roosting adults during vegetation clearing activities. Roosting adults also may be disturbed by construction-related noise and vibration, causing them to flee roosts during daylight hours. Maternal roosts would also be vulnerable to injury or mortality if present, as pups are unable to take flight and would be likely to be killed if present. Suitable foraging, sheltering, and roosting habitats have potential to be removed during vegetation clearing and grading, or temporarily impacts by construction noise, fugitive dust, and increased human presence. Nighttime construction lighting also may impact foraging habitat by attracting prey species, which may attract some bat species and repel others.

Individual larger mammals, including mountain lions, are unlikely to be directly impacted by construction activities as they are highly mobile and can be anticipated to relocate away from work areas of their own volition. Individuals are not likely to be vulnerable to collisions with slower moving construction equipment and vehicles. However, natural foraging, sheltering, and breeding behaviors may be disrupted by construction activities, both temporarily through avoidance of areas with construction-related noise, human presence, vibration, and fugitive dust, and permanently through changes in habitat due to vegetation clearing and grading.

The clearing of vegetation in the Sepulveda Pass and along city streets and demolition of structures with suitable roosts would also likely result in loss of suitable habitat that would be used for roosting, breeding, shelter, and/or foraging for the following three special-status mammals:

- Mountain lion (*Puma concolor*, state candidate for listing)
- Silver-haired bat (*Lasionycteris noctivagans*, WBWG Medium priority)
- Hoary bat (*Lasiurus cinereus*, WBWG Medium priority)

Specifically for mountain lion, Alternative 3 is unlikely to result in significant impacts to suitable habitat due to the small size and linear nature of the clearing and grading activities in comparison to the species large home range size. However, the construction and operation of Alternative 3, specifically widening I-405 between the Getty and Mulholland Drive, has the potential to result in a significant impact to mountain lion movement and usage of wildlife corridors.

The loss of suitable habitat for silver-haired bats and hoary bats would constitute a significant impact.

Special-Status Plants

Five special-status plant species were identified with medium or high potential to occur within the Alternative 3 RSA; none were present. Based on habitat requirements for these five species, these species are most likely to occur in chaparral and/or coastal sage scrub, which occurs on the Project in the Sepulveda Pass and would be in or proximate to work areas along I-405 in the Santa Monica Mountains. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway. Clearing and grading of vegetation would also be required for construction of the structural support beams for the guideway track, staging yards, TPSS, and aerial MRT stations; although vegetation to be impacted is largely non-native and/or ornamental landscaping, native vegetation is also present. If individuals are present during clearing and grading activities, special status plants would be subject to trampling, crushing, and removal. Individuals present in adjacent areas may be exposed to fugitive dust, which can settle on vegetation and interrupt natural photosynthesis. Following vegetation clearing, adjacent areas also may be subject to edge effects including higher exposure to sun, dust, and wind, and incursion by nonnative, weedy species, which can increase competition for space and resources and decrease habitat value for special-status plants.

The clearing of vegetation in the Sepulveda Pass could result in loss of suitable habitat for the following special-status plant species:

- Braunton's milk-vetch (*Astragalus brauntonii*, federally endangered; CRPR 1B.1)
- Slender mariposa lily (*Calochortus clavatus* var. *gracilis*; CRPR 1B.2)
- Davidson's bushmallow (*Malacothamnus davidsonii*; CRPR 1B.2)
- Chaparral nolina (*Nolina cismontana*; CRPR 1B.2)
- Nuttall's scrub oak (*Quercus dumosa*; CRPR 1B.1)

Further detail on each species' potential to occur in the Alternative 3 RSA is provided in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

The loss of individuals or suitable habitat for these special-status plants would constitute a significant impact.

As described in Section 3.3.6, mitigation measures would be implemented to reduce construction-related impacts to special-status plant and wildlife species and their habitats to less than significant through establishment of survey and monitoring requirements (MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-17, MM BIO-29); monitoring of bird nests and determination if no-disturbance buffers require adjustments (such as due to noise from construction activities) (MM BIO-4); education and training of personnel about Project 's biological concerns and requirements (MM BIO-18); establishment and demarcation of Environmentally Sensitive Areas (MM BIO-16); and creation of a habitat restoration plan (MM BIO-10). General construction measures to protect special-status species include protection from wildfire (MM BIO-19), domestic pets (MM BIO-20), night lighting (MM BIO-22), invasive plants (MM BIO-23), entrapment (MM BIO-26), vehicular collisions (MM BIO-25), dust (MM BIO-24), and construction-related trash (MM BIO-27).

Alternative 4

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

The potential for operational impacts such as injury or mortality due to collisions with vehicles, behavioral and habitat usage modifications due to exposure to noise and vibration from passing trains, habitat degradation due to edge effects, and impacts on movement due to infrastructure are limited for most wildlife species for Alternative 4 since the southern portion is an underground alignment and the northern portion, where the alignment is aerial, occurs in developed areas. Anticipated impacts are described below.

Special-Status Invertebrates and Reptiles

Special-status invertebrates, such as Crotch's bumble bee, and special-status reptiles that may occur in habitats along the alignment are not anticipated to be subject to operation-associated direct impacts, including injury or mortality due to collision with vehicles, since the areal extent of suitable habitat that overlaps with Alternative 4 is very limited. The southern portion of the alignment is underground so suitable habitat is not present and while the northern portion of the alignment is aerial, it occurs predominantly in developed areas that are not suitable for these species.

Habitat degradation due to edge effects where native habitats are removed to facilitate construction (refer to Section 8.3.1.2) would be similarly limited due to the low amount of suitable habitat present along the alignment. Edge effects may include changes to the microclimate due to increased exposure to sun and wind, incursion by nonnative, weedy plant species that alter the vegetation structure, and changes in the distribution and diversity of foraging plant species (for bumble bees) and prey species (for reptiles). These habitat alteration impacts would persist through operation of the facility; however, due to the limited areal extent, this is anticipated to constitute a less than significant impact. Further, indirect habitat degradation would be mitigated through the habitat restoration measures related to construction of Alternative 4.

For these reason, operations-related impacts to special-status invertebrates and reptiles are anticipated to be less than significant.

Special-Status Birds and Bats

Special-status birds (including those protected by the MBTA) and special-status bats shown in Table 3.3-1 have the potential to be significantly impacted during operations of Alternative 4 if nesting birds or roosting bats are present in trees and/or shrubs located within the Alternative 4 RSA that require routine maintenance trimming. Adult birds and bats are highly mobile and are anticipated to be able to relocate away from maintenance trimming activities of their own volition; however, nests, eggs, and nestlings, and bat pups would be injured, killed, or destroyed by maintenance activities if they are located in the vegetation slated for removal. Additionally, if breeding birds or bats are present in the adjacent areas, individuals may be subject to indirect impacts including exposure to noise, human presence, and dust which would disrupt natural breeding behaviors such as incubation of eggs and feeding and care of young. In some cases, habitat changes from vegetation removal would reduce protective cover to a degree that results in abandonment of nests and eggs.

Since Alternative 4 would be an underground alignment from the southern terminus at the Metro E Line Expo/Sepulveda Station to the tunnel portal at Del Gado Drive (0.5 mile south of Ventura Boulevard), vegetation maintenance is not anticipated in this section. Impacts from dust and noise to special-status birds or bats are not anticipated during operation since maintenance activities would primarily occur within developed or paved areas at ground level and underground in the tunnel segments.

Special-Status Mammals

Impacts to special-status bats were previously addressed with special-status birds.

While mountain lions are present within the Alternative 4 RSA, the alignment is underground through the Santa Monica Mountains where suitable habitat is present and are known to occur. Depth of the tunnel (ranging from 50 feet to 470 feet below ground surface for the Santa Monica Mountains segment) is anticipated to be sufficient to reduce or prevent indirect impacts at the surface from operations noise and vibration. Therefore, there are no significant impacts to mountain lion associated with operation of Alternative 4.

Special-Status Plants

Impacts to special-status plants that would occur during operation include crushing or trampling of individual plants during normal maintenance, or tree trimming for maintenance. Since maintenance activities would primarily occur within developed or paved areas, it is unlikely that the operation of Alternative 4 would result in significant impacts to special-status plants, including from exposure to fugitive dust. One special-status plant, Nuttall's scrub oak (*Quercus dumosa*), has high potential to be present along the Santa Monica Mountains, in landscaping, and within pockets of native vegetation in developed areas. Since Alternative 4 would be an underground alignment from the southern terminus at the Metro E Line Expo/Sepulveda Station to the tunnel portal at Del Gado Drive (0.5 mile south of Ventura Boulevard), impacts to special-status plants are not anticipated in this section. If trees were present along aboveground portions of Alternative 4, Nuttall's scrub oak would potentially be impacted by required routine maintenance trimming. However, no significant impacts are anticipated since Nuttall's scrub oak was not identified within the Ground Disturbance Area during the initial tree inventory.

MM BIO-1 and MM BIO-2, presented in Section 3.3.6 are included to reduce potentially significant operations-related impacts to nesting birds and roosting special-status bats from maintenance vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro. MM BIO-3 would reduce operational-related impacts to special-status trees from vegetation maintenance to less than significant through application of mitigation as determined in the applicable local ordinance or policy where the impact would occur. Therefore, with the implementation of MM BIO-1, MM BIO-2, and MM BIO-3, operational impacts of Alternative 4 on special-status species would be reduced to a less than significant level.

Construction Impacts

Impacts to vegetation within the Ground Disturbance Area have the potential to affect sensitive vegetation communities, as well as special-status wildlife or plant species, both directly and through modifications to their habitat. Construction activities for Alternative 4 would result in significant impacts to special-status wildlife including nesting birds, special-status plant species, and sensitive vegetation communities if mitigation measures are not implemented. These potentially significant impacts include injury to or mortality of individuals, habitat loss due to permanent vegetation removal, behavioral and health modifications from noise pollution or exposure to fugitive dust from prolonged heavy equipment operation, and behavioral modifications due to extended human disturbances within species habitats during construction.

Alternative 4 is an underground alignment for the southern half of the Project and an aerial alignment starting at the tunnel portal at Del Gado Drive and running north to the maintenance and storage facility (MSF). Ground Disturbance Area is present for the length of the aerial alignment, station footprints, staging areas, the tunnel portal, and the MSF. Construction of the two tunnel segments would be underground except for the launch and extraction sites located within stations or staging yards that are included in the Ground Disturbance Area. Clearing and grading of vegetation within the Ground Disturbance Area would be required for construction of the structural support beams for the guideway track, tunnel portal, staging yards, aerial HRT stations, and “cut-and-cover” construction for underground stations. While most of the vegetation that would be impacted consists of non-native and ornamental landscaping, some native vegetation is also present within the Ground Disturbance Area.

Other anticipated construction impacts related to the construction of Alternative 4 include the possibility of increased noise, dust, and vibration during at-grade impacts, including drilling of the aerial track support structures, “cut-and-cover” installation of the stations, and the tunnel boring machine (TBM) launch and extraction locations for the tunnel excavation (launch sites at Staging Area 1 at Sepulveda Boulevard and National Boulevard and Staging Area 4 in the San Fernando Valley; extraction site at the UCLA Gateway Plaza Station). For construction of the underground tunnel, impacts of noise, dust and vibration are not expected at surface levels due to tunnel depth, except at the tunnel portal near Del Gado Drive. Excessive noise generated from the drilling and heavy equipment operation could significantly disturb avian species and/or other special-status species who are dependent on auditory signals during essential daily activities. Vibration-related disturbances from drilling could also disrupt their normal behavioral patterns near the TBM launch and extraction sites. Impacts through the Santa Monica Mountains are not anticipated due to tunnel depth. Construction-related dust (associated with drilling for the support structures for the aerial guideway, vegetation clearing, grading, etc.) could temporarily impact the overall quality of habitat present. Dust deposition on vegetation can result in reduced photosynthesis and an increase in leaf temperature, making vegetation more susceptible to drought (Farmer, 1993). Evaluation of the Project’s impact on wildfire risk and occurrence is discussed in

the wildfire chapter of the *Sepulveda Transit Corridor Project Safety and Security Technical Report* (Metro, 2025c).

Vegetation Communities/Land Cover Types and Sensitive Vegetation Communities

Direct impacts to vegetation communities would occur within the Ground Disturbance Area; acreages of temporary and permanent impacts to vegetation communities within Alternative 4 are detailed in Table 3.3-6. Due to the sparse vegetation, lack of diversity, and continued anthropogenic disturbance, special-status species are less likely to be found in developed, agricultural, and ruderal land cover types. Approximately 89 percent (244.8 acres) of acreage planned for ground disturbing activities consists of developed, agricultural, and ruderal vegetation. Excluding these areas, construction of Alternative 4 is anticipated to result in 29.8 acres of temporary impacts and 0.3 acre of permanent impacts. Within the vegetated areas subject to impacts, approximately 8 percent (26.2 acres of temporary impacts) is California annual grassland. The two native vegetation communities, coyote brush shrubland and coast live oak woodland, represent approximately 1 percent (3.9 acres) of the impacted area, of which 0.3 acres of coast live oak woodland are anticipated to be permanently impacted from construction of Alternative 4. Indirect impacts to vegetation communities may also occur during construction activities. For example, fugitive dust deposition on foliage may reduce photosynthesis and increase plant vulnerability to drought. Additionally, vegetation removals may increase edge effects, including incursion of nonnative, weedy plants that compete with natives for space and resources.

There are no sensitive vegetation communities within the Ground Disturbance Area. However, one vegetation community has potential to be considered sensitive (** in Table 3.3-6) depending on the associated codominant species present (Sections 3.3.2.1 and 3.3.4.1). Up to an additional 3.6 acres of coyote brush scrubland, a potentially sensitive community, is located within potential off-site staging yard N2 at the western end of the Sepulveda Basin. For this analysis, Metro is conservatively considering impacts to these communities to be significant pending further analysis and refinement of vegetation mapping.

The removal and degradation of native and sensitive vegetation communities would constitute potentially significant impacts.

Table 3.3-6. Alternative 4: Impacts on Land Cover Types and Vegetation Communities

Vegetation Community/Land Cover Type [a]	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Impacts (acres) [b]	Percent of Total Project Impact
Developed	158.2	14.5	172.7	62.8
Agricultural Land	0	65.8	65.8	23.9
Ruderal	0.6	5.7	6.3	2.3
Developed, Agricultural, Ruderal Total	**158.8**	**86.0**	**244.8**	**89.1**
California Annual Grassland	0	26.2	26.2	9.5
Coyote Brush Shrubland**	0	3.6	3.6	1.3
Coast Live Oak Woodland	0.3	0	0.3	0.1
Vegetation Total	**0.3**	**29.8**	**30.1**	**10.9**
GRAND TOTAL	**159.1**	**115.8**	**274.9**	**100.0**

Source: Metro, 2025a

[a]Vegetation communities based on the classifications provided in *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009).

[b]Inconsistencies in calculations due to rounding.

**Potential sensitive vegetation community based on codominant species on-site.

Special-Status Invertebrates

One special-status invertebrate, Crotch's bumble bee, has potential to be present within the Alternative 4 RSA during construction activities. Despite having a relatively narrow range, this species is known to occupy a wide variety of natural and disturbed habitat for nesting and foraging and could be present throughout the RSA in undeveloped areas where pavement is not present and the earth is not regularly maintained through grading, tilling or planting. Based on their broad range of suitable habitat and generalist foraging behavior, Crotch's bumble bee are likely to occur foraging throughout the RSA where preferred flowering plants are present (e.g., native sage species [*Salvia* spp.], milkweeds [*Asclepias* spp.], and plants within the pea family [*Fabaceae*]) and nesting where abandoned rodent burrows are present.

Individuals in occupied burrow nests or overwintering queens in surface soils would be crushed or trapped during construction if present within the Ground Disturbance Area. Additionally, foraging Individuals also would be injured or killed if they are foraging during vegetation clearing activities. This species would also be impacted by the removal of nectar sources and nests in the Ground Disturbance Area result from vegetation clearing and grading for construction of Alternative 4 features including structural support beams for the guideway track, the tunnel portal and associated roadway configuration changes, stations, and construction staging locations. Ground-disturbing impacts from grading and vegetation clearing throughout the RSA would impact individuals and would likely result in loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for Crotch's bumble bee.

The loss of individual Crotch's bumble bees and suitable habitat for this species would constitute a significant impact.

Special-Status Reptiles

Three special-status reptiles are known to occur and two have a high or moderate potential to occur within the Alternative 4 RSA; individuals of these species may be present during construction activities. Reptiles present during construction activities would be directly injured or killed due to collisions with vehicles and equipment or during vegetation clearing activities. Species that shelter in burrows or under debris would be entrapped and suffocate or be crushed during grading activities; buried nests would similarly be crushed or destroyed. Additionally, if individuals become entrapped in open trenches or excavations during construction activities, special-status reptiles would be subject to injury or mortality due to dehydration, opportunistic predation, inability to properly thermoregulate, starvation, or other causes associated with constrained movement. Indirect impacts would include disruption of normal feeding, basking, sheltering, and breeding behaviors due to avoidance of excessive noise and vibration, fugitive dust, and increased human presence. Normal movement patterns throughout a home range also may be disrupted temporarily by avoidance of areas adjacent to construction activities, or permanently by habitat structure modifications. During construction, special-status reptiles also may be subject to higher predation rates by opportunistic predators such as common ravens (*Corvus corax*), coyote, or skunk, that would be attracted to work areas if food debris is present.

Two of the species, southwestern pond turtle and two-striped garter snake, are most likely to occur near aquatic resources such as the ponds in the Sepulveda Basin. Since aquatic resources are limited in Alternative 4, impacts to these two species are expected to be less than significant. Thus, construction of Alternative 4 is likely to have limited impacts on individuals and suitable habitat for the following two species of reptiles:

- Southwestern pond turtle (*Actinemys pallida,* federal candidate for listing)
- Two-striped garter snake (*Thamnophis hammondii*, SSC)

Based on habitat requirements, the remaining three are most likely to be found in the Sepulveda Pass and Santa Monica Mountains, but a broad range of acceptable habitats would result in potentially significant impacts to these three species in areas with ground disturbance even though the alignment is underground in the Santa Monica Mountains. Construction of Alternative 4 may result in injury or mortality of individuals, disruptions of natural behaviors, and loss of suitable habitat that would be used for nesting, breeding, sheltering, and/or foraging for the following three species of reptiles:

- Southern California legless lizard (*Anniella stebbinsi*, SSC)
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC)
- Coast horned lizard (*Phrynosoma blainvillii*, SSC)

The loss of suitable habitat for these special-status species would constitute a significant impact.

Special-Status Birds

One special-status bird species was identified as present and eight have a high potential to occur within the Alternative 4 RSA. Based on habitat requirements for these nine species, they are likely to be found throughout the RSA in transit, resting and/or foraging from the Los Angeles National Cemetery in the south to the Sepulveda Basin in the north. Birds in transit are unlikely to be affected by construction activities; adults are highly mobile and can be expected to relocate away from construction activities of their own volition. However, migratory individuals may experience temporary or permanent loss of transitory habitat. If overwintering burrowing owls are present, individuals would be entrapped and suffocate or be crushed if burrows are present in the work areas during grading and vegetation removal. Additionally, grading would result in loss of suitable wintering burrows for migratory burrowing owls. If native birds breeding within or adjacent to work areas, nests, eggs, and nestlings would be vulnerable to destruction, injury, or mortality if they are present during vegetation clearing and other construction activities. Ground nests may be vulnerable to crushing, trampling, or destruction by pedestrians and vehicles. Nests in adjacent areas also may be exposed to noise, fugitive dust, human presence, and vibration that would disrupt natural breeding behaviors including incubation of eggs and care and feeding of young; these disruptions would result in failure of a nest to successfully produce young. Excessive disruption, or substantial changes in habitat during the nesting period, would also result in abandonment of nest sites, eggs, or young. Further, impacts associated with clearing and grading of vegetation adjacent to I-405 would likely result in loss of suitable habitat that would be used for nesting, breeding, sheltering, and/or foraging for the following nine special-status avian species and nesting birds protected under the MBTA:

- Tricolored blackbird (*Agelaius tricolor*; state threatened and SSC)
- Burrowing owl (*Athene cunicularia*; state candidate and SSC)
- Swainson's hawk (*Buteo swainsoni*; state threatened)
- Northern harrier (*Circus hudsonius*; SSC)
- Olive-sided flycatcher (*Contopus cooperi*; SSC)
- Bald eagle (*Haliaeetus leucocephalus*, state endangered and fully protected)
- Loggerhead shrike (*Lanius ludovicianus*; SSC)
- Vermilion flycatcher (*Pyrocephalus obscurus*; SSC)
- Least Bell's vireo (*Vireo bellii pusillus*; FE and SE)

The loss of nests, eggs, or nestlings, impacts to natural breeding behaviors, eviction from wintering burrows, and loss of suitable habitat for these special-status species would constitute a significant impact.

Special-Status Mammals

Three special-status mammal species were identified as present within the Alternative 4 RSA, including mountain lion, silver-haired bat, and hoary bat. Mountain lions are known to occur within the Santa Monica Mountains, while the silver-haired and hoary bat have broader habitat requirements and have potential to forage in both natural and developed habitats. Within the Sepulveda Pass and Santa Monica Mountains, special-status mammals would occur in or proximate to work areas along I-405. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway.

Within the developed northern and southern ends of the projects, special-status bats would be present in ornamental street trees or on existing infrastructure, such as bridges and buildings. Individuals may be subject to injury or mortality if special-status mammals are present as roosting adults during vegetation clearing activities. Roosting adults also may be disturbed by construction-related noise and vibration, causing them to flee roosts during daylight hours. Maternal roosts would also be vulnerable to injury or mortality if present, as pups are unable to take flight and would be likely to be killed if present. Suitable foraging, sheltering, and roosting habitats have potential to be removed during vegetation clearing and grading, or temporarily impacted by construction noise, fugitive dust, and increased human presence. Nighttime construction lighting also may impact foraging habitat by attracting prey species, which may attract some bat species and repel others.

Individual larger mammals, including mountain lions, are unlikely to be directly impacted by construction activities since they are highly mobile and can be anticipated to relocate away from work areas of their own volition. Individuals are not likely to be vulnerable to collisions with slower moving construction equipment and vehicles. However, natural foraging, sheltering, and breeding behaviors may be disrupted by construction activities, both temporarily through avoidance of areas with construction-related noise, human presence, vibration, and fugitive dust, and permanently through changes in habitat due to vegetation clearing and grading.

The clearing of vegetation in the Sepulveda Pass and along city streets and demolition of structures with suitable roosts would also likely result in loss of suitable habitat that would be used for roosting, breeding, shelter, and/or foraging for the following three special-status mammals:

- Mountain lion (*Puma concolor*, state candidate for listing)
- Silver-haired bat (*Lasionycteris noctivagans*, WBWG Medium priority)
- Hoary bat (*Lasiurus cinereus*, WBWG Medium priority)

Specifically for mountain lion, Alternative 4 is unlikely to result in significant impacts to suitable habitat due to the small size and linear nature of the clearing and grading activities in comparison to the species large home range size. The construction and operation of Alternative 4 is unlikely to significantly impact mountain lion movement and usage of wildlife corridors based on the underground configuration without associated ground-disturbance activities through the Santa Monica Mountains from UCLA Gateway Plaza Station in the south until the tunnel portal at Del Gado Drive. Movements of other vertebrate species would be significantly impacted.

The loss of individuals and suitable habitat for silver-haired bats and hoary bats would constitute a significant impact.

Special-Status Plants

Six special-status plant species were identified with medium or high potential to occur within the Alternative 4 RSA; none were present. Based on habitat requirements, these six species are most likely to occur in chaparral and/or coastal sage scrub which occurs on the Project in the Sepulveda Pass and would occur in or proximate to work areas along I-405 in the Santa Monica Mountains. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway. Clearing and grading of vegetation would also be required for construction of the structural support beams for the guideway track, staging yards, TPSSs, and aerial MRT stations. Although vegetation to be impacted is largely non-native and/or ornamental landscaping, native vegetation is also present. If individuals are present during clearing and grading activities, special-status plants would be subject to trampling, crushing, and removal. Individuals present in adjacent areas may be exposed to fugitive dust, which can settle on vegetation and interrupt photosynthesis. Following vegetation clearing, adjacent areas also may be subject to edge effects including higher exposure to sun, dust, and wind, and incursion by nonnative, weedy species, which can increase competition for space and resources and decrease habitat value for special-status plants.

The clearing of vegetation in the Sepulveda Pass would likely result in loss of suitable habitat for the following special-status plant species:

- Braunton's milk-vetch (*Astragalus brauntonii*, federally endangered, CRPR 1B.1)
- Slender mariposa lily (*Calochortus clavatus* var. *gracilis*, CRPR 1B.2)
- Davidson's bushmallow (*Malacothamnus davidsonii*, CRPR 1B.2)
- Chaparral nolina (*Nolina cismontana*, CRPR 1B.2)
- Nuttall's scrub oak (*Quercus dumosa*, CRPR 1B.1)
- Sanford's arrowhead (*Sagittaria sanfordii*, CRPR 1B.2)

Further detail on each species' potential to occur in the Alternative 4 RSA is provided in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

The loss of individuals or suitable habitat for these special-status plants would constitute a significant impact.

As described in Section 3.3.6, mitigation measures would be implemented to reduce construction-related impacts to special-status plant and wildlife species and their habitats to less than significant through establishment of survey and monitoring requirements (MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-17, MM BIO-29); monitoring of bird nests and determination if no-disturbance buffers require adjustments (such as due to noise from construction activities) (MM BIO-4); education and training of personnel about Project 's biological concerns and requirements (MM BIO-18); and creation of a habitat restoration plan (MM BIO-10).

General construction measures to protect special-status species include protection from wildfire (MM BIO-19), domestic pets (MM BIO-20), night lighting (MM BIO-22), invasive plants (MM BIO-23), entrapment (MM BIO-26), vehicular collisions (MM BIO-25), dust (MM BIO-24), and construction-related trash (MM BIO-27).

Alternative 5

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

The potential for operational impacts such as injury or mortality due to collisions with vehicles, behavioral and habitat usage modifications due to exposure to noise and vibration from passing trains, habitat degradation due to edge effects, and impacts on movement due to infrastructure are limited for most wildlife species for Alternative 5 since it is predominantly an underground alignment. Anticipated impacts are described below.

Special-Status Invertebrates and Reptiles

Special-status invertebrates, such as Crotch's bumble bee, and special-status reptiles that may occur in habitats along the alignment are not anticipated to be subject to operation-associated direct impacts, including injury or mortality due to collision with vehicles, since the areal extent of suitable habitat that overlaps with Alternative 5 is very limited. The alignment is predominantly underground, with the only aboveground portion located immediately south of the LOSSAN corridor on developed land that is not suitable for these species.

Habitat degradation due to edge effects where native habitats are removed to facilitate construction (refer to Section 9.3.1.2) would be similarly limited due to the low amount of suitable habitat present along the alignment. Edge effects may include changes to the microclimate due to increased exposure to sun and wind, incursion by nonnative, weedy plant species that alter the vegetation structure, and changes in the distribution and diversity of foraging plant species (for bumble bees) and prey species (for reptiles). These habitat alteration impacts would persist through operation of the facility; however, due to the limited areal extent, this is anticipated to constitute a less than significant impact. Further, indirect habitat degradation would be mitigated through the habitat restoration measures related to construction of Alternative 5.

For these reason, operations-related impacts to special-status invertebrates and reptiles are anticipated to be less than significant.

Special-Status Birds and Bats

Special-status birds (including those protected by the MBTA) and special-status bats shown in Table 3.3-1 would potentially be significantly impacted during operations and maintenance of Alternative 5 if nesting birds or roosting bats are present in trees and/or shrubs located at stations or within the MSF that require routine maintenance trimming. Adult birds and bats are highly mobile and are anticipated to be able to relocate away from maintenance trimming activities of their own volition; however, nests, eggs, and nestlings, and bat pups, would be injured, killed, or destroyed by maintenance activities if they are located in the vegetation slated for removal. Additionally, if breeding birds or bats are present in the adjacent areas, individuals may be subject to indirect impacts including exposure to noise, human presence, and dust, which would disrupt natural breeding behaviors such as incubation of eggs and feeding and care of young. In some cases, habitat changes due to vegetation removal would be sufficient to reduce protective cover, resulting in abandonment of nests and eggs.

Since Alternative 5 would be an underground alignment between the UCLA Gateway Plaza Station in the south and the tunnel portal east of Sepulveda Boulevard and south of Raymer Street, vegetation maintenance is not anticipated for this section. No impacts to special-status birds or bats from dust are anticipated during operation, since maintenance activities would primarily occur either underground in the tunnel segments, which are at sufficient depth to prevent these effects on the surface (a minimum

of 40 feet except as it transitions to the aerial segment), or within developed or paved areas at ground level.

Special-Status Mammals

Impacts to special-status bats are addressed above with special-status birds.

While mountain lions are present within the Alternative 4 RSA, the alignment is underground through the Santa Monica Mountains where suitable habitat is present and they are known to occur. Depth of the tunnel (ranging from 50 feet to 470 feet below ground surface for the Santa Monica Mountains segment) is anticipated to be sufficient to reduce or prevent indirect impacts at the surface from operations noise and vibration. Therefore, there are no significant impacts to mountain lions anticipated due to operations of Alternative 5.

Special-Status Plants

No impacts to special-status plants during operation, such as crushing or trampling of individuals during normal maintenance, or tree trimming for maintenance, are expected for this alternative since the majority of the Alternative 5 alignment is underground. At-grade maintenance work would occur within developed or paved areas. While one special-status plant, Nuttall's scrub oak (*Quercus dumosa*), has high potential to be present within the RSA in landscaping or within pockets of native vegetation in developed areas, the at-grade and aerial portion of Alternative 5 is located south of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor in a highly urbanized area. Tree species inventoried within the area are non-native ornamental species (Appendix B of the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* [Metro, 2025a]). Since Alternative 5 would be an underground alignment between the UCLA Gateway Plaza Station in the south and the tunnel portal east of Sepulveda Boulevard and south of Raymer Street, no significant impacts to special-status plants are expected during operation of Alternative 5.

MM BIO-1 and MM BIO-2, presented in Section 3.3.6, are included to reduce potentially significant operations-related impacts that would occur to nesting birds and roosting special-status bats from maintenance vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro. MM BIO-3 would reduce operational-related impacts to special-status trees from vegetation maintenance to less than significant through application of mitigation as determined in the applicable local ordinance or policy where the impact would occur. Therefore, with the implementation of MM BIO-1, MM BIO-2, and MM BIO-3, operational impacts of Alternative 5 on special-status species would be reduced to less than significant.

Construction Impacts

Impacts to vegetation within the Ground Disturbance Area have potential to affect sensitive vegetation communities, as well as special-status wildlife or plant species, both directly and through modifications to their habitat. Construction activities for Alternative 5 would result in significant impacts to special-status wildlife including nesting birds, special-status plant species, and sensitive vegetation communities if mitigation measures are not implemented. These potentially significant impacts include injury to or mortality of individuals, habitat loss due to permanent vegetation removal, behavioral or health modifications from noise pollution or exposure to fugitive dust from prolonged heavy equipment operation, and behavioral modifications extended human disturbances within species habitats during construction.

Since Alternative 5 is an underground alignment, Ground Disturbance Area is only present within station footprints, staging areas, the tunnel portal, the MSF, and the approximately 0.5-mile segment of aerial alignment from the tunnel portal into the MSF. Construction of the three tunnel segments would be underground except for launch and extraction sites located within stations or staging areas that are included in the Ground Disturbance Area. Clearing and grading of native vegetation would be required within the Ground Disturbance Area for construction of Alternative 5 components, including structural support beams for the guideway track, the tunnel portal, staging yards, the aerial HRT station, the MSF, and "cut-and-cover" construction for underground stations. While most of the vegetation that would be impacted consists of non-native and ornamental landscaping, some native vegetation is also present within the Ground Disturbance Area.

Other anticipated construction impacts related to the construction of Alternative 5 include the possibility of increased noise, dust, and vibration during at-grade impacts such as drilling of the aerial track support structures, "cut-and-cover" installation of the stations, and at the TBM launch and extraction locations for the tunnel excavation (launch sites at National Boulevard and Sepulveda Boulevard in the south, Ventura Station in the north, extraction site at the UCLA Gateway Plaza Station). While these areas are developed and therefore less likely for special-status species to be present, trees are present that provide potential habitat for special-status birds.

For construction of the underground tunnel, impacts of noise, dust, and vibration are not expected at surface levels due to tunnel depth except at the tunnel portal near the Metrolink ROW. Excessive noise generated from the drilling and heavy equipment operation would significantly disturb avian species and/or other special-status species who are dependent on auditory signals during essential daily activities. Vibration-related disturbance from drilling could also disrupt their normal behavioral patterns near the TBM launch and extraction sites; impacts through the Santa Monica Mountains are not anticipated due to tunnel depth. Construction-related dust (associated with construction of stations, vegetation clearing, grading, etc.) would significantly impact habitat quality by depositing on vegetation, which may reduce photosynthesis and increase leaf temperature, making vegetation more susceptible to drought (Farmer, 1993). Evaluation of the Project's impact on wildfire risk and occurrence is discussed in the wildfire chapter of the Safety and *Sepulveda Transit Corridor Project Safety and Security Technical Report* (Metro, 2025c).

Vegetation Communities/Land Cover Types and Sensitive Vegetation Communities

Direct impacts to vegetation communities would occur within the Ground Disturbance Area; acreages of temporary and permanent impacts to vegetation communities within Alternative 5 are detailed in in Table 3.3-7. Due to the sparse vegetation, lack of diversity, and continued anthropogenic disturbance, special-status species are less likely to be found in developed, agricultural, and ruderal land cover types. Approximately 86 percent (186.5 acres) of acreage for Alternative 5 planned for ground disturbing activities consists of developed, agricultural, and ruderal vegetation. Excluding these areas, construction of Alternative 5 is anticipated to result in 29.8 acres of temporary impacts are anticipated with construction of Alternative 5. Permanent impacts are anticipated to only occur in developed areas during construction of Alternative 5. Within the vegetated areas subject to impacts, approximately 10 percent (26.2 acres of temporary impacts) is California annual grassland. The only native vegetation community, coyote brush shrubland, within the Ground Disturbance Area represents just over 1 percent of the RSA, with 3.6 acres of temporary impacts. Indirect impacts to vegetation communities may also occur during construction activities. For example, fugitive dust deposition on foliage may reduce photosynthesis and increase plant vulnerability to drought. Additionally, vegetation removals may

increase edge effects, including incursion of nonnative, weedy plants that compete with natives for space and resources.

There are no sensitive vegetation communities within the Alternative 5 Ground Disturbance Area. However, one vegetation community has potential to be considered sensitive (** in Table 3.3-7) depending on the associated codominant species present (Sections 3.3.2.1 and 3.3.4.1). Up to an additional 3.6 acres of coyote brush scrubland, a potentially sensitive community, is located within potential off-site staging yard N2 at the western end of the Sepulveda Basin. For this analysis, Metro is conservatively considering impacts to these communities to be significant pending further analysis and refinement of vegetating mapping.

The removal and degradation of native and sensitive vegetation communities would constitute potentially significant impacts.

Table 3.3-7. Alternative 5: Impacts on Land Cover Types and Vegetation Communities

Vegetation Community/Land Cover Type [a]	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Impacts (acres) [b]	Percent of Total Project Impacts
Developed	86.9	28.1	115.0	53.1
Agricultural Land	0	65.8	65.8	30.4
Ruderal	0	5.7	5.7	2.7
Developed, Agricultural, Ruderal Total	**86.9**	**99.7**	**186.5**	**86.2**
California Annual Grassland	0	26.2	26.2	12.1
Coyote Brush Shrubland**	0	3.6	3.6	1.7
Vegetation Total	**0**	**29.8**	**29.8**	**13.8**
GRAND TOTAL	**86.9**	**129.5**	**216.3**	**100.0**

Source: Metro, 2025a

[a]Vegetation communities based on the classifications provided in *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009).

[b]Inconsistencies in calculations due to rounding.

**Potential sensitive vegetation community based on codominant species on-site.

Special-Status Invertebrates

One special-status invertebrate, Crotch's bumble bee, has potential to be present within the Alternative 5 RSA during construction activities. Despite having a relatively narrow range, this species is known to occupy a wide variety of natural and disturbed habitat for nesting and foraging and could be present throughout the RSA in undeveloped areas where pavement is not present and the earth is not regularly maintained through grading, tilling or planting. Based on their broad range of suitable habitat and generalist foraging behavior, Crotch's bumble bee is likely to forage throughout the RSA where preferred flowering plants are present (e.g., native sage species [*Salvia* spp.], milkweeds [*Asclepias* spp.], and plants within the pea family [*Fabaceae*]) and may nest where abandoned rodent burrows are present.

Individuals in occupied burrow nests or overwintering queens in surface soils would be crushed or trapped during construction if present within the Ground Disturbance Area. Additionally, foraging Individuals also would be injured or killed if they are foraging during vegetation clearing activities. This species would also be impacted by the removal of nectar sources and nests in the Ground Disturbance Area resulting from construction of Alternative 5 features including cut-and-cover construction

associated with tunnel portal transition to aerial guideway, stations, and construction staging locations. Ground-disturbing impacts from grading and vegetation clearing throughout the RSA would impact individuals and would likely result in loss of suitable habitat that would be used for nesting, breeding, sheltering, and/or foraging for Crotch's bumble bee.

The loss of individual Crotch's bumble bees and suitable habitat for this species would constitute a significant impact.

Special-Status Reptiles

Three special-status reptiles are known to occur and two have a high or moderate potential to occur within the Alternative 5 RSA; individuals of these species may be present during construction activities. Reptiles present during construction activities would be directly injured or killed due to collisions with vehicles and equipment or during vegetation clearing activities. Species that shelter in burrows or under debris would be entrapped and suffocate or be crushed during grading activities; buried nests would similarly be crushed or destroyed. Additionally, if individuals become entrapped in open trenches or excavations during construction activities, they would be subject to injury or mortality due to dehydration, opportunistic predation, inability to properly thermoregulate, starvation, or other causes associated with constrained movement. Indirect impacts would include disruption of normal feeding, basking, sheltering, and breeding behaviors due to avoidance of excessive noise and vibration, fugitive dust, and increased human presence. Normal movement patterns throughout a home range also may be disrupted temporarily by avoidance of areas adjacent to construction activities, or permanently by habitat structure modifications. During construction, special-status reptiles also may be subject to higher predation rates by opportunistic predators such as common ravens (*Corvus corax*), coyote, or skunk, that would be attracted to work areas if food debris is present.

Two of the species, southwestern pond turtle and two-striped garter snake, are most likely to occur near aquatic resources such as the ponds in the Sepulveda Basin. Since aquatic resources are limited in Alternative 5 and the alignment is underground adjacent to Sepulveda Basin, impacts to these two species are expected to be less than significant.

- Southwestern pond turtle (*Actinemys pallida,* federal candidate for listing)
- Two-striped garter snake (*Thamnophis hammondii*, SSC)

Based on habitat requirements, the remaining three species are most likely to be found in the Sepulveda Pass and Santa Monica Mountains. However, a broad range of acceptable habitats would result in potentially significant impacts in locations with ground disturbance. The clearing of vegetation would result in injury or mortality of individuals, disruptions of natural behaviors, and loss of suitable habitat that would be used for nesting, breeding, sheltering, and/or foraging for the following three special-status reptiles:

- Southern California legless lizard (*Anniella stebbinsi*, SSC)
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC)
- Coast horned lizard (*Phrynosoma blainvillii*, SSC)

The loss of individuals and suitable habiting for these special-status species would constitute a significant impact.

Special-Status Birds

One special-status bird species was identified as present and eight have high potential to occur within the Alternative 5 RSA. Based on habitat requirements for these nine species, they are likely to be found

throughout the RSA in transit, resting and/or foraging from the Los Angeles National Cemetery in the south to the Sepulveda Basin in the north. Birds in transit are unlikely to be affected by construction activities; adults are highly mobile and can be expected to relocate away from construction activities of their own volition. However, migratory individuals may experience temporary or permanent loss of transitory habitat. If overwintering burrowing owls are present, individuals would be entrapped and suffocate or be crushed if burrows are present in the work areas during grading and vegetation removal. Additionally, grading would result in loss of suitable wintering burrows for migratory burrowing owls. If native birds breeding within or adjacent to work areas, nests, eggs, and nestlings would be vulnerable to destruction, injury, or mortality if they are present during vegetation clearing and other construction activities. Ground nests may be vulnerable to crushing, trampling, or destruction by pedestrians and vehicles. Nests in adjacent areas also may be exposed to noise, fugitive dust, human presence, and vibration that would disrupt natural breeding behaviors including incubation of eggs and care and feeding of young; these disruptions would result in failure of a nest to successful produce young. Excessive disruption, or substantial changes in habitat during the nesting period, would also result in abandonment of nest sites, eggs, or young. Further, impacts associated with clearing and grading of vegetation adjacent to I-405 would likely result in loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for the following nine special-status avian species and nesting birds protected under the MBTA:

- Tricolored blackbird (*Agelaius tricolor*, state threatened and SSC)
- Burrowing owl (*Athene cunicularia*, state candidate and SSC)
- Swainson's hawk (*Buteo swainsoni*, state threatened)
- Northern harrier (*Circus hudsonius*, SSC)
- Olive-sided flycatcher (*Contopus cooperi*, SSC)
- Bald eagle (*Haliaeetus leucocephalus*, state endangeed and fully protected)
- Loggerhead shrike (*Lanius ludovicianus*, SSC)
- Vermilion flycatcher (*Pyrocephalus obscurus*, SSC)
- Least Bell's vireo (*Vireo bellii pusillus*, FE and SE)

The loss of nests, eggs, or nestlings, impacts to natural breeding behaviors, eviction from wintering burrows, and loss of suitable habiting for these special-status species would constitute a significant impact.

Special-Status Mammals

Three special-status mammals were identified as present within the Alternative 5 RSA, including mountain lion, silver-haired bat, and hoary bat. Mountain lions are known to occur within the Santa Monica Mountains, while the silver-haired and hoary bat have broader habitat requirements and have potential to forage in both natural and developed habitats. Within the Sepulveda Pass and Santa Monica Mountains, special-status mammals would occur in or proximate to work areas along I-405. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway. Within the developed northern and southern ends of the projects, special-status bats would be present in ornamental street trees or on existing infrastructure, such as bridges and buildings. Individuals may be subject to injury or mortality if they are present as roosting adults during vegetation clearing activities. Roosting adults also may be disturbed by construction-related noise and vibration, causing them to flee roosts during daylight hours. Maternal roosts would also be vulnerable to injury or mortality if present, as pups are unable to take flight and would be likely to be killed if present. Suitable foraging, sheltering,

and roosting habitats have potential to be removed during vegetation clearing and grading, or temporarily impacts by construction noise, fugitive dust, and increased human presence. Nighttime construction lighting also may impact foraging habitat by attracting prey species, which may attract some bat species and repel others.

Individual larger mammals, including mountain lions, are unlikely to be directly impacted by construction activities as they are highly mobile and can be anticipated to relocate away from work areas of their own volition. Individuals are not likely to be vulnerable to collisions with slower moving construction equipment and vehicles. However, natural foraging, sheltering, and breeding behaviors may be disrupted by construction activities, both temporarily through avoidance of areas with construction-related noise, human presence, vibration, and fugitive dust, and permanently through changes in habitat due to vegetation clearing and grading.

The clearing of vegetation in the Sepulveda Pass and along city streets and demolition of structures with suitable roosts would also likely result in loss of suitable habitat that would be used for roosting, breeding, shelter, and/or foraging for the following three special-status mammals:

- Mountain lion (*Puma concolor*, state candidate for listing)
- Silver-haired bat (*Lasionycteris noctivagans*, WBWG Medium priority)
- Hoary bat (*Lasiurus cinereus*, WBWG Medium priority)

Specifically for mountain lion, Alternative 5 is unlikely to result in significant impacts to suitable habitat due to the small size and linear nature of the clearing and grading activities in comparison to the species large home range size. The construction and operation of Alternative 5 is unlikely to significantly impact mountain lion movement and usage of wildlife corridors based on the underground configuration without associated ground-disturbance activities through the Santa Monica Mountains from UCLA Gateway Plaza Station in the south until the tunnel portal east of Sepulveda Boulevard and south of Raymer Street.

The loss of suitable habitat for silver-haired bats and hoary bats would constitute a significant impact.

Special-Status Plants

Six special-status plant species were identified with medium or high potential to occur within the Alternative 5 RSA; none were present. Based on habitat requirements for these six species, they are most likely to occur in chaparral and/or coastal sage scrub, which occurs on the Project in the Sepulveda Pass and would be in or proximate to work areas along I-405 in the Santa Monica Mountains. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway. Clearing and grading of vegetation would also be required for construction of the structural support beams for the guideway track, staging yards, TPSSs, and aerial MRT stations; although vegetation to be impacted is largely non-native and/or ornamental landscaping, native vegetation is also present. If individuals are present during clearing and grading activities, special status plants would be subject to trampling, crushing, and removal. Individuals present in adjacent areas may be exposed to fugitive dust, which can settle on vegetation and interrupt natural photosynthesis. Following vegetation clearing, adjacent areas also may be subject to edge effects including higher exposure to sun, dust, and wind, and incursion by nonnative, weedy species, which can increase competition for space and resources and decrease habitat value for special-status plants.

The clearing of vegetation in the Sepulveda Pass would likely result in loss of suitable habitat for the following special-status plant species:

- Braunton's milk-vetch (*Astragalus brauntonii*, federally endangered, CRPR 1B.1)
- Slender mariposa lily (*Calochortus clavatus* var. *gracilis*, CRPR 1B.2)
- Davidson's bushmallow (*Malacothamnus davidsonii*, CRPR 1B.2)
- Chaparral nolina (*Nolina cismontana*, CRPR 1B.2)
- Nuttall's scrub oak (*Quercus dumosa*, CRPR 1B.1)
- Sanford's arrowhead (*Sagittaria sanfordii*, CRPR 1B.2)

Further detail on each species' potential to occur in the Alternative 5 RSA is provided in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

The loss of individuals or suitable habitat for these special-status plants would constitute a significant impact.

As described in Section 3.3.6, mitigation measures would be implemented to reduce construction-related impacts to special-status plant and wildlife species and their habitats to less than significant through establishment of survey and monitoring requirements (MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-17, MM BIO-29); monitoring of bird nests and determination if no-disturbance buffers require adjustments (such as due to noise from construction activities) (MM BIO-4); education and training of personnel about Project 's biological concerns and requirements (MM BIO-18); establishment and demarcation of Environmentally Sensitive Areas (MM BIO-16); and creation of a habitat restoration plan (MM BIO-10).

General construction measures to protect special-status species include protection from wildfire (MM BIO-19), domestic pets (MM BIO-20), night lighting (MM BIO-22), invasive plants (MM BIO-23), entrapment (MM BIO-26), vehicular collisions (MM BIO-25), dust (MM BIO-24), and construction-related trash (MM BIO-27).

Alternative 6

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

The potential for operational impacts such as injury or mortality due to collisions with vehicles, behavioral and habitat usage modifications due to exposure to noise and vibration from passing trains, habitat degradation due to edge effects, and impacts on movement due to infrastructure are limited for most wildlife species for Alternative 6 due to its underground alignment. Anticipated impacts are described below.

Special-Status Invertebrates and Reptiles

Special-status invertebrates, such as Crotch's bumble bee, and reptiles that may occur in surface habitats over the alignment are not anticipated to be subject to operation-associated direct impacts, as the depth of the tunnel is anticipated to be sufficient for buffer noise and vibration associated with train operation and maintenance from the surface. Maintenance activities similarly would occur in underground areas.

However, special-status invertebrates and reptiles may be subject to permanent habitat loss at the mid-mountain facility, as described below under construction-related impacts, and habitat degradation due to edge effects around the facility. Edge effects may include changes to the microclimate due to

increased exposure to sun and wind, incursion by nonnative, weedy plant species that alter the vegetation structure, and changes in the distribution and diversity of foraging plant species (for bumble bees) and prey species (for reptiles). These habitat alteration impacts would persist through operation of the facility; however, due to the limited areal extent, this is anticipated to constitute a less than significant impact. Further, indirect habitat degradation would be mitigated through the habitat restoration measures related to construction of Alternative 6.

For these reason, operations-related impacts to special-status invertebrates and reptiles are anticipated to be less than significant.

Special-Status Birds and Bats

Special-status birds (including those protected by the MBTA) and special-status bats listed in Table 3.3-1 have potential to be significantly impacted during operation and maintenance of Alternative 6 if nesting birds or roosting bats are present in trees and/or shrubs located within the Alternative 6 RSA that require routine maintenance trimming. Adult birds and bats are highly mobile and are anticipated to be able to relocate away from maintenance trimming activities of their own volition; however, nests, eggs, and nestlings, and bat pups, would be injured, killed, or destroyed by maintenance activities if they are located in the vegetation slated for removal. Additionally, if breeding birds or bats are present in the adjacent areas, individuals may be subject to indirect impacts including exposure to noise, human presence, and dust, which would disrupt natural breeding behaviors such as incubation of eggs and feeding and care of young. In some cases, habitat changes due to vegetation removal would be sufficient to reduce protective cover, resulting in abandonment of nests and eggs.

Since Alternative 6 would be an underground alignment, only the mid-mountain facility and access road location have potential to impact special-status birds and bats during vegetation maintenance for operation of Alternative 6; impacts are expected to be less than significant.

Special-Status Mammals

Impacts to special-status bats are addressed above with special-status birds.

Specifically for mountain lions, direct significant impacts from collisions are not anticipated for Alternative 6 since the alignment is underground through the Santa Monica Mountains where suitable habitat is present and they are known to occur. The depth of the tunnel (ranging from 120 feet to 730 feet below ground surface for the Santa Monica Mountains segment) is anticipated to be sufficient to reduce or prevent indirect impacts at the surface from operations noise and vibration. Within Alternative 6, 19 percent (24.7 acres) of the total impacts are within non-developed natural areas in the Santa Monica Mountains (i.e., suitable habitat for mountain lion); the remaining acreage is either in urban areas within the mountain range or outside of the mountains. Within suitable mountain lion habitat in the Santa Monica Mountains, impacts that have potential to be significant are limited to the mid-mountain facility where they are fairly evenly split between temporary (44 percent of suitable mountain lion habitat impacts, 10.8 acres) and permanent impacts (56 percent of suitable mountain lion habitat impacts; 13.9 acres). Habitat reductions of this size adjacent to an impermeable highway are anticipated to be less than significant for mountain lions to survive or recover in the wild. Impacts to mountain lion habitat that would affect movement and connectivity within the Santa Monica Mountains is discussed in Section 3.3.5.4. The operation of Alternative 6, specifically permanent impacts associated with the mid-mountain ventilation shaft, has the potential to significantly impact mountain lion movement and usage of wildlife corridors through disruption of previously continuous habitat.

Therefore, there are no significant impacts to mountain lion associated with operation of Alternative 4.

Special-Status Plants

Impacts to special-status plants during operation, such as crushing or trampling of individual plants during normal maintenance, or tree trimming for maintenance, are expected to be less than significant since the majority of the Alternative 6 alignment is underground. Potential significant impacts would be limited to maintenance operations at the mid-mountain facility, although maintenance work would occur predominantly within developed or paved areas where special-status plants are not likely to occur. One special-status plant, Nuttall's scrub oak (*Quercus dumosa*), has potential to be present within the RSA in the Santa Monica Mountains and has potential to be significantly impacted by dust and/or routine maintenance trimming at the mid-mountain facility or along the access road at Stone Canyon Reservoir. If present, Nuttall's scrub oak would potentially be impacted by required routine maintenance trimming. Impacts are anticipated to be less than significant since vegetation maintenance at the mid-mountain facility, the only at-grade component within the Santa Monica Mountains, would be minimal for operation of Alternative 6.

MM BIO-1 and MM BIO-2, presented in Section 3.3.6, are included to reduce potentially significant operations-related impacts to nesting birds and roosting special-status bats from maintenance vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro. MM BIO-3 would reduce operational-related impacts to special-status trees from vegetation maintenance to less than significant through application of mitigation as determined in the applicable local ordinance or policy where the impact would occur. Therefore, with the implementation of MM BIO-1, MM BIO-2, and MM BIO-3, operational impacts of Alternative 6 on special-status species would be reduced to a less than significant level.

Construction Impacts

Construction of Alternative 6 have potential for localized, temporary impacts on special-status wildlife or plant species and sensitive vegetation communities both directly and through modifications to suitable habitat during construction of stations, staging areas, the mid-mountain facility, and the MSF. Construction activities for Alternative 6 would result in significant impacts to special-status wildlife including nesting birds, special-status plant species, and sensitive vegetation communities if mitigation measures are not implemented. These potentially significant impacts include injury to or mortality of individuals, habitat loss due to permanent vegetation removal, behavioral or health modifications from noise pollution or exposure to fugitive dust from prolonged heavy equipment operation, and behavioral modifications extended human disturbances within species habitats during construction.

Since Alternative 6 is an underground alignment, Ground Disturbance Area is only present within the station footprints, staging areas, the MSF, and the mid-mountain facility and associated access road; clearing and grading of native vegetation would be required for construction of these components. Construction of the three tunnel segments would be underground except for the launch and extraction sites within stations or staging areas that are included in the Ground Disturbance Area. Native vegetation is concentrated around the mid-mountain facility; vegetation elsewhere within the Ground Disturbance Area is predominantly non-native and/or ornamental landscaping within developed areas, although native vegetation could be present in remnant patches. If required mitigation measures are not enacted, Alternative 6 would result in a potentially significant impact to special-status plant and wildlife species, including nesting birds, as a result of construction activities. Potential impacts include habitat loss from permanent vegetation removal activities, noise pollution from prolonged heavy

equipment operation, and prolonged human-induced disturbances associated with the construction for Alternative 6.

Other anticipated construction impacts related to the construction of Alternative 6 include the possibility of increased noise, dust, and vibration during at-grade impacts such as "cut-and-cover" installation of the stations, clearing and grading at the mid-mountain facility and associated access road, and at the TBM launch and extraction locations for the tunnel excavation (launch sites at Metro E Line Station, Ventura Station, and Van Nuys Metrolink Station in the north, extraction sites at the UCLA Gateway Plaza Station and Ventura Station). While these areas are developed and therefore less likely for special-status species to be present, trees are present that provide potential habitat for special-status birds.

For construction of the underground tunnel, impacts of noise, dust, and vibration are not expected at surface levels except at the tunnel portal near the Metrolink ROW, which is a developed area already subject to disturbances. Excessive noise generated by heavy equipment operation could significantly disturb avian species and/or other special-status species who are dependent on auditory signals during essential daily activities. Vibration related disturbance from drilling could also disrupt their normal behavioral patterns near the TBM launch and extraction sites; impacts through the Santa Monica Mountains are not anticipated due to tunnel depth. Construction-related dust (associated with construction of stations, vegetation clearing, grading, etc.) would significantly impact habitat quality by depositing on vegetation, which may reduce photosynthesis and increase leaf temperature, making vegetation more susceptible to drought (Farmer, 1993). Evaluation of the Project's impact on wildfire risk and occurrence is discussed in the wildfire chapter of the *Sepulveda Transit Corridor Project Safety and Security Technical Report* (Metro, 2025c).

Vegetation Communities/Land Cover Types and Sensitive Vegetation Communities

Direct impacts to vegetation communities would occur within the Ground Disturbance Area; acreages of temporary and permanent impacts to vegetation communities within Alternative 6 are detailed in Table 3.3-8. Due to the sparse vegetation, lack of diversity, and continued anthropogenic disturbance, special-status species are less likely to be found in developed land cover types. Approximately 81 percent (106.7 acres) of the acreage in Alternative 6 planned for ground disturbing activities consists of developed or undifferentiated artificial cuts/embankments. Excluding these developed areas, construction of Alternative 6 is anticipated to result in 10.2 acres of temporary impacts and 23.4 acres of permanent impacts are anticipated from the construction of Alternative 6. Within the vegetated areas subject to impacts, approximately 3 percent (4.1 acres of temporary impacts) is California annual grassland. The remaining vegetation communities are native vegetation in nine communities that represent approximately 15 percent (19.3 acres) of the impacts, of which 11.1 acres are anticipated to be permanently impacted and 8.0 acres are anticipated to be temporarily impacted from construction of Alternative 6. Indirect impacts to vegetation communities may also occur during construction activities. For example, fugitive dust deposition on foliage may reduce photosynthesis and increase plant vulnerability to drought. Additionally, vegetation removals may increase edge effects, including incursion of nonnative, weedy plants that compete with natives for space and resources.

One sensitive vegetation community, California walnut woodland, represents 12.0 acres that would be permanently and temporarily impacted from clearing and grading of native vegetation at the mid-mountain facility by Stone Canyon Reservoir. An additional five vegetation communities have potential to be considered sensitive (** in Table 3.3-8) depending upon the associated codominant plants present (Sections 3.3.2.1and 3.3.4.1). Up to an additional 5.6 acres of potentially sensitive communities would

be impacted at the mid-mountain facility. For this analysis, Metro is conservatively considering impacts to these communities to be significant pending further analysis and refinement of vegetating mapping.

The removal and degradation of native and sensitive vegetation communities would constitute potentially significant impacts.

Table 3.3-8. Alternative 6: Impacts on Land Cover Types and Vegetation Communities

Vegetation Community/Land Cover Type [a]	Permanent Impacts (acres)	Temporary Impacts (acres)	Total Impacts (acres) [b]	Percent of Total Project Impacts
Developed	83.8	22.9	106.7	81.0
Developed Total	**83.8**	**22.9**	**106.7**	**81.0**
California Walnut Woodland*	7.6	4.4	12.0	9.2
California Annual Grassland	1.9	2.2	4.1	3.2
Black Sage Shrubland**	1.5	2.6	4.1	3.1
Undifferentiated Vegetation - Artificial cuts/Embankments	0.7	0.7	1.4	1.0
Ceanothus Chaparral	0.7	0.1	0.8	0.6
California Sagebrush-California Buckwheat Shrubland**	0.4	0.3	0.7	0.6
Coast Live Oak Woodland	0.5	0.1	0.6	0.4
Coyote Brush Shrubland**	0.2	0.4	0.5	0.4
Chamise-Black Sage Shrubland	0.2	0	0.2	0.2
Undifferentiated Chaparral Shrubland**	0.2	0	0.2	0.1
California Encelia Shrubland**	0.1	0	0.1	0.1
Total excluding Developed	**13.9**	**10.8**	**24.7**	**19.0**
GRAND TOTAL	**97.7**	**33.7**	**131.4**	**100.0**

Sources: Metro, 2025a

[a]Vegetation communities based on the classifications provided in *A Manual of California Vegetation*, 2nd Edition (Sawyer et al., 2009).

[b]Inconsistencies in calculations due to rounding.

*Sensitive vegetation community
**Potential sensitive vegetation community based on codominant species on-site.

Special-Status Invertebrates

One special-status invertebrate, Crotch's bumble bee, has potential to be present within the Alternative 6 RSA during construction activities. Despite having a relatively narrow range, this species is known to use a wide variety of natural and disturbed habitat for nesting and foraging and could be present throughout the RSA in undeveloped areas where pavement is not present and the earth is not regularly maintained through grading, tilling or planting. Based on their broad range of suitable habitat and generalist foraging behavior, Crotch's bumble bee are likely to forage throughout the RSA where preferred flowering plants are present (e.g., native sage species (*Salvia* spp.), milkweeds (*Asclepias* spp.), and plants within the pea family (*Fabaceae*) and may nest where abandoned rodent burrows are present.

Individuals in occupied burrow nests or overwintering queens in surface soils would be crushed or trapped during construction if present within the Ground Disturbance Area. Additionally, foraging Individuals also would be injured or killed if they are foraging during vegetation clearing activities. This

species would also be impacted by the removal of nectar sources and nests in the Ground Disturbance Area resulting from construction of Alternative 6 features, including the mid-mountain vent shaft and access road (Stone Canyon Reservoir) and TPSS site 5. Ground-disturbing impacts from grading and vegetation clearing throughout the RSA would impact individuals and would likely result in loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for Crotch's bumblebee; this is considered a significant impact.

The loss of individual Crotch's bumble bees and suitable habitat for this species suitable habitat for Crotch's bumble bee would constitute a significant impact.

Special-Status Reptiles

Three special-status reptiles are known to occur and two have a high or moderate potential to occur within the Alternative 6 RSA; individuals of these species may be present during construction activities. Reptiles present during construction activities would be directly injured or killed due to collisions with vehicles and equipment or during vegetation clearing activities. Species that shelter in burrows or under debris would be entrapped and suffocate or be crushed during grading activities; buried nests would be similar crushed or destroyed. Additionally, if individuals become entrapped in open trenches or excavations during construction activities, they would be subject to injury or mortality due to dehydration, opportunistic predation, inability to properly thermoregulate, starvation, or other causes associated with constrained movement. Indirect impacts would include disruption of normal feeding, basking, sheltering, and breeding behaviors due to avoidance of excessive noise and vibration, fugitive dust, and increased human presence. Normal movement patterns throughout a home range also may be disrupted temporarily by avoidance of areas adjacent to construction activities, or permanently by habitat structure modifications. During construction, special-status reptiles also may be subject to higher predation rates by opportunistic predators such as common ravens (*Corvus corax*), coyote, or skunk, that would be attracted to work areas if food debris is present.

Two of the species, southwestern pond turtle and two-striped garter snake, are most likely to occur near aquatic resources such as the Stone Canyon Reservoir. Based on habitat requirements, the remaining three are most likely to be found in the Santa Monica Mountains. Individuals would be found in or proximate to the mid-mountain facility in the Santa Monica Mountains. Construction of the facility would involve clearing and grading of native vegetation adjacent to the reservoir. The clearing of vegetation in the Santa Monica Mountains would likely result in injury or mortality of individuals, disruptions of natural behaviors, and loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for the following five special-status reptiles:

- Southwestern pond turtle (*Actinemys pallida,* federal candidate for listing)
- Southern California legless lizard (*Anniella stebbinsi*, SSC)
- Coastal whiptail (*Aspidoscelis tigris stejnegeri,* SSC)
- Coast horned lizard (*Phrynosoma blainvillii*, SSC)
- Two-striped garter snake (*Thamnophis hammondii*, SSC)

The loss of individuals and suitable habiting for these special-status species would constitute a significant impact.

Special-Status Birds

Eight special-status bird species have a high or moderate potential to occur within the Alternative 6 RSA; none were present. Based on habitat requirements for these eight species, they are likely to be found throughout the RSA in transit, resting and/or foraging from the UCLA campus in the south to the

centrally located Stone Canyon Reservoir. Birds in transit are unlikely to be affected by construction activities; adults are highly mobile and can be expected to relocate away from construction activities of their own volition. However, migratory individuals may experience temporary or permanent loss of transitory habitat. If overwintering burrowing owls are present, individuals would be entrapped and suffocate or be crushed if burrows are present in the work areas during grading and vegetation removal. Additionally, grading would result in loss of suitable wintering burrows for migratory burrowing owls. If native birds breeding within or adjacent to work areas, nests, eggs, and nestlings would be vulnerable to destruction, injury, or mortality if they are present during vegetation clearing and other construction activities. Ground nests may be vulnerable to crushing, trampling, or destruction by pedestrians and vehicles. Nests in adjacent areas also may be exposed to noise, fugitive dust, human presence, and vibration that would disrupt natural breeding behaviors including incubation of eggs and care and feeding of young; these disruptions would result in failure of a nest to successful produce young. Excessive disruption, or substantial changes in habitat during the nesting period, would also result in abandonment of nest sites, eggs, or young. Further, impacts associated with clearing and grading of vegetation for the mid-mountain facility would likely result in loss of suitable habitat that would be used for nesting, breeding, shelter, and/or foraging for the following eight special-status avian species and nesting birds protected under the MBTA:

- Tricolored blackbird (*Agelaius tricolor*, state threatened and SSC)
- Burrowing owl (*Athene cunicularia*, state candidate and SSC)
- Swainson's hawk (*Buteo swainsoni*, state threatened)
- Northern harrier (*Circus hudsonius*, SSC)
- Olive-sided flycatcher (*Contopus cooperi*, SSC)
- Bald eagle (*Haliaeetus leucocephalus*, state endangered and fully protected)
- Loggerhead shrike (*Lanius ludovicianus*, SSC)
- Vermilion flycatcher (*Pyrocephalus obscurus*, SSC)

- The loss of nests, eggs, or nestlings, impacts to natural breeding behaviors, eviction from wintering burrows, and loss of suitable habiting for these special-status species would constitute a significant impact.

Special-Status Mammals

Three special-status mammals were identified as present within the Alternative 6 RSA. Mountain lions are known to occur within the Santa Monica Mountains, while the silver-haired and hoary bat have broader habitat requirements and have potential to forage in both natural and developed habitats. Within the Santa Monica Mountains, special-status mammals would occur in or proximate to work areas with ground disturbing activities. Impacts from installation of the mid-mountain facility would include clearing and grading of native vegetation.

Within the developed northern and southern ends of the projects, special-status bats would be present in ornamental street trees or on existing infrastructure, such as bridges and buildings. Individuals may be subject to injury or mortality if they are present as roosting adults during vegetation clearing activities. Roosting adults also may be disturbed by construction-related noise and vibration, causing them to flee roosts during daylight hours. Maternal roosts would also be vulnerable to injury or mortality if present, as pups are unable to take flight and would be likely to be killed if present. Suitable foraging, sheltering, and roosting habitats have potential to be removed during vegetation clearing and grading, or temporarily impacts by construction noise, fugitive dust, and increased human presence.

Nighttime construction lighting also may impact foraging habitat by attracting prey species, which may attract some bat species and repel others.

Individual larger mammals, including mountain lions, are unlikely to be directly impacted by construction activities as they are highly mobile and can be anticipated to relocate away from work areas of their own volition. Individuals are not likely to be vulnerable to collisions with slower moving construction equipment and vehicles. However, natural foraging, sheltering, and breeding behaviors may be disrupted by construction activities, both temporarily through avoidance of areas with construction-related noise, human presence, vibration, and fugitive dust, and permanently through changes in habitat due to vegetation clearing and grading.

The clearing of vegetation in the Santa Monica Mountains and along city streets, and the demolition of structures with suitable roosts would likely result in loss of suitable habitat that would be used for roosting, breeding, sheltering, and/or foraging for the following 3 special-status mammals:

- Mountain lion (*Puma concolor*, state candidate for listing)
- Silver-haired bat (*Lasionycteris noctivagans*, WBWG Medium priority)
- Hoary bat (*Lasiurus cinereus*, WBWG Medium priority)

Specifically for mountain lion, Alternative 6 is unlikely to result in a significant impact to suitable habitat due to the small size and linear nature of the clearing and grading activities in comparison to the species' large home range size. The construction and operation of Alternative 6, specifically temporary and permanent impacts associated with the mid-mountain facility and access roads, has the potential to result in a significant impact to mountain lion movement and usage of wildlife corridors through disruption of previously continuous habitat.

The loss of individuals and loss of suitable habitat for silver-haired bats and hoary bats would constitute a significant impact.

Special-Status Plants

Five special-status plant species were identified with medium or high potential to occur within the Alternative 6 RSA; none were present. Based on habitat requirements, these five species are most likely to occur in chaparral and/or coastal sage scrub which occurs on the Project in the Sepulveda Pass and would be in or proximate to work areas along I-405 in the Santa Monica Mountains. Impacts from roadway realignment along I-405 into existing hillsides between Sunset Boulevard and Mulholland Drive would include clearing and grading of native vegetation adjacent to the freeway. Clearing and grading of vegetation would also be required for construction of the structural support beams for the guideway track, staging yards, TPSSs, and aerial MRT stations; although vegetation to be impacted is largely non-native and/or ornamental landscaping, native vegetation is also present. If individuals are present during clearing and grading activities, special-status plants would be subject to trampling, crushing, and removal. Individuals present in adjacent areas may be exposed to fugitive dust, which can settle on vegetation and interrupt natural photosynthesis. Following vegetation clearing, adjacent areas also may be subject to edge effects including higher exposure to sun, dust, and wind, and incursion by nonnative, weedy species, which can increase competition for space and resources and decrease habitat value for special-status plants.

The clearing of vegetation in the Sepulveda Pass would likely result in loss of suitable habitat for the following special-status plant species:

- Braunton's milk-vetch (*Astragalus brauntonii*, federally endangered, CRPR 1B.1)

- Slender mariposa lily (*Calochortus clavatus* var. *gracilis*, CRPR 1B.2)
- Davidson's bushmallow (*Malacothamnus davidsonii*, CRPR 1B.2)
- Chaparral nolina (*Nolina cismontana*, CRPR 1B.2)
- Nuttall's scrub oak (*Quercus dumosa*, CRPR 1B.1)

Further detail on each species' potential to occur in the Alternative 6 RSA is provided in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a).

The loss of individuals or suitable habitat for these special-status plants would constitute a significant impact.

As described in Section 3.3.6, mitigation measures would be implemented to reduce construction-related impacts to special-status plant and wildlife species and their habitats to less than significant through establishment of survey and monitoring requirements (MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-17, MM BIO-29); monitoring of bird nests and determination if no-disturbance buffers require adjustments (such as due to noise from construction activities) (MM BIO-4); education and training of personnel about Project 's biological concerns and requirements (MM BIO-18); and creation of a habitat restoration plan (MM BIO-10).

Maintenance and Storage Facilities

Monorail Transit Maintenance and Storage Facility Base Design (Alternatives 1 and 3)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Maintenance of the monorail vehicles and equipment would occur at the MSF Base Design and may occasionally require routine maintenance trimming of ornamental trees and shrubs located within the MSF Base Design. Suitable habitat for special-status plant species and most special-status wildlife species is not present; therefore, no operational impacts are anticipated. However, the Project has potential to result in significant impacts to bats and MBTA-protected nesting birds through disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites due to noise, vibration, and human presence during maintenance activities. MM BIO-1 and MM BIO-2, presented in Section 3.3.6, are included to reduce operations-related impacts from vegetation trimming to nesting birds and special-status bats to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro.

The MSF Base Design for Alternative 1 would be on developed property at the Los Angeles Department of Water and Power (LADWP) facility, located east of the Van Nuys Metrolink Station and directly south of the LOSSAN rail corridor; no habitat modifications or removal would be required for the construction of the MSF. No impacts to special-status plant species would result from the construction of the MSF since suitable habitat is not present. Roosting bats and MBTA-protected nesting birds do have potential to be impacted during construction of the MSF Base Design if ornamental trees and/or shrubs located within the Ground Disturbance Area of the MSF Base Design are trimmed or removed; this would be a potential significant impact. Impacts may include disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting

sites in adjacent areas due to noise, vibration, and human presence. MM BIO-4 and MM BIO-5, included in Section 3.3.6, are specified to reduce construction-related impacts related to vegetation removal to nesting birds and special-status bats to less than significant by requiring pre-activity surveys for nesting birds and roosting bats during the relevant seasons, and implementing no-disturbance buffers as relevant.

Monorail Transit Maintenance and Storage Facility Design Option 1 (Alternatives 1 and 3)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Maintenance of the monorail vehicles and equipment would occur at the MSF Design Option 1 and may occasionally require maintenance trimming of ornamental trees and shrubs located within the MSF Design Option 1. Suitable habitat for special-status plant species and most special-status wildlife species is not present; therefore, no operational impacts are anticipated. However, the Project has potential to result in significant impacts to bats and MBTA-protected nesting birds through disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites due to noise, vibration, and human presence during maintenance activities. MM BIO-1 and MM BIO-2, presented in Section 3.3.6, are included to reduce operations-related impacts to nesting birds and special-status bats from vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro.

The MSF Design Option 1 for Alternative 1 would be located on developed property abutting Orion Avenue, south of the LOSSAN rail corridor; no habitat modification or removal would be required for the construction of the MSF Design Option 1. No impacts to special-status plant species would result from the construction of the MSF Design Option 1 since suitable habitat is not present. Roosting bats and MBTA-protected nesting birds have potential to be impacted during construction of the MSF if ornamental trees and/or shrubs located within the Ground Disturbance Area of the MSF are trimmed or removed. This would be a potential significant impact. Impacts may include disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites in adjacent areas due to noise, vibration, and human presence. MM BIO-4 and MM BIO-5, included in Section 3.3.6, are specified to reduce construction-related impacts to nesting birds and special-status bats from vegetation trimming or removal to less than significant.

Electric Bus Maintenance and Storage Facility (Alternative 1)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Maintenance of the electric buses and equipment would occur at the Electric Bus MSF and may occasionally require maintenance trimming of ornamental trees and shrubs located within the Electric Bus MSF. Suitable habitat for special-status plant species and most special-status wildlife species is not present; therefore, no operational impacts are anticipated. However, the Project has potential to result in significant impacts to roosting bats and nesting birds protected by the MBTA through disruption of

natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites due to noise, vibration, and human presence during maintenance activities. MM BIO-1 and MM BIO-2, presented in Section 3.3.6, are specified to reduce operations-related impacts to nesting birds and special-status bats from vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro.

The Electric Bus MSF for Alternative 1 would be located on developed property on the corner of Pico Boulevard and Cotner Avenue; no habitat modifications or removal would be required for the construction of the Electric Bus MSF. No impacts on special-status plant species would result from the construction of the Electric Bus MSF since suitable habitat is not present. Roosting bats and MBTA-protected nesting birds have potential to be impacted during construction of the MSF if ornamental trees and/or shrubs located within the Ground Disturbance Area of the MSF are trimmed or removed; this would potentially be a significant impact. Impacts may include disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites in adjacent areas due to noise, vibration, and human presence. MM BIO-4 and MM BIO-5, included in Section 3.3.6, are specified to reduce construction-related impacts to nesting birds and special-status bats from vegetation trimming or removal to less than significant.

Heavy Rail Transit Maintenance and Storage Facility (Alternatives 4 and 5)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Maintenance of the Alternative 4 or Alternative 5 HRT vehicles and equipment would occur at the MSF and may occasionally require maintenance trimming of ornamental trees and shrubs located within the MSF. Suitable habitat for special-status plant species and most special-status wildlife species is not present; therefore, no operational impacts are anticipated. However, the Project has potential to result in significant impacts to bats and MBTA-protected nesting birds from operations-related activities through disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites due to noise, vibration, and human presence during maintenance activities. MM BIO-1 and MM BIO-2, included in Section 3.3.6 are included to reduce operations-related impacts to nesting birds and special-status bats from vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro.

The MSF for Alternative 4 or Alternative 5 would be on developed land located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east; no habitat modifications or removal would be required for the construction of the MSF. No impacts to special-status plant species would result from the construction of the MSF since suitable habitat is not present. Roosting bats and MBTA-protected nesting birds have potential to be impacted during construction of the MSF if ornamental trees and/or shrubs located within the Ground Disturbance Area of the MSF are trimmed or removed; this would potentially be a significant impact. Impacts may include disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of

roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites in adjacent areas due to noise, vibration, and human presence. MM BIO-4 through MM BIO-5, presented in Section 3.3.6 are included to reduce construction-related impacts to nesting birds and special-status bats from vegetation trimming or removal to less than significant.

Heavy Rail Transit Maintenance and Storage Facility (Alternative 6)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

Maintenance of the HRT vehicles and equipment would occur at the MSF and may occasionally require maintenance trimming of ornamental trees and shrubs located within the MSF. Suitable habitat for special-status plant species and most special-status wildlife species is not present; therefore, no operational impacts are anticipated. However, the Project would have significant impacts to roosting bats and MBTA-protected nesting birds from operations-related activities through disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites due to noise, vibration, and human presence during maintenance activities. MM BIO-1 and MM BIO-2, included in Section 3.3.6, are identified to reduce operations-related impacts to nesting birds and special-status bats from vegetation trimming to less than significant through compliance with the existing Metro Tree Policy and implementation of pre-activity surveys on facilities owned by Metro.

The MSF for Alternative 6 would be located would be on developed property located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east; no habitat modifications or removal would be required for the construction of the MSF. No impacts on special-status plant species would result from the construction of the MSF since suitable habitat is not present. Roosting bats and MBTA-protected nesting birds have potential to be impacted during construction of the MSF if ornamental trees and/or shrubs located within the Ground Disturbance Area of the MSF are trimmed or removed. Impacts may include disruption of natural breeding and sheltering behaviors; injury or morality to bat pups; destruction, injury, or mortality of nests, eggs, nestlings, and individuals; loss of roosting and breeding habitat; and temporary impacts to roosting sites and nesting sites in adjacent areas due to noise, vibration, and human presence. MM BIO-4 and MM BIO-5, included in Section 3.3.6, are included to reduce construction-related impacts to special-status bats and nesting birds from vegetation trimming or removal to less than significant.

3.3.5.2 Impact BIO-2: Would the 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 US Fish and Wildlife Service?

Project Alternatives

No Project Alternative

Impact Statement

Operational Impact: Less than Significant Impact

Construction Impact: Less than Significant Impact

Operational Impacts

Operational impacts from the Project would not occur under the No Project Alternative since the project alternatives would not be constructed.

Within the Project Study Area, the only foreseeable transit improvement under the No Project Alternative would include changes to the Metro Line 761. Changes to the bus route would have no potential to affect riparian habitat or sensitive natural communities as the improved route would continue to operate on existing streets and highways. The No Project Alternative would have no operational impacts to riparian or sensitive natural communities.

Construction Impacts

Construction impacts from the Project would not occur under the No Project Alternative. Changes to the Metro Line 761 would require minimal or no construction activities, as the existing Metro bus line would simply be rerouted to between the Metro E Line Expo/Sepulveda Station and the Van Nuys Metrolink/Amtrak Station. These potential termini already include transit infrastructure supporting bus feeder lines and would not require construction of new facilities to support the rerouted bus service. Minor bus stop modifications along the Metro Line 761 may be required; however, construction activities associated with these improvements would consist of minimal or no ground disturbance within existing sidewalks and street ROW. It is not anticipated that riparian or sensitive natural communities within the Project Study Area would be impacted by such construction activities. Impacts to riparian or sensitive natural communities associated with the No Project Alternative would be less than significant during construction.

Alternative 1

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant Impact with Mitigation

There is no riparian habitat within the Alternative 1 Ground Disturbance Area, although there is 1.1 acres of undifferentiated riparian habitat in the RSA located in the 500-foot buffer.

Sensitive natural vegetation communities present within the Ground Disturbance Area for Alternative 1 include sugar bush shrubland and California walnut woodland. Five additional vegetation communities have potential to be sensitive with further refinement, including the following: laurel sumac shrubland, California sycamore woodland, toyon shrubland, black sage shrubland, and California sagebrush woodland. Potentially sensitive communities are assumed to be as such for discussion of impact analysis.

Operational Impacts

No riparian habitat occurs within the Ground Disturbance Area, therefore, there are no operational impacts anticipated from maintenance vegetation trimming.

Minor vegetation trimming of sensitive communities may occur during operations. Vegetation trimming would likely remove overhanging branches (if any) and is not likely to result in the removal of entire trees, shrubs, or root bases. No significant impacts to sensitive natural vegetation communities from operation of Alternative 1 are anticipated since vegetation that may require operational maintenance

trimming would have been mitigated under impacts for construction of the Project. An additional potential impact to sensitive communities is introduction of invasive plant seeds into native habitat through vehicle tires used to transport equipment used for operational maintenance activities onto Alternative 1, such as work trucks carrying pressure washing or painting equipment. However, maintenance activities with potential to introduce or spread invasive plant species would primarily occur within developed or paved areas where tires would not be touching bare ground.

Construction Impacts

No riparian habitat occurs within the Ground Disturbance Area; 1.1 acres of undifferentiated riparian habitat located in the RSA along Haskell Creek in the northeastern corner of Sepulveda Basin in the 500-foot buffer. No impacts from construction to this riparian habitat are anticipated since construction activities would be on the east side of I-405, over 300 feet away from the riparian habitat on the west side of I-405.

Sensitive natural vegetation communities (California walnut woodland and sugar bush shrubland) are known to occur within the Ground Disturbance Area along the Sepulveda Pass in the Santa Monica Mountains; 0.7 acre of these communities are present within the Alternative 1 Ground Disturbance Area. Construction activities adjacent to these locations are associated with aerial guideway construction in the Santa Monica Mountains, specifically I-405 widening and construction of the Getty Center MRT Station and drainage improvements next to the station. Installation of the structural support columns would occur along the aerial alignment next to the sensitive vegetation communities. Within freeway-widening work zones, retaining walls, drainage, and outer pavement widenings would be constructed, which would require clearing and grading of native habitat. The five potentially sensitive vegetation communities occur along I-405 through the Santa Monica Mountains, with 3.2 acres present within the Alternative 1 Ground Disturbance Area. Clearing of vegetation for construction activities in this area would likely result in loss of sensitive natural communities within the Ground Disturbance Area of the Alternative 1 RSA. Vehicle tires on equipment used for construction of Alternative 1 have potential to transport invasive plant seeds into native habitat during clearing and grading. An additional risk to sensitive natural community would exist from elevated levels of particulate matter from tires. Dust deposition on vegetation from active construction and particulate matter from tires that can disrupt photosynthesis and other processes critical for plant survival.

Alternative 1 would result in significant impacts to sensitive natural communities from construction activities, including permanent vegetation removal activities associated with the construction for Alternative 1. MM BIO-10, MM-BIO 16 through MM BIO-18, and MM BIO-23 through MM BIO-25, described in Section 3.3.6, are included to reduce construction-related impacts to sensitive natural communities to less than significant through establishment of Environmentally Sensitive Areas, biological monitoring of work within these communities, environmental training to Project workers, protection from invasive weeds and protection from dust from speeding or other sources.

Alternative 3

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant Impact with Mitigation

There is no riparian habitat within the Alternative 3 Ground Disturbance Area; 1.1 acres of undifferentiated riparian habitat are located in the RSA in 500-foot ground-disturbance buffer. Sensitive natural vegetation communities present within the Ground Disturbance Area for Alternative 3 include

sugar bush shrubland and California walnut woodland. Seven additional vegetation communities have potential to be sensitive with further refinement, including the following: laurel sumac shrubland, California buckwheat shrubland, California sycamore woodland, toyon shrubland, black sage shrubland, California sagebrush woodland, and scrub oak woodland. Potentially sensitive communities are assumed to be as such for discussion of impact analysis.

Operational Impacts

No riparian habitat occurs within the Ground Disturbance Area; there are no operations impacts to riparian habitat from maintenance vegetation trimming.

Minor vegetation trimming of sensitive communities may occur during operations. Vegetation trimming would likely remove overhanging branches (if any) and is not likely to result in the removal of entire trees, shrubs, or root bases. No impacts to sensitive natural vegetation communities from operation of Alternative 3 are anticipated since vegetation that may require operational maintenance trimming would have been mitigated under impacts for construction of the Project. An additional potential impact to sensitive communities is introduction of invasive plant seeds into native habitat through vehicle tires used to bring equipment used for operational maintenance activities onto Alternative 3, such as work trucks carrying pressure washing or painting equipment. Maintenance activities with potential to introduce or spread invasive plant species would primarily occur within developed or paved areas where tires would not be touching bare ground.

Construction Impacts

No riparian habitat occurs within the Ground Disturbance Area; 1.1 acres of undifferentiated riparian habitat are located in the RSA along Haskell Creek in the northeastern corner of Sepulveda Basin in the 500-foot buffer. No impacts from construction are anticipated since construction activities would be on the east side of I-405, over 300 feet away from the riparian habitat on the west side of I-405.

Sensitive natural vegetation communities (California walnut woodland and laurel sumac scrub) are known to occur within the Ground Disturbance Area along the Sepulveda Pass in the Santa Monica Mountains; 0.7 acre of sensitive communities are present within the Alternative 3 Ground Disturbance Area. Construction activities adjacent to these locations are associated with aerial guideway construction in the Santa Monica Mountains, specifically the I-405 widening, and construction of the Getty Center MRT Station and drainage improvements next to the station. Installation of the structural support columns would occur along the aerial alignment next to the sensitive vegetation communities. Within freeway-widening work zones, retaining walls, drainage, and outer pavement widenings would be constructed, which would require clearing and grading of native habitat. Potentially sensitive vegetation communities occur along I-405 through the Santa Monica Mountains, with 5.4 acres present within the Alternative 3 Ground Disturbance Area. Clearing of vegetation in this area for project features such as the I-405 widening, aerial guideway structural support columns, construction of stations, construction of TPSS stations, and access roads would result in loss of sensitive natural communities within the Ground Disturbance Area of the Alternative 3 RSA. Vehicle tires on equipment used for construction of Alternative 3 have potential to transport invasive plant seeds into native habitat during clearing and grading. An additional risk to sensitive natural community would exist from elevated levels of dust deposition on vegetation from active construction that can disrupt photosynthesis and other processes critical for plant survival.

The Project would result in significant impacts to sensitive natural communities as a result of construction activities, including permanent vegetation removal activities, associated with the

construction for Alternative 3. MM BIO-10, MM-BIO 16 through MM BIO-18, and MM BIO-23 through MM BIO-25, described in Section 3.3.6, are included to reduce construction-related impacts to sensitive natural communities to less than significant through establishment of Environmentally Sensitive Areas, biological monitoring of work within these communities, environmental training to Project workers, protection from invasive weeds, and protection from dust from speeding or other sources.

Alternative 4

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant Impact with Mitigation

There is no riparian habitat within the Alternative 4 Ground Disturbance Area; 8.3 acres of undifferentiated riparian habitat are located in the RSA in the 500-foot ground-disturbance buffer. Known sensitive natural vegetation communities are not present within the Ground Disturbance Area or 500-foot buffer for Alternative 4. One vegetation community, coyote brush shrubland, is present within the Ground Disturbance Area that has potential to be sensitive with further refinement. This potentially sensitive community is assumed to be as such for discussion of impact analysis.

Operational Impacts

No riparian habitat occurs within the Ground Disturbance Area; no operations impacts are anticipated to riparian habitat from maintenance vegetation trimming. Since the one potentially sensitive vegetation community is only present within potential off-site staging yard N2 (located in the western end of the Sepulveda Basin), no operations work is associated with this location; thus, there are no impacts to sensitive vegetation communities from operation of Alternative 4.

Construction Impacts

No riparian habitat occurs within the Ground Disturbance Area, although 8.3 acres of undifferentiated riparian habitat are located in the RSA, specifically in the Los Angeles River at the western end of Sepulveda Basin, in the 500-foot buffer for off-site staging yards N1 and N2. Clearing of vegetation for staging locations N1 and N2 would occur approximately 100 feet from the riparian habitat; no riparian habitat is likely to be present within the staging yard footprints as the areas are previously disturbed (as indicated through vegetation mapping of agricultural and California annual grasslands). Therefore, direct impacts such as removal of riparian vegetation are unlikely.

No sensitive natural vegetation communities are known to occur within the Ground Disturbance Area or 500-foot buffer for Alternative 4. One potentially sensitive community, coyote brush shrubland, occurs within off-site staging yard N2 located adjacent to the Los Angeles River at the western end of Sepulveda Basin; 3.6 acres are present within the Alternative 4 Ground Disturbance Area. Clearing of vegetation in this area for construction activities would likely result in loss of sensitive natural communities within the Ground Disturbance Area of the Alternative 4 RSA. Tires of vehicles and equipment used for construction of Alternative 4 have potential to transport invasive plant seeds into native habitat at this location during clearing and grading. An additional risk to sensitive natural community would exist from elevated levels of particulate matter from tires and dust deposition on vegetation from active construction within the staging yard and particulate matter from tires that can disrupt photosynthesis and other processes critical for plant survival.

The Project may cause indirect impacts to riparian habitat as a result of excessive dust from construction activities within the yards following vegetation clearing; this would be a less than significant impact.

However, the Project also has potential to cause significant impacts to sensitive vegetation communities due to clearing for N2 staging yard. MM BIO-10, MM-BIO 16 through MM BIO-18, and MM BIO-23 through MM BIO-25, described in Section 3.3.6, are included to reduce construction-related impacts to sensitive natural communities to less than significant. These measures include the establishment of Environmentally Sensitive Areas, biological monitoring during work within these communities, environmental training for Project workers, protection from invasive weeds, and dust control measures from speeding vehicles or other sources.

Alternative 5

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant Impact with Mitigation

There is no riparian habitat within the Alternative 5 Ground Disturbance Area; 8.3 acres of undifferentiated riparian habitat are located in the 500-foot ground-disturbance buffer. Sensitive natural vegetation communities are not present within the Ground Disturbance Area or 500-foot buffer for Alternative 5. One vegetation community, coyote brush shrubland, present within the Alternative 5 Ground Disturbance Area that has potential to be sensitive with further refinement. This potentially sensitive community is assumed to be as such for discussion of impact analysis.

Operational Impacts

No riparian habitat or sensitive natural communities occur within the Ground Disturbance Area, resulting in no operational impacts from maintenance vegetation trimming. Since the one potentially sensitive vegetation community is only present within potential off-site staging yard N2 (located in the western end of the Sepulveda Basin), no operations work is associated with this location; there are no impacts to sensitive vegetation communities from operation of Alternative 5.

Construction Impacts

No riparian habitat occurs within the Ground Disturbance Area of Alternative 5; 8.3 acres of undifferentiated riparian habitat are located in the RSA, specifically in the Los Angeles River at the western end of Sepulveda Basin, in the 500-foot buffer for off-site staging yards N1 and N2. Clearing of vegetation for staging locations N1 and N2 would occur approximately 100 feet from the riparian habitat; no riparian habitat is likely to be present within the staging yard footprints as the areas are previously disturbed (as indicated through vegetation mapping of agricultural and California annual grasslands). Therefore, direct impacts such as removal of riparian vegetation are unlikely.

No sensitive natural vegetation communities are known to occur within the Ground Disturbance Area or 500-foot buffer for Alternative 5. One potentially sensitive community, coyote brush shrubland, occurs within off-site staging yard N2 located adjacent to the Los Angeles River at the western end of Sepulveda Basin; 3.6 acres are present within the Alternative 5 Ground Disturbance Area. Clearing of vegetation in this area for construction activities would likely result in loss of sensitive natural communities within the Ground Disturbance Area of the Alternative 5 RSA. Vehicle tires on equipment used for construction of Alternative 5 have potential to transport invasive plant seeds into native habitat at this location during clearing and grading. Additionally, sensitive natural communities may be exposed to particulate matter and dust from active construction within the staging yard. Dust and particulate matter deposition on foliage can disrupt photosynthesis and other processes critical for plant survival (Farmer, 1993).

The Project may cause indirect impacts to riparian habitat as a result of excessive dust from construction activities within the yards following vegetation clearing; this would be a less than significant impact. The Project also has potential to cause significant impacts to sensitive vegetation communities due to clearing for N2 staging yard. MM BIO-10, MM-BIO 16 through MM BIO-18, and MM BIO-23 through MM BIO-25, described in Section 3.3.6, are included to reduce construction-related impacts to sensitive natural communities to less than significant through establishment of Environmentally Sensitive Areas, biological monitoring of work within these communities, environmental training to Project workers, protection from invasive weeds, and protection from dust from speeding or other sources.

Alternative 6

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

There is no riparian habitat within the Alternative 6 Ground Disturbance Area or in the 500-foot buffer. Sensitive natural vegetation communities present within the Ground Disturbance Area and 500-foot buffer for Alternative 6 include 12.0 acres of California walnut woodland. Four additional vegetation communities encompassing 5.4 acres within the Alternative 6 Ground Disturbance Area have potential to be sensitive with further refinement, including the following: black sage shrubland, California sagebrush-California buckwheat shrubland, coyote brush shrubland, and California encelia shrubland. Potentially sensitive communities are assumed to be as such for discussion of impact analysis.

Operational Impacts

No riparian habitat occurs within the Ground Disturbance Area; therefore, there are no operational impacts to riparian habitats from maintenance vegetation trimming.

Minor vegetation trimming of sensitive communities may occur along access roads to the mid-mountain facility near Stone Canyon Reservoir during operation of Alternative 6. Vegetation trimming would likely remove overhanging branches (if any) and is not likely to result in the removal of entire trees, shrubs, or root bases. No impacts to sensitive natural communities from operation of Alternative 6 are anticipated since vegetation that may require operational maintenance trimming would have been mitigated under impacts for construction of the Project. Additionally, vehicle tires used to bring equipment used for operational maintenance activities onto Alternative 6, such as work trucks carrying pressure washing or painting equipment, can introduce invasive plant seeds into sensitive natural communities in the area. t. Since maintenance activities would primarily occur within developed or paved areas, it is unlikely that the operation of Alternative 6 would introduce or spread invasive plant species. Maintenance activities with potential to introduce or spread invasive plant species would primarily occur within developed or paved areas where tires would not be touching bare ground.

Construction Impacts

One sensitive natural vegetation community (California walnut woodland) is known to occur within the Ground Disturbance Area for Alternative 6, specifically in the Santa Monica Mountains near Stone Canyon Reservoir; 12.0 acres of the sensitive community are mapped within the Alternative 6 Ground Disturbance Area. Potentially sensitive vegetation communities also occur near the Stone Canyon Reservoir, with 5.4 acres present within the Alternative 6 Ground Disturbance Area. Clearing of vegetation for Alternative 6 at the mid-mountain vent shaft, access road, and TPSS site at Stone Canyon Reservoir would likely result in loss of California walnut woodland, a sensitive natural community, and

four potentially sensitive communities. Vehicle tires on equipment used for construction of Alternative 6 have potential to transport invasive plant seeds into native habitat during clearing and grading. Also, elevated levels of dust from active construction can disrupt photosynthesis and other processes critical for plant survival when it settles on foliage.

Construction of Alternative 6 would result in significant impacts to sensitive natural communities, including permanent vegetation removal. MM BIO-10, MM-BIO 16 through MM BIO-18, and MM BIO-23 through MM BIO-25, described in Section 3.3.6, are included to reduce construction-related impacts to sensitive natural communities to less than significant through establishment of Environmentally Sensitive Areas, biological monitoring of work within these communities, environmental training to Project workers, protection from invasive weeds, and protection from dust from speeding or other sources.

Maintenance and Storage Facilities

Monorail Transit Maintenance and Storage Facility Base Design (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF Base Design for Alternative 1 or Alternative 3 would be located at the LADWP facility located east of the Van Nuys Metrolink Station and directly south of the LOSSAN rail corridor. There are no riparian habitat or sensitive natural communities present within the Ground Disturbance Area or the 500-foot buffer of the MSF Base Design. No impacts to riparian habitat or sensitive natural communities are expected from the operation or construction of the MSF Base Design.

Monorail Transit Maintenance and Storage Facility Design Option 1 (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF Design Option 1 for Alternative 1 or Alternative 3 would be located on industrial property abutting Orion Avenue, south of the LOSSAN rail corridor. No riparian habitats or sensitive natural communities are present within the Ground Disturbance Area or the 500-foot buffer of the MSF Design Option 1. No impacts to riparian habitat or sensitive natural communities are expected from the operation or construction of the MSF Design Option 1.

Electric Bus Maintenance and Storage Facility (Alternative 1)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The Electric Bus MSF for Alternative 1 would be located on developed property near the southern end of the Alternative 1 RSA on the corner of Pico Boulevard and Cotner Avenue. No riparian habitat or sensitive natural communities are present within the Ground Disturbance Area or the 500-foot buffer of the Electric Bus MSF. No impacts to riparian habitat or sensitive natural communities are expected from the operation or construction of the Electric Bus MSF.

Heavy Rail Transit Maintenance and Storage Facility (Alternatives 4 and 5)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF for Alternative 4 or Alternative 5 would be on developed land located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. No riparian habitat or sensitive natural communities are present within the Ground Disturbance Area or the 500-foot buffer of the MSF. No impacts to riparian habitat or sensitive natural communities are expected from the operation or construction of the MSF.

Heavy Rail Transit Maintenance and Storage Facility (Alternative 6)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF for Alternative 6 would be on developed property located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. No riparian habitats or sensitive natural communities are present within the Ground Disturbance Area or the 500-foot buffer of the MSF. No impacts to riparian habitat or sensitive natural communities are expected from the operation or construction of the MSF.

3.3.5.3 Impact BIO-3: Would the 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?

Project Alternatives

No Project Alternative

Impact Statement

Operational Impact: Less than Significant Impact

Construction Impact: Less than Significant Impact

Operational Impacts

Operational impacts from the Project would not occur under the No Project Alternative since the project alternatives would not be constructed.

Within the Project Study Area, the only foreseeable transit improvement under the No Project Alternative would include changes to the Metro Line 761. Changes to the bus route would have no potential to affect state or federally protected wetlands as the improved route would continue to operate on existing streets and highways. The No Project Alternative would have no operational impacts to state or federally protected wetlands. Similarly, no operational impacts to non-wetland waters under the jurisdiction of the Regional Water Quality Control Board (RWQCB) or CDFW would occur under the No Project Alternative.

Construction Impacts

Construction impacts from the Project would not occur under the No Project Alternative. Changes to the Metro Line 761 would require minimal or no construction activities, as the existing Metro bus line would simply be rerouted to between the Metro E Line Expo/Sepulveda Station and the Van Nuys Metrolink/Amtrak Station. These potential termini already include transit infrastructure supporting bus feeder lines and would not require construction of new facilities to support the rerouted bus service. Minor bus stop modifications along the Metro Line 761 may be required; however, construction activities associated with these improvements would consist of minimal or no ground disturbance within existing sidewalks and street ROW. It is not anticipated that state or federally protected wetlands or non-wetland waters under the jurisdictional of RWQCB or CDFW within the Project Study Area would be impacted by such construction activities. Impacts to state or federally protected wetlands associated with the No Project Alternative would be less than significant during construction.

Alternative 1

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

There are no state or federally protected wetlands within the Ground Disturbance Area for Alternative 1; therefore, there would be no impacts to protected wetlands related to the operation of Alternative 1.

However, non-wetland waters do occur in the Alternative 1 Ground Disturbance Area. The Los Angeles River occurs along the Alternative 1 alignment and is a WOTUS under the jurisdiction of the USACE, RWQCB and CDFW. One unnamed ephemeral drainage also occurs, portions of which are under the jurisdiction of the RWQCB and CDFW. While temporary impacts to these features may occur during construction, as described below, no operations-related impacts are anticipated as all operations and regular maintenance activities would occur only on existing roadways and developed surfaces.

Construction Impacts

The Los Angeles River is concrete-lined and devoid of riparian or herbaceous wetland vegetation where Alternative 1 traverses above the river; no wetlands are associated with the river at this location. There are no state or federally protected wetlands that occur within the Ground Disturbance Area for Alternative 1; consequently, no impacts to protected wetlands are anticipated from construction of Alternative 1.

The Los Angeles River is considered WOTUS under the jurisdiction of the USACE, RWQCB and CDFW within the Alternative 1 Ground Disturbance Area. A total of 0.11 acres of non-wetland waters is associated with the Los Angeles River within the Alternative 1 Ground Disturbance Area. Construction activities would occur outside of jurisdictional areas associated with the Los Angeles River; therefore, no direct impacts to the Los Angeles River are anticipated during construction.

Additionally, there is one unnamed ephemeral channel, including 164 linear feet of non-wetland waters, under the jurisdiction of the RWQCB and CDFW present within the Alternative 1 Ground Disturbance Area. This includes temporary impacts to 0.02 acres of Waters of the State under the jurisdiction of RWQCB and 0.03 acre of CDFW-jurisdictional streambed. Construction-related impacts to these features would include temporary filling of, or sedimentation or erosion into the waterways, or disturbance of

the bank or bed during construction activities. This would be a potentially significant impact to aquatic resources.

Impacts to aquatic resources would be avoided, minimized, and mitigated for through implementation of MM BIO-15, MM BIO-18, and MM BIO-21, which require monitoring of aquatic features during work near jurisdictional waters, work area delineation, BMP implementation to protect against sedimentation, worker education on sensitive aquatic resources, and avoidance of work near jurisdictional waters during and following rain events.

Alternative 3

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

There are no state or federally protected wetlands within the Ground Disturbance Area for Alternative 3; therefore, there would be no impacts to protected wetlands related to the operation of Alternative 3.

However, non-wetland waters do occur in the Alternative 3 Ground Disturbance Area. The Los Angeles River occurs along the Alternative 3 alignment and is a WOTUS under the jurisdiction of the USACE, RWQCB, and CDFW. One unnamed ephemeral drainage also occurs, portions of which are under the jurisdiction of the RWQCB and CDFW. While temporary impacts to these features are anticipated during construction, as described below, no operations-related impacts are anticipated as all operations would occur only on existing roadways and developed surfaces.

Construction Impacts

The Los Angeles River is concrete-lined and devoid of riparian or herbaceous wetland vegetation where Alternative 3 traverses the river; no wetlands are associated with the river at this location. There are no state or federally protected wetlands that occur within the Ground Disturbance Area for Alternative 3; consequently, no impacts to protected wetlands are anticipated from construction of Alternative 3.

The Los Angeles River is considered WOTUS under the jurisdiction of the USACE, RWQCB and CDFW within the Alternative 3 Ground Disturbance Area. A total of 0.11 acres of non-wetland waters is associated with the Los Angeles River within the Alternative 1 Ground Disturbance Area. Construction activities would occur outside of jurisdictional areas associated with the Los Angeles River; therefore, no direct significant impacts to the Los Angeles River are anticipated during construction.

Additionally, there are 164 linear feet of non-wetland ephemeral channels under the jurisdiction of the RWQCB and CDFW present within the Alternative 3 Ground Disturbance Area. This extent includes temporary impacts to 0.02 acre of waters of the State under the jurisdiction of RWQCB and 0.03 acre of CDFW-jurisdictional streambed. Construction-related impacts to these features would include temporary filling of, or sedimentation or erosion into the waterways, or disturbance of the bank or bed during construction activities. This would be a potentially significant impact to aquatic resources.

Impacts to aquatic resources would be avoided, minimized, and mitigated for through implementation of MM BIO-15, MM BIO-18, and MM BIO-21, which require aquatics monitoring during work near jurisdictional waters, work area delineation, BMP implementation to protect against sedimentation, worker education on sensitive aquatic resources, and avoidance of work near jurisdictional waters during and following rain events.

Alternative 4

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant Impact with Mitigation

Operational Impacts

There are no state or federally protected wetlands within the Ground Disturbance Area for Alternative 4; therefore, there would be no impacts to protected wetlands related to the operation of Alternative 4.

However, non-wetland waters do occur in the Alternative 4 Ground Disturbance Area. Alternative 4 would traverse the Los Angeles River north of US-101 and includes an aerial alignment that would cross over the river adjacent to Sepulveda Boulevard north of US-101. The Los Angeles River is a WOTUS under the jurisdiction of the USACE, RWQCB, and CDFW. The operations of Alternative 4 would not result in significant impacts to the course, location, or conditions of the Los Angeles River. No other non-wetland jurisdictional features occur in the Alternative 4 Ground Disturbance Area. Thus, there would be no operations-related impacts to non-wetland waters.

Construction Impacts

The Los Angeles River is concrete-lined and devoid of riparian or herbaceous wetland vegetation where Alternative 4 traverses and crosses the river; no wetlands are associated with the river at this location. There are no state or federally protected wetlands that occur within the Ground Disturbance Area for Alternative 4; consequently, no impacts to protected wetlands are anticipated from construction of Alternative 4.

The Los Angeles River is considered WOTUS under the jurisdiction of the USACE, RWQCB, and CDFW. A total of 0.13 acres of non-wetland waters associated with the Los Angeles River is located within the Alternative 4 Ground Disturbance Area. Construction activities would occur outside of jurisdictional areas associated with the Los Angeles River; therefore, no direct impacts to the Los Angeles River are anticipated during construction. However, as construction would occur over the river channel, temporary indirect construction-related impacts are possible. These impacts would include sedimentation into the waterway. This would be a potentially significant impact to aquatic resources that would be managed through mitigation measures and BMPs.

No other non-wetland waters occur in the Alternative 4 Ground Disturbance Area.

Impacts to the Los Angeles River would be avoided, minimized, and mitigated for through implementation of MM BIO-15, MM BIO-18, and MM BIO-21, which require aquatics monitoring during work near jurisdictional waters, work area delineation, BMP implementation to protect against sedimentation, worker education on sensitive aquatic resources, and avoidance of work near jurisdictional waters during and following rain events.

Alternative 5

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

Operational Impacts

There are no state or federally protected wetlands within the Ground Disturbance Area for Alternative 5; therefore, there would be no impacts to protected wetlands related to the operation of Alternative 5.

However, non-wetland waters do occur in the Alternative 5 Ground Disturbance Area. Alternative 5 would traverse the Los Angeles River north of US-101 and includes an underground alignment that would cross under the river via tunnel, and under Sepulveda Boulevard north of US-101. The Los Angeles River and is a WOTUS under the jurisdiction of the USACE, RWQCB, and CDFW. As Alternative 5 is underground at the crossing of the river, operations would not result in significant impacts to the course, location, or conditions of the Los Angeles River.

No other non-wetland jurisdictional features occur in the Alternative 5 Ground Disturbance Area. Thus, there would be no operations-related impacts to non-wetland waters.

Construction Impacts

The Los Angeles River is concrete-lined and devoid of riparian or herbaceous wetland vegetation where Alternative 5 traverses the river; no wetlands are associated with the river at this location. There are no state or federally protected wetlands that occur within the Ground Disturbance Area for Alternative 5; consequently, no impacts to wetlands impacts are anticipated from construction of Alternative 5.

The Los Angeles River is considered WOTUS under the jurisdiction of the USACE, RWQCB, and CDFW. A total of 0.06 acres of non-wetland waters associated with the Los Angeles River is located within the Alternative 5 Ground Disturbance Area. However, because Alternative 5 is underground at the crossing of the Los Angeles River, no direct or indirect construction-related impacts to the river bed or banks is anticipated. As no other non-wetland jurisdictional waters occur within the Alternative 5 Ground Disturbance Area, tunneling under the Los Angeles River would avoid construction-related impacts to jurisdictional, non-wetland waters for Alternative 5.

Alternative 6

Impact Statement

Operational Impact: No Impact

Construction Impact: Less than Significant with Mitigation

Operational Impacts

There are no state or federally protected wetlands within the Ground Disturbance Area for Alternative 6; therefore, there would be no impacts related to the operation of Alternative 6.

However, non-wetland waters do occur in the Alternative 6 Ground Disturbance Area. The Los Angeles River occurs along the Alternative 6 alignment and is a WOTUS under the jurisdiction of the USACE, RWQCB and CDFW. Alternative 6 would traverse the Los Angeles River north of US-101 and includes an underground alignment that would cross under the river via tunnel, and under Van Nuys Boulevard north of US-101. However, because Alternative 6 is underground at the crossing, operations-related impacts to this aquatic feature are not anticipated. One unnamed ephemeral drainage also occurs, portions of which are under the jurisdiction of the RWQCB and CDFW.

Construction Impacts

The Los Angeles River is concrete-lined and devoid of riparian or herbaceous wetland vegetation where Alternative 6 traverses the river; no wetlands are associated with the river at this location. There are no

state or federally protected wetlands that occur within the Ground Disturbance Area for Alternative 6; consequently, no construction-related impacts to protected wetlands are anticipated from construction of Alternative 6.

The Los Angeles River is within the Alternative 6 Ground Disturbance Area. A total of 0.07 acre of non-wetland waters under the jurisdiction of the USACE, RWQCB, and CDFW is associated with the Los Angeles River at this crossing. However, because Alternative 6 is underground at this crossing, construction activities for Alternative 6 are not anticipated to have any impact on this aquatic resource.

Additionally, one unnamed ephemeral channel occurs along the Alternative 6 alignment within the mid-mountain facility work area, including an estimated 0.11 acre of waters of the State under the jurisdiction of the RWQCB, and 0.22 acre of CDFW-jurisdictional streambed. Permanent impacts to this feature are anticipated to facilitate construction of Alternative 6, including permanent filling of, or sedimentation and erosions into the channel, disturbance to the banks and bed to facility the mid-mountain facility construction; this is a significant impact to aquatic features. These permanent impacts to CDFW-jurisdictional streambed and RWQCB-jurisdictional waters of the State would trigger permitting requirements, likely to include mitigation for impacts. Prior to the start of construction, Metro would engage with the relevant agencies and secure all necessary waters-related permits.

Impacts to aquatic resources would be avoided, minimized, and mitigated for through implementation of MM BIO-15, MM BIO-18, and MM BIO-21, which require aquatics monitoring during work near jurisdictional waters, work area delineation, BMP implementation to protect against sedimentation, worker education on sensitive aquatic resources, and avoidance of work near jurisdictional waters during and following rain events.

Maintenance and Storage Facilities

Monorail Transit Maintenance and Storage Facility Base Design (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF Base Design for Alternative 1 or Alternative 3 would be on developed property at the LADWP facility located east of the Van Nuys Metrolink Station and directly south of the LOSSAN rail corridor. Since there are no wetlands or non-wetland waters present within the Ground Disturbance Area of the MSF Base Design, no impacts to protected wetlands or jurisdictional waters are expected from the operation and construction of the MSF Base Design.

Monorail Transit Maintenance and Storage Facility Design Option 1 (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF Design Option 1 for Alternative 1 or Alternative 3 would be developed property abutting Orion Avenue located south of the LOSSAN rail corridor. Since no wetlands or non-wetland waters are present within the Ground Disturbance Area of the MSF Design Option 1, no impacts to protected wetlands or jurisdictional waters are expected from the operation and construction of the MSF Design Option 1.

Electric Bus Maintenance and Storage Facility (Alternative 1)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The Electric Bus MSF for Alternative 1 would be located on developed property on the corner of Pico Boulevard and Cotner Avenue. No wetlands or non-wetland waters are present within the Ground Disturbance Area of the Electric Bus MSF. No impacts to protected wetlands or jurisdictional waters are expected from the operation and construction of the Electric Bus MSF.

Heavy Rail Transit Maintenance and Storage Facility (Alternatives 4 and 5)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF for Alternative 4 or Alternative 5 would be located on developed land located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. Since there are no wetlands or non-wetland waters present within the Ground Disturbance Area of the MSF, no impacts to protected wetlands or jurisdictional waters are expected from the operation and construction of the MSF.

Heavy Rail Transit Maintenance and Storage Facility (Alternative 6)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF for Alternative 6 would be located on developed property located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. Since there are no wetlands or non-wetland waters present within the Ground Disturbance Area of the MSF, no impacts to protected wetlands or jurisdictional waters are expected from the operation and construction of the MSF.

3.3.5.4 Impact BIO-4: Would the 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?

Project Alternatives

No Project Alternative

Impact Statement

Operational Impact: Less than Significant Impact

Construction Impact: Less than Significant Impact

Within the Project Study Area, the Santa Monica Mountains including SMMNRA represent a regional connectivity corridor with respect to habitat patches. Local wildlife movement is facilitated through use

of development and infrastructure (including city streets, abandoned lots, and private backyards in highly urbanized areas), remnants of riparian habitat, underpasses, and patches of habitat. Habitat for nesting and roosting bats and birds is present within the Project Study Area in the form of natural vegetation such as trees and infrastructure such as buildings and bridges.

Operational Impacts

Operational impacts from the Project would not occur under the No Project Alternative since the project alternatives would not be constructed.

Within the Project Study Area, the only foreseeable transit improvement under the No Project Alternative would include changes to Metro Line 761. Since the route would continue to operate on existing streets and highways already in use with vehicular traffic, no impacts are anticipated to regional wildlife movement corridors or wildlife nursery sites; changes to the bus route are anticipated to less than significantly impact local wildlife movement corridors. Operational impacts to wildlife movement corridors and nursery sites associated with the No Project Alternative would be addressed in project-specific environmental documentation.

Construction Impacts

Construction impacts from the Project would not occur under the No Project Alternative since no alternatives would be built. Changes to the Metro Line 761 would require minimal or no construction activities, as the existing Metro bus line would simply be rerouted to between the Metro E Line Expo/Sepulveda Station and the Van Nuys Metrolink/Amtrak Station. These potential termini already include transit infrastructure supporting bus feeder lines and would not require construction of new facilities to support the rerouted bus service. Minor bus stop modifications along the Metro Line 761 may be required; however, construction activities associated with these improvements would consist of minimal or no ground disturbance within existing sidewalks and street ROW. It is not anticipated that wildlife movement corridors or nursery sites within the Project Study Area would be impacted since construction activities would be limited to individuals bus stops (i.e., discrete locations with small footprints). Impacts to wildlife movement corridors and nursery sites associated with the No Project Alternative would be less than significant during construction.

Alternative 1

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The Santa Monica Mountains and SMMNRA, which transect the Alternative 1 RSA, along with habitat in the Santa Monica Mountains that is outside of SMMNRA, represent a regional connectivity corridor with respect to habitat patches. The SMMC's habitat linkage planning map (SMMC, 2021) identifies four potential wildlife corridors along the I-405 corridor: Mulholland Drive Bridge, Skirball Center Drive bridge, Bel Air Crest Road underpass, and the Sepulveda Boulevard underpass. Habitat for nesting birds and roosting bats is also present in the form of natural and ornamental vegetation such as trees and infrastructure such as buildings and bridges.

Operational Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 1 RSA. Thus, no operations-related impacts to the movement of resident or migratory fish is anticipated for Alternative 1.

Native Resident or Migratory Wildlife

The Alternative 1 RSA runs north to south and bisects the Santa Monica Mountains. Currently, I-405 acts as a restrictive barrier to mountain lion and vertebrate movement from east to west and vice-versa where it traverses the Santa Monica Mountains. Barriers to movement result in gene flow limitations and isolation of populations, both of which negatively affect the overall health and success of a species (NPS, 2019b). Underpasses and culverts become increasingly important to wildlife movement in areas with extensive road networks (Penrod et. Al, 2001). Instances of I-405 crossings by mountain lions and other large mammals are rare but have been recorded on occasion, both successfully and unsuccessfully (i.e., death resulting from vehicle collision), during NPS studies of the Santa Monica Mountains population (NPS, 2019b). Anthropogenic disturbance for ongoing maintenance is expected to be minimal and unlikely to significantly impact wildlife movement. Operation of Alternative 1 and permanent impacts from the Project would further impact movement of mountain lions and other large mammals across I-405 as a result of the expanded roadway (i.e., increased width at four locations, including the following: approximately 50 feet east at the Mulholland Drive Bridge wildlife crossing, approximately 50 feet west by Promontory Road near Mountaingate Country Club, up to approximately 30 feet west immediately south of the Getty Center MRT Station, and up to approximately 25 feet west of Getty Center Drive south to Beverly Park Drive by The Getty). The aerial guideway would also represent a new, novel obstacle for transiting wildlife. Noise, lighting, and the overall presence of trains passing overhead on the aerial guideway are anticipated to deter wildlife movement. Anthropogenic disturbance for ongoing maintenance is expected to be intermittent and so is unlikely to significantly impact wildlife movement. Alternative 1 operation is likely to decrease the potential of a successful crossing and increase barriers to movement due to increase in crossing distance from wider disturbance footprint and presence of an overhead guideway and moving trains. This would be a significant impact to wildlife movement and habitat connectivity.

Permanent changes to this area would impact local wildlife movement (Suvarna, 2020). Aerial trains would influence the behavior and movement of wildlife during operation. Specifically, the noise and vibrations associated with operation of trains would alter foraging, mating, or dispersal patterns. Lights used for operational and safety purposes have the potential to confuse and disrupt nocturnal species. In addition, birds and bats are at risk of collision with the moving components of aerial trains. However, operation of aerial trains, when compared to a ground level roadway, also have the potential to provide some benefits to wildlife, including less consistent and sustained source traffic noise, a decreased chance of direct strikes due to reduced vehicle traffic, and a lower level of fragmentation to habitat (Lucas et. al., 2017). Synanthropic species, like raccoon and coyote, are those that have adapted to living in close proximity to humans and are more assimilated to anthropogenic disturbances; they are frequently found in urban environments making them more likely to adapt and utilize corridors during operation. However, wary species, such as mountain lion and bobcat, have potential to be deterred by the aerial tram when it is present and passing overheard during operation. Research based on the I-405 Sepulveda Pass Widening and HOV project found that wildlife crossing activity did not return to preconstruction levels following project conclusion at three of the four crossings identified by SMMC

(NPS, 2024a), presumably due to changes to the crossings and adjacent vegetation following construction. Bel Air Crest underpass was the exception, where crossing activity did not decrease, presumably due to lower habitat impacts (i.e., vegetation leading to crossing remained intact) and construction activity (i.e., no construction staging). Impacts to habitat adjacent to wildlife crossings would significantly impact wildlife movement corridors.

The Sepulveda Basin Recreation Area is a potential local movement corridor, with habitat for avian species, coyotes, and herpetological species. Approximately 35 acres along the eastern edge of the Sepulveda Basin is within the Alternative 1 RSA, in the 500-foot ground disturbance buffer. If permanent disruption to habitat within the Sepulveda Basin were to occur, it would be likely to alter local corridors by blocking or altering travel routes. However, no ground-disturbing activities are planned for within the area. The aerial guideway would be on the eastern side of I-405 when adjacent to the area, located 300 feet or more from habitat. Once operational, the presence of the guideway increases the distance wildlife must cross if wildlife is entering or exiting the area from the east; up to 75 feet would be added to the distance to safely cross I-405 into the refuge. Even urban-adapted species like opossums and striped skunks may need to adjust local movement corridors to access the refuge if access would be too close to the guideway or traffic. This increased distance and potential disruption to local corridors would represent a significant impact to local wildlife movement if unmitigated.

The aerial monorail associated with Alternative 1 would pose a potentially significant impact to avian species by hindering avian movement and present a risk for aerial collisions with the monorail vehicle and guideway. For regional movement corridors, this alignment would run predominantly north to south within the Alternative 1 RSA and therefore would be perpendicular to the primary direction of avian movement for migrating birds. Most bird species would migrate above the height of the aerial monorail (45 to 55 feet above the existing ground level), so disruptions are expected to be minimal. However, lights on the vehicles or guideway would pose a risk of disorienting birds during migration periods (early April through late May and mid-August through early November) and lead to exhaustion and death (USFWS, 2020). This would constitute a significant impact. Dispersing local resident or younger, recently fledged birds have potential to collide with the guideway track or vehicles while flying along local movement corridors, which would constitute a significant impact.

If special-status bat species have roosting or maternity habitat or if commuting or foraging flyways (e.g., roads through or alongside tree stands, riparian corridors) are adjacent to the guideway, significant impacts to bats would occur from vehicle collisions (Caltrans, 2019). One special-status migratory bat species, the hoary bat, and special-status birds have the potential to occur in the Alternative 1 RSA during operation of Alternative 1. Operations-related activities associated with Alternative 1, such as vegetation removal or trimming, would also result in a potentially significant impact to migratory bat and avian species by removing potential nesting, roosting, and foraging habitat. Artificial lighting that may be present on guideway structures and within vehicle during operation would negatively affect adjacent bat roosting locations.

MM BIO-1 and MM BIO-2, as described in Section 3.3.6, are included to reduce significant operational-related impacts to migratory wildlife species from aerial train presence to less than significant through limiting of vegetation trimming to outside of nesting bird and roosting season where feasible, and installation of appropriate anti-collision devices to aerial vehicles and support structures where an aerial alignment is present. MM BIO-28 mitigates significant operational-related impacts to the movement of native wildlife species, specifically mountain lions and other vertebrates, to less than significant through monitoring of wildlife crossings and implementation of additional mitigation measures, such as

enhanced crossing infrastructure or more extensive wildlife funneling fencing, within six months if impacts are observed.

Construction Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 1 RSA. Thus, no construction-related impacts to the movement of resident or migratory fish is anticipated for Alternative 1.

Native Resident or Migratory Wildlife

Mountain lion movement is already dramatically impacted within the Alternative 1 RSA due to I-405; construction activities associated with Alternative 1 would temporarily further hinder movement in the Santa Monica Mountains.

The Ground Disturbance Area of Alternative 1 along the Sepulveda Pass would include aerial guideway construction in the Santa Monica Mountains and the widening of I-405 at discrete locations through the Santa Monica Mountains. Within these freeway work zones, retaining walls construction, drainage improvements, and pavement expansion would be conducted for the I-405 widening. Construction of Alternative 1 would impact movement of mountain lions and other vertebrates across I-405 as a result of construction activities including equipment and lighting and prolonged human presence, thereby decreasing the potential of a successful crossing and increasing barriers to movement. This would be a significant impact. MM BIO-14, included in Section 3.3.6, is included to reduce construction-related impacts to the movement of native wildlife species, specifically mountain lions and other vertebrates, to less than significant through preconstruction surveys, protection of natal dens if located, limiting vegetation removal, vegetation restoration, and creation of a 5-year monitoring plan.

Local movement through corridors may be temporarily impacted due to construction noise, lights, anthropogenic presence, and air pollution. Although resident species are assumed to be exposed to, and therefore acclimated to, at least some level of existing disturbance associated with I-405 and other nearby development, an increase in disturbances related to project construction would further disrupt behavior patterns in an already urbanized environment. Urban-adapted wildlife may alter their pathways through the region based on construction. Impacts to migratory birds and bats from construction of Alternative 1 may occur due to equipment and lighting associated with nightwork. Bat species have differing reactions to light, with some being attracted and some repelled, but the insects they prey on are influenced by artificial lighting. If artificial lighting for nightwork is adjacent to roosting habitat, it can negatively affect the quality of the habitat. One special-status migratory bat species, the hoary bat, has moderate potential to occur within the Alternative 1 RSA during migratory flyover events. The Santa Monica Mountains provide habitat for the hoary bat for roosting and foraging resources during their migration from south to north, and vice-versa. Migratory special-status birds also have the potential to occur in the Alternative 1 RSA during construction of Alternative 1. Ground disturbance activities such as, removal of vegetation/habitat, drilling, excavating, pile driving, topsoil removal, grading, associated with the construction of Alternative 1, would therefore result in a potentially significant impact to migratory bat and migratory avian species.

MM BIO-4, MM BIO-5, MM BIO-7, and MM BIO-14, included in Section 3.3.6, are recommended to reduce construction-related impacts to migratory species to less than significant through protection to nesting birds, special-status bats, least Bell's vireo, and wildlife movement corridors.

Alternative 3

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The SMMNRA that transects the Alternative 3 RSA, along with habitat in the Santa Monica Mountains that is outside of SMMNRA, represents a regional connectivity corridor with respect to habitat patches. The SMMC's habitat linkage planning map (SMMC, 2021) identifies four potential wildlife corridors along the I-405 corridor: Mulholland Drive Bridge, Skirball Center Drive bridge, Bel Air Crest Road underpass, and the Sepulveda Boulevard underpass. Habitat for nesting birds and roosting bats is also present in the form of vegetation such as natural and ornamental trees and infrastructure such as buildings and bridges.

Operational Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 1 RSA. Thus, no operations-related impacts to the movement of resident or migratory fish is anticipated for Alternative 1.

Native Resident or Migratory Wildlife

The Alternative 3 RSA runs north to south and bisects the Santa Monica Mountains. Currently, I-405 acts as a restrictive barrier to mountain lion and other vertebrates for east–west movement where it intersects the Santa Monica Mountains. Barriers to movement result in gene flow limitations and isolation of populations, both of which negatively affect the overall health and success of a species (NPS, 2019b). Instances of I-405 crossings by mountain lions and other vertebrates are rare but have been recorded on occasion, both successfully and unsuccessfully (i.e., death resulting from vehicle collision), during NPS studies of the Santa Monica Mountains population (NPS, 2019b).

Operation of Alternative 3 and permanent impacts from the Project would further impact movement of mountain lions and other vertebrates across I-405 because of the expanded roadway (i.e., increased width at three locations, including by approximately 50 feet at the Mulholland Drive Bridge wildlife crossing, by approximately 50 feet by Promontory Road near Mountaingate Country Club, and by up to approximately 30 feet south of the Getty Center MRT Station). The aerial guideway also represents a new, novel obstacle. Noise, lighting, and the overall presence of trains passing overhead on the aerial guideway are anticipated to deter wildlife movement. Anthropogenic disturbance for ongoing maintenance is expected to be intermittent and so is unlikely to significantly impact wildlife movement. Alternative 3 operation is likely to decrease the potential of a successful crossing and increase barriers to movement due to an increase in crossing distance from a wider disturbance footprint and the presence of an overhead guideway and moving trains. This would be a significant impact for wildlife movement and habitat connectivity. MM BIO-28, described in Section 3.3.6, is included to mitigate for operational-related impacts to the movement of native wildlife species, specifically mountain lions and other vertebrates, to less than significant through monitoring of wildlife crossings and enacting additional mitigation measures, such as enhanced crossing infrastructure or more extensive wildlife funneling fencing, within 6 months if impacts are observed.

Permanent changes to this area would impact local wildlife movement (Suvarna, 2020). Aerial trains would influence the behavior and movement of wildlife during operation. Specifically, the noise and

vibrations associated with operation of trains would alter foraging, mating, or dispersal patterns. Lights used for operational and safety purposes have potential to confuse and disrupt nocturnal species. In addition, birds and bats are at risk of collision with the moving components of aerial trains. However, operation of aerial trains, when compared to a ground level roadway, also have potential to provide some benefits to wildlife, including less consistent and sustained source traffic noise, a decreased chance of direct strikes due to reduced vehicle traffic, and a lower level of fragmentation to habitat (Lucas et. al., 2017). Synanthropic species, like raccoon and coyote, are those that have adapted to living in close proximity to humans and are more assimilated to anthropogenic disturbances; they are frequently found in urban environments, making them more likely to adapt and utilize movement corridors during Alternative 3 operation. Wary species, such as mountain lion and bobcat, have the potential to be more easily deterred by the aerial tram when it is present and passing overheard during operation. Research based on the I-405 Sepulveda Pass Widening and HOV project found that wildlife crossing activity did not return to preconstruction levels following project conclusion at three of the four crossings identified by SMMC (NPS, 2024a), presumably due to changes to the crossings and adjacent vegetation following construction. Bel Air Crest underpass was the exception where wildlife activity did not decrease postconstruction, presumably due to less habitat impacts (i.e., vegetation leading to crossing remained intact) and construction activity (i.e., no construction staging).

The Sepulveda Basin Recreation Area is a potential local movement corridor, with habitat for avian species, coyotes, and herpetological species. Approximately 35 acres along the eastern edge of the Sepulveda Basin is within the Alternative 3 RSA, in the 500-foot ground-disturbance buffer. If permanent disruption to habitat within the Sepulveda Basin were to occur, it would be likely to alter local corridors by blocking or altering travel routes; however, no ground-disturbing activities are planned for within the area. The aerial guideway would be on the eastern side of I-405 when adjacent to the area, 300 feet or more from habitat. Once operational, the presence of the guideway would increase the distance if wildlife is entering or exiting the refuge from the east; up to 75 feet would be added to the distance to cross I-405 into the refuge. Even urban-adapted species such as coyotes may need to adjust local movement corridors to access the refuge if access would be too close to the guideway or traffic. This increased distance and potential disruption to local corridors would represent a significant impact to local wildlife movement if unmitigated.

The aerial monorail associated with Alternative 3 would pose hindrances to avian movement. For regional movement corridors, this alignment would run predominantly north to south within the Alternative 3 RSA and, therefore, would be perpendicular to the primary direction of avian movement for migrating birds. Most migrating birds would transit above the height of the aerial monorail (i.e., 45 to 55 feet above the existing ground level), so disruptions are expected to be minimal. However, lights on the vehicles or guideway would disorient birds during migration periods (early April through late May and mid-August through early November) and lead to exhaustion and death (USFWS, 2020). Dispersing local resident or younger, recently fledged birds have potential to collide with the guideway track or vehicles while flying along local movement corridors.

If special-status bat species have roosting or maternity habitat or if commuting or foraging flyways (e.g., roads through or alongside tree stands, riparian corridors) are adjacent to the guideway, impacts to bats would occur from vehicle collisions (Caltrans, 2019). One special-status migratory bat species, the hoary bat, and special-status birds have the potential to occur in the Alternative 3 RSA during operation of Alternative 3. Operations-related activities associated with Alternative 3, such as vegetation removal or trimming, would also result in a potentially significant impact to migratory bat and avian species by removing potential nesting, roosting, and foraging habitat. Artificial lighting that may be present on

guideway structures and within vehicle during operation would negatively affect adjacent bat roosting locations.

MM BIO-1 and MM BIO-2, as described in Section 3.3.6, are included to reduce operational-related impacts to migratory wildlife species from aerial train presence to less than significant through limiting of vegetation trimming to outside of nesting bird and roosting season where feasible and installation of appropriate anti-collision devices to aerial vehicles and support structures where an aerial alignment is present. MM BIO-28 is included to mitigate for operational-related impacts to the movement of native wildlife species, specifically mountain lions and other vertebrates, to less than significant through monitoring of wildlife crossings and enactment of additional mitigation measures, such as enhanced crossing infrastructure or more extensive wildlife funneling fencing, within six months if impacts are observed.

Construction Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 3 RSA. Thus, no construction-related impacts to the movement of resident or migratory fish is anticipated for Alternative 3.

Native Resident or Migratory Wildlife

Mountain lion movement is already dramatically impacted within the Alternative 3 RSA due to I-405. Construction activities associated with construction of Alternative 3 could temporarily further hinder movement within the Santa Monica Mountains.

The Ground Disturbance Area of Alternative 3 along the Sepulveda Pass would include aerial guideway construction in the Santa Monica Mountains and the widening of I-405 at discrete locations through the Santa Monica Mountains. Within these freeway work zones, retaining wall construction, drainage improvements, and pavement expansion would be conducted for the I-405 widening. Construction of Alternative 3 would impact movement of mountain lions and other vertebrates across I-405 as a result of construction activities, including equipment and lighting and prolonged human presence, thereby decreasing the probability of successful crossings and increasing barriers to movement. This would be a significant impact to wildlife movement and habitat connectivity. MM BIO-14, described in Section 3.3.6, is included to reduce construction-related impacts to the movement of native wildlife species, specifically mountain lions and other vertebrates, to less than significant through preconstruction surveys, protection of natal dens if located, limiting vegetation removal, vegetation restoration, and creation of a 5-year monitoring plan.

Local movement through wildlife corridors may be temporarily impacted due to the increase in noise, lights, anthropogenic presence, and air pollution associated with Alternative 3 construction. Although resident species are assumed to be exposed to, and therefore acclimated to, at least some level of existing disturbance associated with I-405 and other nearby development, an increase in disturbance related to Project construction would further disrupt behavior patterns in an already urbanized environment. Urban-adapted wildlife may alter their pathways through the region based on construction. Impacts to migratory birds and bats from construction of Alternative 3 may occur due to equipment and lighting associated with nightwork. Bat species have differing reactions to light, with some being attracted and some repelled, but the insects they prey on are influenced by artificial lighting. If artificial lighting for nightwork is adjacent to roosting habitat, it can negatively affect the quality of the habitat. One special-status migratory bat species, the hoary bat, has moderate potential to

occur within the Alternative 3 RSA during migratory flyover events. The Santa Monica Mountains provide habitat for the hoary bat for roosting and foraging resources during their migration from south to north, and vice-versa. Migratory special-status birds also have the potential to occur in the Alternative 3 RSA during construction of Alternative 3. Ground disturbance activities (such as removal of vegetation/habitat, drilling, excavating, pile driving, topsoil removal, grading) associated with the construction of Alternative 3 would result in a potentially significant impact to migratory bat and migratory avian species.

MM BIO-4, MM BIO-5, MM BIO-7, and MM BIO-14, described in Section 3.3.6, are included to reduce construction-related impacts to migratory species to less than significant through protections for nesting birds and special-status bats, protections for least Bell's vireo, protection of natal dens if located, vegetation restoration, development of a monitoring plan to document changes in wildlife movement over time.

Alternative 4

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The SMMNRA and the Santa Monica Mountains overall represent a regional connectivity corridor with respect to habitat patches. The SMMC's habitat linkage planning map (SMMC, 2021) has identified several potential wildlife corridors within the Santa Monica Mountains in the Alternative 4 RSA. Since Alternative 4 would be an underground configuration with no associated ground disturbance in the mountains between the UCLA Gateway Plaza Station and Ventura Boulevard/Sepulveda Boulevard Station, impacts to these wildlife corridors are not anticipated. Habitat for nesting birds and roosting bats is also present in the aerial portion of Alternative 4 and at areas associated with ground disturbance for the underground tunnel in the form of vegetation, such as ornamental trees, and infrastructure, such as buildings and bridges.

Operational Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 4 RSA. Thus, no operations-related impacts to the movement of resident or migratory fish are anticipated for Alternative 4.

Native Resident or Migratory Wildlife

Wildlife movement of large mammals, specifically mountain lions, is unlikely to be impacted by operation of Alternative 4, since Alternative 4 traverses the Santa Monica Mountains underground. The tunnel operates at approximately 470 feet below ground level as it passes under the Santa Monica Mountains to 50 feet near UCLA, depths at which noise and vibration would not be evident at surface level. Within the aerial portion of the alignment, located in the northern portion from the tunnel portal at Del Gado Drive to the MSF, elusive wildlife species such as bobcats or mountain lions are unlikely to be present regardless of guideway presence. More adaptable, urban-adapted species such as coyote and raccoons are anticipated to be resilient to presence of the aerial guideway, since it is located in a highly developed area with a high degree of baseline disturbance and activity.

Within the aerial alignment north from Del Gado Drive, permanent changes have potential to impact local wildlife movement (Suvarna, 2020). Aerial trains would influence the behavior and movement of wildlife during operation. Specifically, the noise and vibrations associated with operation of trains would alter foraging, mating, or dispersal patterns. Lights used for operational and safety purposes have potential to confuse and disrupt nocturnal species. In addition, birds and bats are at risk of collision with the moving components of aerial trains. However, operation of aerial trains, when compared to a ground level roadway, have potential to provide some benefits to wildlife, including less consistent and sustained source traffic noise, a decreased chance of direct strikes due to reduced vehicle traffic, and a lower level of fragmentation to habitat (Lucas et. al., 2017). Synanthropic species, such as raccoon and coyote, are those that have adapted to living in close proximity to humans and are more assimilated to anthropogenic disturbances; they are frequently found in urban environments making them more likely to adapt and utilize corridors during operation. Wary species, such as mountain lion and bobcat, have potential to be more easily deterred by the aerial tram when it passes overheard during operation. However, since Alternative 4 is an aerial alignment beginning north of the Santa Monica Mountains (as interpreted by the SMMNRA vegetation mapping), the majority of the area subject to permanent change from Alternative 4 is already developed, agricultural, or ruderal communities. These land covers represent areas where wary species are less likely to be present, so they are therefore unlikely to be impacted by Alternative 4 operation. Impacts to wildlife movement within the urbanized areas where the alignment is aerial are expected to be less than significant for Alternative 4.

The Sepulveda Basin Recreation Area is the last relatively natural area in the northern portion of the RSA and serves as a potential local movement corridor with habitat for avian species, coyotes, and herpetological species. The eastern edge of the refuge is adjacent the Alternative 4 RSA, just outside the 500-foot ground-disturbance buffer. Although permanent disruption to habitat within the refuge would be likely to alter local corridors, no ground disturbing activities are anticipated within the refuge and the guideway would be operating more than 500 feet east of the refuge on the opposite site of I-405. Consequently, impacts to the Sepulveda Basin Recreation Area would be less than significant.

Topanga State Park, which is southwest of the Sepulveda Basin and the alignment, is the closest natural area where wildlife from the refuge would most likely migrate (USACE, 2011). Impacts to wildlife movement within the refuge are not anticipated from Alternative 4.

Special-status bats and MBTA-protected birds have the potential to occur in the Alternative 4 RSA during operation of Alternative 4. Operations-related activities associated with Alternative 4, such as vegetation removal or trimming, would be restricted to the aerial alignment from the tunnel portal at Del Gado Drive north to the MSF. Vegetation maintenance would not be required for the remainder of the alignment since the HRT vehicles and stations would be underground. Within the aerial alignment, operations activities have potential to significantly impact migratory bat and avian species by removing potential nesting, roosting, and foraging habitat. The aerial guideway associated with Alternative 4 would hinder avian movement. For regional movement corridors, this alignment would run predominantly north to south within the Alternative 4 RSA and, therefore, would be perpendicular to the primary direction of avian movement for migrating birds. Most bird species would migrate above the height of the aerial monorail (45 to 55 feet above the existing ground level), so disruptions are expected to be minimal. Lights on the vehicles or guideway are unlikely to pose a risk of disorienting birds during migration periods (early April through late May and mid-August through early November), since the aerial guideway on Alternative 4 is located within a highly developed area where light pollution is abundant. Dispersing local resident or younger, recently fledged birds have potential to collide with the guideway track or vehicles while flying along local movement corridors.

If special-status bat species have roosting or maternity habitat adjacent to the guideway, or if commuting or foraging flyways (e.g., roads through or alongside tree stands, riparian corridors) are adjacent to the guideway, impacts to bats would occur from vehicle collisions (Caltrans, 2019). One special-status migratory bat species, the hoary bat, has moderate potential to occur within the Alternative 4 RSA during migratory flyover events. In an urban environment, street trees as well as park trees have been shown to be important for bats; spacing between street trees combined with urban lighting provides space for insects to aggregate, providing ample foraging opportunities for hoary bats (Moretto et al., 2019). Hoary bats have been documented by the Natural History Museum of Los Angeles in highly urban, park-deprived settings including South L.A. (Ordeñana, 2018). Artificial lighting that may be present on guideway structures and within vehicle during operation would negatively affect adjacent bat roosting locations.

MM BIO-1 and MM BIO-2, as described in Section 3.3.6, are included to reduce operations-related impacts to migratory wildlife species from aerial train presence to less than significant through limiting of vegetation trimming to outside of nesting bird and roosting season where feasible, and installation of appropriate anti-collision devices to aerial vehicles and support structures where an aerial alignment is present.

Construction Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 4 RSA. Thus, no construction-related impacts to the movement of resident or migratory fish are anticipated for Alternative 4.

Native Resident or Migratory Wildlife

Construction of the guideway between the launch sites at the southern terminus and the tunnel portal at Del Gado Drive remains underground between the TBM launch and extraction sites. Since the stations and TPSSs are also underground, the primary surface level impacts south of Del Gado Drive are associated with the cut-and-cover construction of the four southern stations and clearing and grading for staging areas. Construction of the aerial guideway, stations, and MSF would potentially impact wildlife movement due to construction activities. Based on the size of the station footprints and that there are no surface impacts in the Santa Monica Mountains, which have best quality habitat within the Alternative 4 RSA, construction impacts to wildlife corridors are anticipated to be localized and temporary south of the tunnel portal.

North of Del Gado Drive, where the aerial tram is present, potential impacts to movement would occur. Local movement through corridors may be temporarily impacted due to construction noise, lights, anthropogenic presence, and air pollution associated with construction. Resident species within this already urbanized environment are assumed to be exposed to, and therefore acclimated to, some level of existing disturbance associated with I-405 and other nearby development; therefore, impacts to wildlife movement are anticipated to be less than significant. Impacts to migratory birds and bats from construction of Alternative 4 may occur due to equipment and lighting associated with nightwork, if required. Bat species have differing reactions to light, with some being attracted and some repelled, but the insects they prey on are influenced by artificial lighting. If artificial lighting for nightwork is adjacent to roosting habitat, it can negatively affect the quality of the habitat.

Special-status birds and one special-status migratory bat species, the hoary bat, have potential to occur in the Alternative 4 RSA during construction of Alternative 4. The Santa Monica Mountains provide

habitat for the hoary bat for roosting, and foraging resources during their migration from south to north, and vice-versa. Migratory special-status birds also have the potential to occur in the Alternative 4 RSA during construction of Alternative 4. Ground-disturbance activities including removal of vegetation/habitat, drilling, excavating, pile driving, topsoil removal, and grading associated with construction of Alternative 4 would result in a potentially significant impact to migratory bat and migratory avian species. MM BIO-4, MM BIO-5, MM BIO-7, and MM BIO-14, described in Section 3.3.6, are included to reduce construction-related impacts to migratory species to less than significant through protection to nesting birds and special-status bats, protection of least Bell's vireo, protection of natal dens if located, vegetation restoration, and development of a monitoring plan to document changes in wildlife movement over time.

Alternative 5

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The SMMNRA and the Santa Monica Mountains overall represent a regional connectivity corridor with respect to habitat patches. The SMMC habitat linkage planning map (SMMC, 2021) has identified several potential wildlife corridors within the Santa Monica Mountains in the Alternative 5 RSA. Since Alternative 5 would be an underground configuration with no associated ground disturbance in the mountains between the UCLA Gateway Plaza Station and the Ventura Boulevard/Sepulveda Boulevard Station, impacts to these wildlife corridors are not anticipated. Habitat for nesting and roosting bats and birds is present in the aerial portion of the project and at areas associated with ground disturbance for the underground tunnel, in the form of vegetation such as ornamental trees and infrastructure such as buildings and bridges.

Operational Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 5 RSA. Thus, no operations-related impacts to the movement of resident or migratory fish is anticipated for Alternative 5.

Native Resident or Migratory Wildlife

Wildlife movement of large mammals, specifically mountain lions, is unlikely to be impacted by operational activities since the Alternative 5 traverses the Santa Monica Mountains underground with the tunnel operating at depths of approximately 470 feet as it passes under the Santa Monica Mountains to 50 feet near UCLA. Noise and vibration would not be evident at surface level due to these depths of operation. Due to the tunnel portal location by Raymer Street, where it transitions to an aerial guideway, impacts to wildlife movement are anticipated to be minimal and confined to the immediate area. While the aerial guideway from the portal to the MSF would dissuade wildlife during operation, this location is already highly developed with the LOSSAN corridor present. Elusive wildlife species like bobcats or mountain lions are unlikely to be present in northern extent of the alignment regardless of guideway presence. More adaptable, urbanized species such as coyote and raccoons are more likely to be resilient to guideway disturbance since the aerial guideway is in a highly developed area with high levels of baseline disturbance.

The Sepulveda Basin Recreation Area is a potential local movement corridor, with habitat for avian species, coyotes and herpetological species. The eastern edge of the Refuge is adjacent the Alternative 5 RSA, just outside the 500-foot ground-disturbance buffer. The operation of Alternative 5 would be underground when adjacent to the refuge and, therefore, is not anticipated to affect movement corridors.

Special-status bats and MBTA-protected birds have the potential to occur in the Alternative 5 RSA during operation of Alternative 5. Operations-related activities associated with Alternative 5, such as vegetation removal or trimming, would be restricted to the aerial guideway from the tunnel portal south of Raymer Street to the MSF and at-grade components Van Nuys Metrolink/Amtrak, underground station entrances, and the MSF. Vegetation maintenance within the aerial segment would result in significant impacts to special-status bats and nesting birds due to the removal of potential nesting, roosting, and foraging habitat. However, vegetation maintenance would not be required for the remainder of the alignment, as the HRT vehicles and stations would be underground, where habitat is not present.

The aerial guideway associated with Alternative 5 would hinder avian movement. For regional movement corridors, this alignment would run west to east within the Alternative 5 RSA and, therefore, would be perpendicular to the primary direction of avian movement for migrating birds. Most bird species would migrate above the height of the aerial guideway (45 to 55 feet above the existing ground level), so disruptions are expected to be minimal. Lights on the vehicles or guideway are unlikely to pose a risk of disorienting birds during migration periods (early April through late May and mid-August through early November), since the aerial guideway on Alternative 5 is located within a highly developed area where light pollution is abundant. Dispersing local resident or younger, recently fledged birds have potential to collide with the guideway track or vehicles while flying along local movement corridors.

If special-status bat species have roosting or maternity habitat adjacent to the guideway, or if commuting or foraging flyways (e.g., roads through or alongside tree stands, riparian corridors) are adjacent to the guideway, impacts to bats would occur from vehicle collisions (Caltrans, 2019). One special-status migratory bat species, the hoary bat, has moderate potential to occur within the Alternative 5 RSA during migratory flyover events. In an urban environment, street trees as well as park trees have been shown to be important for bats; spacing between street trees combined with urban lighting provides space for insects to aggregate, providing ample foraging opportunities for hoary bats (Moretto et al., 2019). Hoary bats have been documented by the Natural History Museum of Los Angeles in highly urban, park-deprived settings including South L.A. (Ordeñana, 2018). Artificial lighting on guideway structures and within vehicle during operation on the aerial portion would negatively affect adjacent bat roosting locations. However, the aerial guideway of Alternative 5 is only present for approximately 0.5-mile segment between Sepulveda Boulevard and the MSF. Impacts to movement corridors for special-status birds, including those covered under MBTA, and special-status bats during operations are anticipated to be less than significant due to the underground stations and alignment for all but 0.5 mile of Alternative 5.

MM BIO-1 and MM BIO-2, described in Section 3.3.6, are included to reduce operations-related impacts to migratory wildlife species from aerial train presence to less than significant through limiting of vegetation trimming to outside of nesting bird and roosting season where feasible and installation of appropriate anti-collision devices to aerial vehicles and support structures where an aerial alignment is present.

Construction Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 5 RSA. Thus, no construction-related impacts to the movement of resident or migratory fish is anticipated for Alternative 5.

Native Resident or Migratory Wildlife

Construction of the three underground tunnel segments and associated TPSSs for Alternative 5 would be underground except for TBM launch and extraction sites (located in staging yards or stations). The Ground Disturbance Area associated for the north-south section of the alignment, where the best quality habitat within Alternative 5 would be located, would include cut-and-cover construction of the seven underground stations and clearing and grading of construction staging areas. Construction of the aerial guideway, stations, staging areas, and MSF would potentially impact wildlife movement due to increased construction noise, lights, and air pollution. Based on the size of the station footprints and no surface impacts in the Santa Monica Mountains, construction impacts to movement of wildlife species are anticipated to be localized and temporary.

One special-status migratory bat species, the hoary bat, has potential to occur in the Alternative 5 RSA during construction of Alternative 5 as do migratory and special-status birds. Ground disturbance activities, including removal of vegetation/habitat, excavating, pile driving, topsoil removal, and grading associated with the construction of Alternative 5, would result in potential impacts to migratory bat and avian species. MM BIO-4, MM BIO-5, MM BIO-7, and MM BIO-14, described in Section 3.3.6, are included to reduce construction-related impacts to migratory species to less than significant through protection to nesting birds and special-status bats, protections for least Bell's vireo, vegetation restoration, and development of a monitoring plan to document changes in wildlife movement over time.

Alternative 6

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The SMMNRA and the Santa Monica Mountains represent a regional connectivity corridor with respect to habitat patches. The SMMC habitat linkage planning map (SMMC, 2021) has identified several potential wildlife corridors within the Santa Monica Mountains in the vicinity of the Alternative 6 RSA; none are located within the Alternative 6 RSA. While Alternative 6 would be an underground configuration in the mountains between the UCLA Gateway Plaza Station and Ventura Boulevard/Sepulveda Boulevard Station, permanent and temporary ground disturbance for grading of the hillside and access road installation would occur at the mid-mountain facility adjacent to Stone Canyon Reservoir and would significantly impact wildlife movement.

Operational Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 6 RSA. Thus, no operations-related impacts to the movement of resident or migratory fish are anticipated for Alternative 6.

Native Resident or Migratory Wildlife

The Alternative 6 RSA runs north to south and bisects the Santa Monica Mountains. The intersection of I-405 and the Santa Monica Mountains west of the RSA act as a restrictive barrier to mountain lions and other vertebrates for east–west movement. However, roads in the vicinity of Alternative 6 are two lanes and pose less of a risk for wildlife collision and death.

The majority of the alignment for Alternative 6 is underground, with depths between 50 and 130 feet as it passes under the Westside of Los Angeles, 120 to 730 feet under the Santa Monica Mountains, and 40 and 50 feet under the San Fernando Valley. Given these depths, noise and vibration associated with operations are not anticipated to be detectable at the surface, and no impacts are anticipated to wildlife movement on the surface is anticipated for the underground tunnel. However, movement of mountain lions and other vertebrates within the Santa Monica Mountains would be impacted by the presence of the mid-mountain facility adjacent to the Stone Canyon Reservoir and operation of Alternative 6, since permanent changes to habitat is likely to impact local wildlife movement (Suvarna, 2020). Operation of Alternative 6 would impact local wildlife movement corridors due to loss of native habitat, introduction of development, exposure to artificial light source from security lighting on the facility, and anthropogenic disturbance for ongoing maintenance associated with the ventilation shaft footprint and access road, such as routine repairs or vegetation clearing. Alternative 6 operation would potentially decrease successful wildlife movement and increase barriers due to the presence of the mid-mountain facility within continuous habitat, particularly in the short-term following construction completion, when disturbed areas are not yet revegetated. Based on the minimal infrastructure and intermittent required maintenance at the facility, impacts to wildlife movement are expected to be less than significant.

One special-status migratory bat species, the hoary bat, has moderate potential to occur within the Alternative 6 RSA during migratory flyover events. Since Alternative 6 is an underground configuration, impacts to migratory bats are anticipated to be less than significant for operation. However, artificial lighting that may be present at the mid-mountain facility during operation would negatively affect adjacent bat roosting locations. If roosts are present and natural breeding or overwintering behaviors are altered by exposure to artificial lighting, this would constitute a significant impact.

Special-status birds and MBTA-protected birds also have the potential to occur in the RSA during operation of Alternative 6. Operations-related activities associated with Alternative 6, such as vegetation removal or trimming, would result in a significant impact to migratory bat and avian species by removing potential nesting, roosting, and foraging habitat. This would be a significant impact.

MM BIO-1 and MM BIO-2, as described in Section 3.3.6, are included to reduce operations-related impacts to migratory wildlife species from aerial train presence to less than significant through limiting of vegetation trimming to outside of nesting bird and roosting season where feasible and installation of appropriate anti-collision devices to aerial vehicles and support structures where an aerial alignment is present.

Construction Impacts

Native Resident or Migratory Fish

There are no native resident or migratory fish with established native resident corridors or migration routes present within the Alternative 6 RSA. Therefore, there are no impacts anticipated to resident or migratory fish movement for Alternative 6.

Native Resident or Migratory Wildlife

Construction of Alternative 6 would have localized, temporary impacts on wildlife during construction of stations, staging areas, and the MSF. Construction of the three tunnel segments would be underground except for launch and extraction sites within stations or staging areas. The Ground Disturbance Area associated with construction of Alternative 6 would consist of cut-and-cover construction of the seven underground stations; construction of the MSF site; clearing and grading for the construction staging areas; and clearing and grading for the mid-mountain ventilation shaft and associated access road. Ground-disturbance activities including removal of vegetation/habitat, topsoil removal, and grading would result in a potential impact to vertebrate movement including large mammals, bat and avian species. Special-status birds and bats and MBTA-protected birds have potential to occur during construction of Alternative 6 and would be impacted from vegetation clearing and habitat removal. One special-status migratory bat species, the hoary bat, and special-status birds have the potential to occur in the Alternative 6 RSA during construction of Alternative 6. The Santa Monica Mountains provides roosting habitat for the hoary bat and foraging resources during their migration from south to north, and vice-versa.

Mountain lion movement is already dramatically impacted within the Santa Monica Mountains due to I-405; construction activity associated with Alternative 6 has potential to temporarily further hinder movement of mountain lions and other vertebrates in the Santa Monica Mountains as a result of construction activities at the mid-mountain facility. Disturbance can be associated with equipment present and activity, lighting, and prolonged human presence. This would be a significant impact to wildlife movement and habitat connectivity. The TBM launch and extraction sites are outside of the Santa Monica Mountains where mountain lion corridors are located; thus, no impacts are associated with these Alternative 6 features.

MM BIO-4, MM BIO-5, MM BIO-7, and MM BIO-14, described in Section 3.3.6, are included to reduce construction-related impacts to migratory species to less than significant through protection to nesting birds and special-status bats, and protection of least Bell's vireo. MM BIO-14, described in Section 3.3.6, is included to reduce construction-related impacts to the movement of native wildlife species, specifically mountain lions and other vertebrates, to less than significant through implementation of preconstruction surveys, protection of natal dens if located, limiting vegetation removal, vegetation restoration, and creation of a 5-year monitoring plan to document wildlife movement over time and inform the need for additional measures.

Maintenance and Storage Facilities

Monorail Transit Maintenance and Storage Facility Base Design (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF Base Design for Alternative 1 or Alternative 3 would be on developed property at the LADWP facility located east of the Van Nuys Metrolink Station and directly south of the LOSSAN rail corridor. Since there is no open habitat, waterways, or native vegetation present no impacts to the movement of native resident or migratory fish or wildlife would be expected from the operation or construction of the MSF Base Design.

Monorail Transit Maintenance and Storage Facility Design Option 1 (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF Design Option 1 for Alternative 1 or Alternative 3 would be located on developed property abutting Orion Avenue, south of the LOSSAN rail corridor. Since there is no open habitat, waterways, or native vegetation present in the MSF Design Option 1, no impacts to the movement of native resident or migratory fish or wildlife would be expected from the operation or construction of MSF Design Option 1.

Electric Bus Maintenance and Storage Facility (Alternative 1)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The Electric Bus MSF for Alternative 1 would be located on developed property on the corner of Pico Boulevard and Cotner Avenue. Since there is no open habitat, waterways, or native vegetation present in the Electric Bus MSF, no impacts to the movement of native resident or migratory fish or wildlife would be expected from the operation or construction of the Electric Bus MSF.

Heavy Rail Transit Maintenance and Storage Facility (Alternatives 4 and 5)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF for Alternative 4 or Alternative 5 east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. Since there is no open habitat, waterways, or native vegetation present in the MSF, no impacts to the movement of native resident or migratory fish or wildlife would be expected from the operation or construction of the MSF.

Heavy Rail Transit Maintenance and Storage Facility (Alternative 6)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

The MSF for Alternative 6 would be located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. Since there is no open habitat, waterways, or native vegetation present, no impacts to the movement of native resident or migratory fish or wildlife would be expected from the operation or construction of the MSF.

3.3.5.5 Impact BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Project Alternatives

No Project Alternative

Impact Statement

Operational Impact: Less than Significant Impact

Construction Impact: Less than Significant Impact

Operational Impacts

Operations-related impacts from the Project would not occur under the No Project Alternative. Within the Project Study Area, the only foreseeable transit improvement under the No Project Alternative would include changes to Metro Line 761. Although the route would continue to operate on existing streets and highways, operation of the improved Metro Line 761 has potential to impact trees protected under tree preservation policies or ordinances when routine maintenance requires trimming of trees or other vegetation. Permitting requirements for protected trees and shrubs vary by location depending on land jurisdiction/ownership, tree/shrub species and size requirements of applicable ordinances or policies. Operational impacts to protected trees and shrubs associated with changes to Metro Line 761 would be addressed in project-specific environmental documentation.

Construction Impacts

Construction impacts from the Project would not occur under the No Project Alternative. Changes to the Metro Line 761 would require minimal to no construction activities as the existing Metro bus line would simply be rerouted along existing streets and highways between the Metro E Line Expo/Sepulveda Station and the Van Nuys Metrolink/Amtrak Station. These potential termini already include transit infrastructure supporting bus feeder lines and would not require construction of new facilities to support the rerouted bus service. Minor bus stop modifications along the Metro Line 761 may be required; however, construction activities associated with these improvements would consist of minimal or no ground disturbance within existing sidewalks and street ROW. It is not anticipated that protected trees and shrubs within the Project Study Area would be impacted since construction activities would be confined to areas of existing pavement. Impacts to protected trees and shrubs associated of No Project Alternative would be less than significant during construction.

Alternative 1

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

To assess for conflicts with local policies or ordinances that protect biological resources, policies and ordinances were evaluated by landowner for applicability to the Project. The County of Los Angeles General Plan is applicable to the unincorporated County land located in the southern portion of the Alternative 1 RSA, where the U.S. Department of Veterans Affairs (VA) Hospital site and Los Angeles National Cemetery are located, among other entities. The County land is already highly developed and landscaped in this area; no woodlands are present and there is low to no likelihood of native vegetation being present that would represent a diverse ecosystem to be preserved. Of the 16 trees within the Tree

Survey Area, 12 are nonnative landscaped species and four are oak trees within landscaped areas (discussed below under applicable tree ordinances or policies).

The goal of the "OurCounty" Sustainability Plan is to reduce car dependency by providing a safe, affordable public transit system, which is also the purpose of the Project. In addition, the Project would mitigate for tree impacts on unincorporated County land through an applicable ordinance or policy based on species and therefore contribute to the "living streets" approach of the Sustainability Plan.

For Alternative 1, the *City of Los Angeles General Plan's* (DCP, 2001) policies to create and maintain an integrated open space system that apply to and are addressed by the Project include preserving habitat linkages and providing wildlife corridors (MM BIO-14); conserving and managing watersheds (MM BIO-13 with Jurisdictional Aquatic Resource mitigation); onsite evaluation of sensitive habitats (MM BIO-10) and species (MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-14); and analysis of wildlife movement (MM BIO-14).

Since no SEAs intersect with the RSA and no ground disturbance is planned for the Sepulveda Basin, these policies do not apply to Alternative 1.

The City of Santa Monica General Plan is not applicable to Alternative 1, since no land owned by the City is within the RSA.

The Project complies with the SMMNRA General Management Plan in that the Alternative 1 alignment intersects with SMMNRA in locations that are already developed and, therefore, is preserving natural resources. Roadside vegetation impacts within SMMNRA are temporary impacts for I-405 improvements. MM BIO-9 requires Metro to prepare a Habitat Restoration Plan that would restore temporary impacted locations. MM BIO-14 details coordination with appropriate entities to mitigation for vertebrate crossing impacts, which would include vegetation restoration. Trail locations within SMMNRA would not be affected by the Project. The Project would reduce dependency on cars to comply with the Action Plan. MM BIO-23 complies with the Invasive Plant Management Plan by requiring equipment and personnel to be free of mud, debris, or vegetation when entering the Project.

Four local ordinances or policies protecting trees and shrubs were found to be applicable to the Alternative 1 RSA, including the City of Los Angeles Protected Tree and Shrub Ordinance, Los Angeles County Oak Tree Ordinance, City of Los Angeles Street Tree Policy, and the Metro Tree Policy. For the purpose of this analysis, trees within SMMNRA were assumed to be under the protection of one of these ordinances or policies. No other ordinances or policies related to biological resources were identified that would be pertinent to the operation or construction of Alternative 1.

As discussed below, there is potential for significant impacts related to protected tree and shrub removal within the City of Los Angeles, unincorporated County of Los Angeles, and SMMNRA related to the construction and operation of Alternative 1.

Table 3.3-9. Details of Jurisdiction, Mitigation Ratios, and Maintenance Period for Landowners with Potential for Impacts to Trees

Jurisdiction	Landowner	Mitigation Ratio for Protected Species [a]	Maintenance Period	Additional Notes
City of LA Protected Tree and Shrub Ordinance	City of LA including private property	4:1	3 years	Survival of continuously living replacements for maintenance period required.
LA County Oak Tree Ordinance	Unincorporated LA County	2:1	2 years minimum	Applicant's proposal should include future maintenance measures where required.
Santa Monica Mountains National Recreation Area (SMMNRA)	Many, National Park Service acts as administrator	2:1 to 4:1[c]	3 to 5 years [c]	Mitigation for impacts within the SMMNRA are determined through coordination with appropriate entities. Replacement ratio and maintenance period presented represent a preliminary estimate.
City of Santa Monica Tree Code	City of Santa Monica Public right-of-way (ROW)	2:1 to 4:1 [c]	3 to 5 years [c]	Mitigation ratio and maintenance period at discretion of City of Santa Monica. Replacement ratio and maintenance period presented represent a preliminary estimate.
Metro Tree Policy	Metro right-of-way, Properties & Capital Project Sites	2:1	3 years	Heritage trees, as defined by local ordinance, are protected at 4:1[a].
City of Los Angeles Street Tree Policy	City of LA public right-of-way	2:1	5 years	Applicable to any tree or upon any street or parkway in the city, but does not apply to trees within private properties, in Caltrans right-of-way, or on University of California, Los Angeles campus[b] unless the tree was planted and maintained by the City

Source: Metro, 2025a

[a]Mitigation ratios are for number of replacement trees required per individual tree impacted.

[b]Teresa Estrada, phone call by C. Hargreaves to LA Dept of Urban Forestry Division, July 19, 2024.

[c]Mitigation ratio and maintenance period for trees within SMMNRA and the City of Santa Monica estimated from the range of replacement trees from the Metro Tree Policy to the City of LA Ordinance.

NA = not applicable
SMMRNA = Santa Monica Mountains National Recreation Area

Operational Impacts

During operations of Alternative 1, activities such as trimming, encroaching into the protection zone (i.e., dripline or canopy), or other actions that would damage root systems or alter the grade around a trunk may impact protected tree and shrub species. These activities would result in potentially significant impact to protected trees. Protected tree species on Alternative 1 that may require operational maintenance include coast live oaks, southern California black walnuts, and Mexican elderberry near the Getty Center Station and adjacent TPSS facility; coast live oaks and western

sycamores at the Metro G Line Station; and coast live oaks and southern California black walnut located at the proposed Sherman Way Station and adjacent TPSS facility. Maintenance to these protected trees would constitute a significant impact. At the Wilshire Boulevard Station within the VA Hospital site, coast live oaks and a holly oak are present; however, although these trees are located within the expanded 200-foot Tree Survey Area required for oak trees on unincorporated county land, they are unlikely to require maintenance trimming as a result of Alternative 1.

To address this impact, Alternative 1 would implement MM BIO-3, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs when impacts are unavoidable. With implementation of MM BIO-3, impacts to protected trees during operations of Alternative 1 would be reduced to less than significant through installation and maintenance of replacement trees or shrubs following the requirements of the pertinent tree preservation ordinance.

Construction Impacts

For the purpose of this assessment, protected trees and shrubs that meet the size and species criteria and whose Tree Protection Zone (TPZ) (dripline or canopy) falls at least partially within the Tree Survey Area are presumed to require removal during construction.

Table 3.3-10 provides a summary of the protected trees and shrubs potentially affected by each of the project alternatives. For Alternative 1, a total of 3,282 protected trees and shrubs are mapped within the Tree Survey Area. Of those, 246 are protected by the City of LA Ordinance, irrespective of land ownership, and require permits for alterations made to protected trees and shrubs during construction, including trimming and encroaching into the tree/shrub protection zone in any manner that would cause a protected tree or shrub to die, such as damaging the root system with compaction or injury and changing the grade around the trunk.

Four individual oak trees are protected under the County Oak Tree Ordinance, since they occur on unincorporated County land within 200 feet of the Ground Disturbance Area; any modification to them would require a permit beforehand from the Director of Public Works. However, no impacts are anticipated to these four oak trees due to their distance from the Ground Disturbance Area (i.e., outside the 10-foot buffer but within the 200-foot buffer required by the County Oak Tree Ordinance).

The remaining 2,934 trees within the Tree Survey Area of Alternative 1 are protected under the Metro Tree Policy and LA Street Tree Policy. Within SMMNRA, 98 trees of 11 tree species and 1 unknown species are within the Tree Survey Area. Heritage or protected trees, as determined by local ordinances or policy, may be present within the Alternative 1 Tree Survey Area; impacts such as substantial trimming or removal of these heritage or protected trees would constitute a significant impact. Unless mitigated, the anticipated removal and alteration of protected trees and shrubs during construction of Alternative 1 would conflict with the City and County tree ordinances and with Metro and City tree policies. This is considered a significant impact. Refer to the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a), Appendix B – Attachment 1, Tree Inventory Tables for the full list of these recorded trees.

To address this impact, Alternative 1 would implement MM BIO-11, described in Section 3.3.6, which would require installation and maintenance of replacement trees or shrubs when impacts are unavoidable. With implementation of MM BIO-11, impacts associated with the removal of protected trees and shrubs during construction of Alternative 1 would be reduced to less than significant.

Table 3.3-10. Ordinance-Protected Trees and Shrubs within Ground Disturbance Area

Jurisdiction	Species Name	Alternative 1		Alternative 3		Alternative 4		Alternative 5		Alternative 6	
		Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*
City of LA Protected Tree and Shrub Ordinance	Toyon *(Heteromeles arbutifolia)*	55	220	29	116	0	0	0	0	0	0
	Southern CA black walnut *(Juglans californica)*	31	124	20	80	2	8	0	0	314	1,256
	Western sycamore *(Platanus racemosa)*	24	104	24	96	11	44	9	36	0	0
	Coast live oak (*Quercus agrifolia)*	109	436	53	212	53	212	43	172	13	52
	Canyon live oak *(Quercus chrysolepis)*	3	12	3	12	13	52	13	52	0	0
	Valley oak *(Quercus lobata)*	2	8	2	8	1	4	2	8		
	Mexican elderberry *(Sambucus mexicana)*	22	88	23	92	2	8	2	8	2	8
LA County Oak Tree Ordinance[a]	Coast live oak *(Quercus agrifolia)*	3	6	3	6	0	0	0	0	0	0
	Holly oak *(Quercus ilexa)*	1	2	1	2	0	0	0	0	0	0
TOTAL		**250**	**992**	**158**	**624**	**82**	**328**	**69**	**276**	**329**	**1,316**

Jurisdiction	Species Name	Alternative 1		Alternative 3		Alternative 4		Alternative 5		Alternative 6	
		Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*	Quantity	Replace-ment Trees*
Santa Monica Mountains National Recreation Area	Numerous native and non-native tree species[b]	98	196 to 392[c]	98	196 to 392[c]	0	0	0	0	0	0
City of Santa Monica Tree Code	Numerous native and non-native tree species[d]	0	0	0	0	76	152 to 304[c]	76	152 to 304[c]	0	0
Metro/City of LA Street Tree Policy	Numerous native and non-native tree species	2,934	5,868 plus additional for heritage trees	2,670	5,340 plus additional for heritage trees	1,417	2,834 plus additional for heritage trees	1,017	2,034 plus additional for heritage trees	609	1,218 plus additional for heritage trees
GRAND TOTAL		**3,282**	**7,056 to 7,252 plus heritage trees**	**2,926**	**6,160 to 6,356 plus heritage trees**	**1,575**	**3,314 to 3,466 plus heritage trees**	**1,162**	**2,462 to 2,614 plus heritage trees**	**938**	**2,534 plus heritage trees**

Source: Metro, 2025a

[a]Los Angeles County Oak Tree Ordinance states "any tree of the oak genus"; therefore, non-native oak species are included in this inventory and mitigation calculations.

[b]Full list of SMMNRA and Policy-protected trees listed in the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a), Appendix B – Attachment 1, Tree Inventory Tables.

[c]SMMNRA and City of Santa Monica Tree Code mitigation amounts presumed to be within range of ordinances and policies within the area; final mitigation would be decided through coordination with appropriate entities.

[d]Mitigation amounts would be at discretion of City of Santa Monica.

*Number of replacement trees required for mitigation as per applicable tree ordinance or policy.
SMMNRA = Santa Monica Mountains National Recreation Area
TBD = to be determined

Alternative 3

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

To assess for conflicts with local policies or ordinances that protect biological resources, policies and ordinances were evaluated by landowner for applicability to the Project. The County of Los Angeles General Plan is applicable to the unincorporated County land located in the southern portion of the Alternative 3 RSA, where the VA Hospital site and Los Angeles National Cemetery are located, among other entities. The County land is already highly developed and landscaped; no woodlands are present, and there is low to no likelihood of native vegetation being present that would represent a diverse ecosystem to be preserved. Of the 18 trees within the Tree Survey Area, 14 are nonnative landscaped species and four are oak trees within landscaped areas (discussed below under applicable tree ordinances or policies).

The goal of the "OurCounty" Sustainability Plan is to reduce car dependency by providing a safe, affordable public transit system, which is also the purpose of the Project. In addition, the Project would mitigate for tree impacts on unincorporated County land through an applicable ordinance or policy based on species and therefore contribute to the "living streets" approach of the Sustainability Plan.

For Alternative 3, the *City of Los Angeles General Plan's* (DCP, 2001) policies to create and maintain an integrated open space system that apply to and are addressed by the Project include preserving habitat linkages and providing wildlife corridors (MM BIO-14); conserve and manage watersheds (MM BIO-15 with Jurisdictional Aquatic Resource mitigation); onsite evaluation of sensitive habitats (MM BIO-10) and species (MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-14); and analysis of wildlife movement (MM BIO-14).

Since no SEAs intersect with the RSA and no ground disturbance is planned for the Sepulveda Basin, these policies do not apply to Alternative 3.

The City of Santa Monica General Plan is not applicable to Alternative 3 since no land owned by the City is within the RSA.

The Project complies with the SMMNRA General Management Plan in that the Alternative 3 alignment intersects with SMMNRA in locations that are already developed and therefore is preserving natural resources. Roadside vegetation impacts within SMMNRA are temporary impacts for I-405 highway improvements. MM BIO-9 requires Metro to prepare a Habitat Restoration Plan which would restore temporary impacted locations. MM BIO-14 details coordination with appropriate entities to mitigate for vertebrate crossing impacts, which would include implementing vegetation restoration. Trail locations within SMMNRA would not be affected by the Project. The Project would reduce dependency on cars to comply with the Action Plan. MM BIO-23 complies with the Invasive Plant Management Plan by requiring equipment and personnel to be free of mud, debris, or vegetation when entering the Project.

Four local ordinances or policies protecting trees and shrubs were found to be applicable within the Alternative 3 RSA: City of Los Angeles Protected Tree and Shrub Ordinance, Los Angeles County Oak Tree Ordinance, City of Los Angeles Street Tree Policy, and the Metro Tree Policy. For the purpose of this analysis, trees within SMMNRA were assumed to be under the protection of one of these ordinances or policies. No other ordinances or policies related to biological resources were identified that would be pertinent to the operation or construction of Alternative 3.

As discussed below, there is potential for significant impacts related to protected tree and shrub removal within the City of Los Angeles, unincorporated County of Los Angeles, and the SMMNRA related to the construction and operation of Alternative 3.

Operational Impacts

During operations of Alternative 3, activities such as trimming, encroaching into the protection zone (i.e., dripline or canopy), or other actions that would damage root systems or alter the grade around a trunk may impact protected tree and shrub species. These activities would result in a potentially significant impact to protected trees.

Protected tree species on Alternative 3 that may require maintenance include coast live oaks, southern California black walnuts, and Mexican elderberry located at the proposed Getty Center Station and adjacent TPSS facility; coast live oaks and western sycamores located at the proposed Metro G Line Station; and coast live oaks and southern California black walnut located at the proposed Sherman Way Station and adjacent TPSS facility. Maintenance to these protected trees would constitute a significant impact. At the Wilshire Boulevard station within the VA Hospital site, coast live oak and a holly oak are present; however, although these trees are located within the expanded 200-foot Tree Survey Area required for oak trees on unincorporated County land, they are unlikely to require maintenance trimming as a result of Alternative 3.

To address this impact, Alternative 3 would implement MM BIO-3, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs when impacts to are unavoidable. With implementation of MM BIO-3, impacts to protected trees during operations of Alternative 3 would be reduced to less than significant through installation and maintenance of replacement trees or shrubs following the requirements of the pertinent tree preservation ordinance.

Construction Impacts

For the purpose of this assessment, protected trees and shrubs included in the inventory (i.e., of the appropriate size and species whose Tree Protection Zone (TPZ) (dripline or canopy of the tree/shrub) falls at least partially within the Tree Survey Area) are presumed to require removal during construction.

For Alternative 3, a total of 2,926 protected trees and shrubs are mapped within the Tree Survey Area. Of those, 154 are protected under the purview of the City of LA Ordinance, irrespective of land ownership, and require permits for alterations made to protected trees and shrubs during construction, including trimming and encroaching into the tree/shrub protection zone in any manner that would cause a protected tree or shrub to die, such as damaging the root system with compaction or injury and changing the grade around the trunk.

Four individual oak trees are protected under the County Oak Tree Ordinance since they occur on unincorporated County land within 200 feet of the Ground Disturbance Area; any modification to them requires a permit beforehand from the Director of Public Works. No impacts are anticipated to these four oak trees due to their distance from the Ground Disturbance Area (i.e., outside the 10-foot buffer but within the 200-foot buffer required by the County Oak Tree Ordinance).

The remaining 2,670 trees are protected under the Metro Tree Policy and City of LA Policy. Within the SMMNRA, 98 trees of 11 tree species and 1 unknown are within the Tree Survey Area. Heritage or protected trees as determined by local ordinances or policy, may be present within the Alternative 3 Tree Survey Area; impacts to these trees are anticipated to be less than significant for Alternative 3.

Unless mitigated, the anticipated removal and alteration of protected trees and shrubs during construction of Alternative 3 would conflict with the City and County tree ordinances and with Metro Tree Policy and City of LA Policy. This is considered a significant impact. See the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a), Appendix B – Attachment 1, Tree Inventory Tables for the full list of these recorded trees.

To address this impact, Alternative 3 would implement MM BIO-11, described in Section 3.3.6, which would require installation and maintenance of replacement trees or shrubs when impacts are unavoidable. With implementation of MM BIO-11, impacts associated with the removal of protected trees and shrubs during construction of Alternative 3 would be reduced to less than significant.

Alternative 4

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

To assess for conflicts with local policies or ordinances that protect biological resources, policies and ordinances were evaluated by landowner for applicability to the Project. The Alternative 4 RSA does not include unincorporated County land so the County of Los Angeles General Plan and Sustainability Plan "OurCounty" are not applicable.

For Alternative 4, the *City of Los Angeles General Plan's* (DCP, 2001) policies to create and maintain an integrated open space system that apply to and are addressed by the Project include conserve and manage watersheds (MM BIO-15 through Jurisdictional Aquatic Resource mitigation) and onsite evaluation of sensitive habitats (MM BIO-10) and species (MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9). Since no SEAs intersect with the RSA, this policy does not apply to Alternative 4. The City's General Plan includes a policy to protect wild areas such as the Sepulveda Basin; Alternative 4 includes potential offsite staging yards N1 and N2 at the western edge of the Basin. Per the Master Plan and Environmental Assessment (USACE, 2011), N1 is subject to an agricultural lease and N2 is slated for recreation and is an ornamental tree/maintained lawn. The Los Angeles River and riparian habitat is also present within the 500-foot ground disturbance buffer. The Project would comply with policies related to protecting wild areas through avoiding, minimizing and/or mitigating for impacts to CDFW sensitive vegetation communities (MM BIO-10), protected trees and shrubs (MM BIO-12), and jurisdictional aquatic resources (MM BIO-15), and implementing construction measures related to delineating work boundaries and environmentally sensitive areas (MM BIO-16), monitoring vegetation clearing (MM BIO-17), protecting wildlife from pets (MM BIO-20), minimizing wildlife exposure to night lighting (MM BIO-22), limiting the spread of invasive seeds (MM BIO-23), and reducing the risk of wildlife entrapment (MM BIO-26). Additionally, MM BIO-9 requires Metro to prepare a Habitat Restoration Plan which would restore temporary impacted locations like staging yards.

The City of Santa Monica's General Plan applies to potential offsite staging yard S1, by the Santa Monica Airport. The Project complies with the goal of preserving ecological balance and reducing air pollution as impacts to the 18 trees present within this area would be avoided, minimized, and/or mitigated for (MM BIO-10) through coordination with the Director of Community and Cultural Services at the City.

Four local ordinances or policies protecting biological resources are present within the Alternative 4 RSA: City of LA Ordinance, City of Santa Monica Tree Code, City of LA Policy, and the Metro Tree Policy. No other ordinances or policies related to biological resources were identified in the operation of Alternative 4.

As discussed below, there is a potential for significant impacts related to protected tree and shrub removal within the City of Los Angeles during operation and construction of Alternative 4. Additionally, significant impacts related to tree removal within property owned by the City of Santa Monica exist related to the construction of Alternative 4.

Operational Impacts

During operations of Alternative 4, activities such as trimming, encroaching into the protection zone (i.e., dripline or canopy), or other actions that would damage root systems or alter the grade around a trunk may impact protected tree and shrub species. These activities would result in a potentially significant impact to protected trees.

Protected tree species on Alternative 4 that may require operational maintenance include coast live oak and Mexican elderberry at the proposed UCLA station, coast live oak immediately east of I-405 and south of Del Gado Drive, and western sycamores south of Sherman Way along the eastside of Sepulveda Boulevard. Maintenance to these protected trees would constitute a significant impact.

To address this impact, Alternative 4 would implement MM BIO-3, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs when impacts are unavoidable. With implementation of MM BIO-3, impacts to protected trees during operations of Alternative 4 would be reduced to less than significant through installation and maintenance of replacement trees or shrubs following the requirements of the pertinent tree preservation ordinance.

Construction Impacts

For the purpose of this assessment, protected trees and shrubs included in the inventory (i.e., of the appropriate size and species whose TPZ (dripline or canopy of the tree/shrub) falls at least partially within the Tree Survey Area) are presumed to require removal during construction.

For Alternative 4, a total of 1,575 protected trees and shrubs are mapped within the Tree Survey Area. Of those, 82 are protected under the purview of the City of LA Ordinance, irrespective of land ownership, and require permits for any alterations made to protected trees and shrubs during construction, including trimming and encroaching into the tree/shrub protection zone. Seventy-six are on property owned by the City of Santa Monica that would be used during construction as a potential off-site staging yard. These trees are covered by the City of Santa Monica Tree Code and would require a City permit from the Santa Monica City Director before trees can be altered in any manner, including but not limited to removal, trimming, pruning, and planting. The remaining 1,4817 trees are under the jurisdiction of the City of LA Policy or the Metro Tree Policy. Heritage or protected trees as determined by local ordinances or policy, may be present within the Alternative 4 Tree Survey Area; impacts to them are anticipated to be less than significant for Alternative 4.

Unless mitigated, the anticipated removal and alteration of protected trees and shrubs during construction of Alternative 4 would conflict with the City and County tree ordinances and with Metro and City tree policies. This is considered a significant impact. Refer to the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a), Appendix B – Attachment 1, Tree Inventory Tables for the full list of these recorded trees.

To address this impact, Alternative would 4 would implement MM BIO-12, described in Section 3.3.6, which would require installation and maintenance of replacement trees or shrubs following the requirements of the pertinent preservation policy or ordinance when impacts are unavoidable. With

implementation of MM BIO-12, impacts associated with the removal of protected trees and shrubs during construction of Alternative 4 would be reduced to less than significant.

Alternative 5

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

To assess for conflicts with local policies or ordinances that protect biological resources, policies and ordinances were evaluated by landowner for applicability to the Project. The Alternative 5 RSA does not include unincorporated County land, so the County of Los Angeles General Plan and Sustainability Plan "OurCounty" are not applicable.

For Alternative 5, the *City of Los Angeles General Plan's* (DCP, 2001) policies to create and maintain an integrated open space system that apply to and are addressed by the Project include conservation and management watersheds (MM BIO-15 through Jurisdictional Aquatic Resource mitigation); and onsite evaluation of sensitive habitats (MM BIO-10) and species (MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9). Since no SEAs intersect with the RSA, this policy does not apply to Alternative 5. The city's General Plan includes a policy to protect wild areas such as the Sepulveda Basin; Alternative 5 includes potential offsite staging yards N1 and N2 at the western edge of the Basin. Per the Master Plan and Environmental Assessment (USACE, 2011), N1 is subject to an agricultural lease and N2 is slated for recreation and is an ornamental tree/maintained lawn. The Los Angeles River and riparian habitat are also present within the 500-foot ground disturbance buffer. The Project would comply with policies related to protecting wild areas through avoiding, minimizing and/or mitigating for impacts to CDFW sensitive vegetation communities (MM BIO-10), protected trees and shrubs (MM BIO-12), and jurisdictional aquatic resources (MM BIO-15), and implementation of construction measures related to delineating work boundaries and environmentally sensitive areas (MM BIO-16), monitoring vegetation clearing (MM BIO-17), protecting wildlife from pets (MM BIO-20), minimizing wildlife exposure to night lighting (MM BIO-22), avoiding the introduction of invasive seeds (MM BIO-23), and reducing the risk of wildlife entrapment (MM BIO-26). Additionally, MM BIO-9 requires Metro to prepare a Habitat Restoration Plan which would restore temporary impacted locations like staging yards.

The City of Santa Monica's General Plan applies to potential offsite staging yard S1, by the Santa Monica Airport. The Project complies with the goal of preserving ecological balance and reducing air pollution as impacts to the 18 trees present within this area would be avoided, minimized, and/or mitigated for (MM BIO-10) through coordination with the Director of Community and Cultural Services at the City.

Four local ordinances or policies protecting biological resources are present within the Alternative 5 RSA, including the City of LA Ordinance, City of Santa Monica Tree Code, City of LA Policy, and the Metro Tree Policy. No other ordinances or policies related to biological resources were identified in the operation of Alternative 5.

As discussed below, there is a potential for significant impacts related to protected tree and shrub removal within the City of Los Angeles during construction and operation of Alternative 5. Additionally, significant impacts related to tree removal within property owned by the City of Santa Monica exist related to the construction of Alternative 5.

Operational Impacts

During operations of Alternative 5, activities such as trimming, encroaching into the protection zone (i.e., dripline or canopy), or other actions that would damage root systems or alter the grade around a trunk may impact protected tree and shrub species. These activities would result in a potentially significant impact to protected trees.

Protected tree species on Alternative 5 that may require operational maintenance include coast live oak and Mexican elderberry at the proposed UCLA station. Maintenance to these protected trees would constitute a significant impact. To address this impact, Alternative 5 would implement MM BIO-3, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs when impacts are unavoidable. With implementation of MM BIO-3, impacts to protected trees during operations of Alternative 5 would be reduced to less than significant through installation and maintenance of replacement trees or shrubs following the requirements of the pertinent tree preservation ordinance.

Construction Impacts

For the purpose of this assessment, protected trees and shrubs included in the inventory (i.e., of the appropriate size and species whose TPZ (dripline or canopy of the tree/shrub) falls at least partially within the Tree Survey Area) are presumed to require removal.

For Alternative 5, a total of 1,162 protected trees and shrubs are mapped within the Tree Survey Area of Alternative 5. Of those, 69 are protected under the purview of the City of LA Ordinance, irrespective of land ownership, and require permits for alterations made to protected trees and shrubs during construction, including trimming and encroaching into the tree/shrub protection zone in any manner that would cause a protected tree or shrub to die, such as damaging the root system with compaction or injury and changing the grade around the trunk. Seventy-six are on property owned by the City of Santa Monica that would be used during construction as a potential off-site staging yard. These are covered by the City of Santa Monica Tree Code and would require a City permit from the Santa Monica City Director before trees can be altered in any manner, including but not limited to removal, trimming, pruning, and planting. The remaining 1,017 trees are under the jurisdiction of the City of LA Policy or the Metro Tree Policy. Heritage or protected trees as determined by local ordinances or policy, may be present within the Alternative 5 Tree Survey Area; impacts to these trees are anticipated to be less than significant for Alternative 5.

Unless mitigated, the anticipated removal and alteration of protected trees and shrubs during construction of Alternative 5 would conflict with the City and County tree ordinances and with Metro and City tree policies. This is considered a significant impact. Refer to the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a), Appendix B – Attachment 1, Tree Inventory Tables for the full list of these recorded trees.

To address this impact, Alternative would 5 would implement MM BIO-12, described in Section 3.3.6, which would require installation and maintenance of replacement trees or shrubs following requirements of the pertinent preservation policy or ordinance. With implementation of MM BIO-12, impacts associated with the removal of protected trees and shrubs during construction of Alternative 5 would be reduced to less than significant.

Alternative 6

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The Alternative 6 RSA does not enter unincorporated County land, so the County of Los Angeles General Plan and Sustainability Plan "OurCounty" are not applicable.

For Alternative 6, the *City of Los Angeles General Plan's* (DCP, 2001) policies to create and maintain an integrated open space system that apply to and are addressed by the Project include preserving habitat linkages and providing wildlife corridors (MM BIO-14); conserving and managing watersheds (MM BIO-15 for Jurisdictional Aquatic Resource mitigation); onsite evaluation of sensitive habitats (MM BIO-10) and species (MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-14); and analysis of wildlife movement (MM BIO-14). Since no SEAs intersect with the RSA and no ground disturbance is planned for the Sepulveda Basin, these policies do not apply to Alternative 6.

The City of Santa Monica General Plan is not applicable to Alternative 6 since no land owned by the City is within the RSA.

Three local ordinances or policies protecting biological resources are present within the Alternative 6 RSA, including the City of LA Ordinance, City of LA Policy, and the Metro Tree Policy. No other ordinances or policies related to biological resources were identified in the operation of Alternative 6.

As discussed below, there is potential for significant impacts related to protected tree and shrub removal within the City of Los Angeles related to the construction and operation of Alternative 6.

Operational Impacts

During operations of Alternative 6, activities such as trimming, encroaching into the protection zone (i.e., dripline or canopy), or other actions that would damage root systems or alter the grade around a trunk may impact protected tree and shrub species. These activities would result in a potentially significant impact to protected trees.

Protected tree species on Alternative 6 that may require operational maintenance include coast live oak and Mexican elderberry at the proposed UCLA station. Additionally, several southern California black walnut and coast live oaks are presumed to be present around the proposed mid-mountain deep vent shaft within the Stone Canyon Reservoir area that may require operational maintenance. Maintenance to these protected trees would constitute a significant impact.

To address this impact, Alternative 6 would implement MM BIO-3, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs when impacts are unavoidable. With implementation of MM BIO-3, impacts to protected trees during operations of Alternative 6 would be reduced to less than significant through installation and maintenance of replacement trees or shrubs following the requirements of the pertinent tree preservation ordinance.

Construction Impacts

For the purpose of this assessment, protected trees and shrubs included in the inventory (i.e., of the appropriate size and species whose TPZ falls at least partially within the Tree Survey Area) are presumed to require removal during construction.

For Alternative 6, a total of 938 protected trees and shrubs are mapped within the Tree Survey Area. Of those, 329 are estimated to be protected under the purview of the City of LA Ordinance, irrespective of land ownership, and require permits for alterations made to protected trees and shrubs during construction, including trimming and encroaching into the tree/shrub protection zone. Due to lack of access into portions of the Tree Survey Area around Stone Canyon Reservoir, the number of trees was estimated through aerial imagery and species was designated as southern California black walnut per the publicly available vegetation mapping (NPS, 2004-2019). Since California walnut are protected under the City of LA Ordinance, inventoried trees within the area were assumed to be protected and are included herein.

The remaining 609 trees are under the jurisdiction of the City of LA Policy or the Metro Tree Policy. Heritage or protected trees as determined by local ordinances or policy, may be present within the Alternative 6 Tree Survey Area; impacts to these trees are anticipated to be less than significant for Alternative 6.

Unless mitigated, the anticipated removal and alteration of protected trees and shrubs during construction of Alternative 6 would conflict with the City and County tree ordinances and with Metro and City tree policies. This is considered a significant impact. Refer to the *Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report* (Metro, 2025a), Appendix B – Attachment 1, Tree Inventory Tables for the full list of these recorded trees.

To address this impact, Alternative 6 would implement MM BIO-13, described in Section 3.3.6, which would require installation and maintenance of replacement trees or shrubs following requirements of the pertinent preservation policy or ordinance. With implementation of MM BIO-13, impacts associated with the removal of protected trees and shrubs during construction of Alternative 6 would be reduced to less than significant.

Maintenance and Storage Facilities

Trees present within any of the MSF locations are summarized below; they are policy-protected by either the City of LA Policy or Metro Tree Policy. Permitting would be required for trees on the public ROW and covered by the LA Street Tree Policy. Tree impacts under the Metro Tree Policy would not require permits; instead, coordination and negotiation with landowners would be required to reconcile for street tree removals.

Monorail Transit Maintenance and Storage Facility Base Design (Alternatives 1 and 3)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The MSF Base Design is not within unincorporated County land, so the Los Angeles County General Plan and Sustainability Plan "OurCounty" are not applicable.

The MSF Base Design for Alternatives 1 and 3 would be on developed property at the LADWP facility located east of the Van Nuys Metrolink/Amtrak Station and directly south of the LOSSAN rail corridor. Within the MSF Base Design, there are 32 ornamental trees, including Chinese elm (*Ulmus parvifolia*), jacaranda *(Jacaranda mimosifolia*), Canary Island pine (*Pinus canariensis*), and shamel ash (*Fraxinus uhdei*), among others. Since the MSF would be within Los Angeles Metro property lines, Metro is responsible for trees within the MSF; these trees are covered by the Metro Tree Policy.

Impacts to trees at the MSF Base Design during the operations phase would conflict with the Metro Tree Policy, which applies to tree removal within Metro property lines or Metro's ROW. Trees within the MSFs are anticipated to be removed during construction. Those that are not removed during construction would be subject to potentially significant impacts during operations if maintenance, such as trimming, injury that would result in death, or removal, is required during operations. With implementation of MM BIO-3, impacts to protected trees and shrubs during operations of the MSF for Alternatives 1 and 3 would be reduced to less than significant.

Tree removal at the MSF Base Design during construction would conflict with the Los Angeles Street Tree and Metro Tree Policies, which would constitute a significant impact. To address this impact, the MSF Base Design would implement MM BIO-11, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs following requirements of the pertinent tree preservation policy or ordinance. With implementation of MM BIO-11, impacts associated with removal of protected trees and shrubs during construction of the MSF Base Design would be reduced to less than significant.

Monorail Transit Maintenance and Storage Facility Design Option 1 (Alternatives 1 and 3)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The MSF Design Option 1 is not within unincorporated County land, so the Los Angeles County General Plan and Sustainability Plan "OurCounty" are not applicable.

The MSF Design Option 1 for Alternatives 1 and 3 would be located on developed property abutting Orion Avenue, south of the LOSSAN rail corridor. Within the MSF Design Option 1, there are 206 ornamental trees including carob (*Ceratonia siliqua*), eucalyptus (*Eucalyptus* spp.), sweetgum (*Liquidambar styraciflua*), cajeput (Melaleuca *spp*.), jacaranda, and assorted palm species among others. Since the MSF would be within Los Angeles Metro property lines, Metro is responsible for trees within the MSF. Impacts to trees at the MSF Design Option 1 during the operations phase would conflict with the Metro Tree Policy, which applies to tree removal within Metro property lines or Metro's ROW. however, no impacts to trees within the MSF Design Option 1 are anticipated during operation since Trees within the MSFs are anticipated to be removed during construction. Those that are not removed during construction would be subject to potentially significant impacts during operations if maintenance, such as trimming, injury that would result in death, or removal, is required during operations. With implementation of MM BIO-3, impacts to protected trees and shrubs during operations of the MSF for Alternatives 1 and 3 would be reduced to less than significant.

Tree removal at the MSF Design Option 1 during construction would conflict with the Los Angeles Street Tree and Metro Tree Policies, which would constitute a significant impact. To address the impact, the MSF Design Option 1 would implement MM BIO-11, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs following requirements of the pertinent tree preservation policy or ordinance. With implementation of MM BIO-11, impacts associated with removal of protected trees and shrubs during construction of the MSF Design Option 1 would be reduced to less than significant.

Electric Bus Maintenance and Storage Facility (Alternative 1)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The Electric Bus MSF is not within unincorporated County land, so the Los Angeles County General Plan and Sustainability Plan "OurCounty" are not applicable.

The Electric Bus MSF for Alternative 1 would be located on developed property on the corner of Pico Boulevard and Cotner Avenue near the southern end of the Alternative 1 RSA. This area has 15 ornamental trees including Brisbane box (*Lophostemon confertus*), crape myrtle (*Lagerstroemia* spp.), brush box (*Lophostemon confertus*) and queen palm trees (*Syagrus romanzoffiana***)**. Since the MSF would be within Los Angeles Metro property lines, Metro is responsible for trees within the MSF.

Impacts to trees at the Electric Bus MSF during the operations phase would conflict with the Metro Tree Policy, which applies to tree removal within Metro property lines or Metro's ROW. Trees within the Electric Bus MSF are anticipated to be removed during construction. Those that are not removed during construction would be subject to potentially significant impacts during operations if maintenance, such as trimming, injury that would result in death, or removal, is required during operations. With implementation of MM BIO-3, impacts to protected trees and shrubs during operations of the Electric Bus MSF for Alternative 1 would be reduced to less than significant.

Tree removal at the Electric Bus MSF during construction would conflict with the Los Angeles Street Tree and Metro Tree Policies, which would constitute a significant impact.

To address this impact, the Electric Bus MSF for Alternative 1 would implement MM BIO-11, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs following requirements of the pertinent tree preservation policy or ordinance. With implementation of MM BIO-11, impacts associated with removal of protected trees and shrubs during construction of the Electric Bus MSF for Alternative 1 would be reduced to less than significant.

Heavy Rail Transit Maintenance and Storage Facility (Alternatives 4 and 5)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The MSF for Alternatives 4 and 5 would be on developed land located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. Within the Alternatives 4 and 5 MSF, there are 43 ornamental trees including Mexican fan palm (*Washingtonia robusta*), Canary Island pine, Chinese elm, and eucalyptus trees among others. Since the MSF would be within Los Angeles Metro property lines, Metro is responsible for trees within the MSF.

Impacts to trees at the MSF during the operations phase would conflict with the Metro Tree Policy, which applies to tree removal within Metro property lines or Metro's ROW; Trees within the MSF are anticipated to be removed during construction. Those that are not removed during construction would be subject to potentially significant impacts during operations if maintenance, such as trimming, injury that would result in death, or removal, is required during operations. With implementation of MM BIO-

3, impacts to protected trees and shrubs during operations of the MSF for Alternatives 4 and 5 would be reduced to less than significant.

Tree removal at the MSF during construction would conflict with the Los Angeles Street Tree and Metro Tree Policies, which would constitute a significant impact. To address this impact, the MSF for Alternatives 4 and 5 would implement MM BIO-12, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs following requirements of the pertinent tree preservation policy or ordinance. With implementation of MM BIO-12, impacts associated with removal of protected trees and shrubs during construction of the MSF for Alternatives 4 and 5 would be reduced to less than significant.

Heavy Rail Transit Maintenance and Storage Facility (Alternative 6)

Impact Statement

Operational Impact: Less than Significant Impact with Mitigation

Construction Impact: Less than Significant Impact with Mitigation

The MSF for Alternative 6 would be on developed property located east of the Van Nuys Metrolink Station and south of the LOSSAN rail corridor, bounded by Hazeltine Avenue to the west and Woodman Avenue to the east. Within the Alternative 6 MSF, there are 36 ornamental trees including Mexican fan palm, Canary Island pine, and eucalyptus trees among others. Since the MSF would be within Los Angeles Metro property lines, Metro is responsible for trees within the MSF; these trees are covered by the Metro Tree Policy.

Impacts to trees at the Alternative 6 MSF during the operational phase would conflict with the Metro Tree Policy, which applies to tree removal within Metro property lines or Metro's ROW. Trees within the Alternative 6 MSF are anticipated to be removed during construction. Those that are not removed during construction would be subject to potentially significant impacts during operations if maintenance, such as trimming, injury that would result in death, or removal, is required during operations. With implementation of MM BIO-3, impacts to protected trees and shrubs during operations of the MSF for Alternative 6 would be reduced to less than significant.

Tree removal at the Alternative 6 MSF during construction would conflict with the Los Angeles Street Tree and Metro Tree Policies, which would constitute a significant impact. To address this impact, the MSF for Alternative 6 would implement MM BIO-13, described in Section 3.3.6, which would require the installation and maintenance of replacement trees or shrubs following requirements of the pertinent tree preservation policy or ordinance. With implementation of MM BIO-13, impacts associated with removal of protected trees and shrubs during construction of the MSF for Alternative 6 would be reduced to less than significant.

3.3.5.6 Impact BIO-6: Would the 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?

Project Alternatives

No Project Alternative

Impact Statement

Operational Impact: Less than Significant Impact

Construction Impact: Less than Significant Impact

Operational Impacts

Operational impacts from the Project would not occur under the No Project Alternative, since the project alternatives would not be constructed.

Within the Project Study Area, the only foreseeable transit improvement under the No Project Alternative would include changes to the Metro Line 761. Operation of the improved Metro Line 761 bus route would not conflict with the provisions of an adopted HCP, or natural community conservation plan, or other approved local, regional, or state conservation plans because currently no such plans exist within the Project Study Area.

Construction Impacts

Construction impacts from the Project would not occur under the No Project Alternative. Construction activities associated with changes to the Metro Line 761 would not conflict with the provisions of an adopted HCP, or natural community conservation plan, or other approved local, regional, or state conservation plans because currently no such plans exist within the Project Study Area.

Alternative 1

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional, or state HCPs that occur within the Alternative 1 RSA. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Alternative 3

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 3 RSA. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Alternative 4

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 4 RSA. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Alternative 5

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 5 RSA. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Alternative 6

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 6 RSA. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Maintenance and Storage Facilities

Monorail Transit Maintenance and Storage Facility Base Design (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 1 or Alternative 3 RSAs. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Monorail Transit Maintenance and Storage Facility Design Option 1 (Alternatives 1 and 3)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 1 or Alternative 3 RSAs. Therefore, no impacts would occur.

Electric Bus Maintenance and Storage Facility (Alternative 1)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 1 RSA. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Heavy Rail Transit Maintenance and Storage Facility (Alternatives 4 and 5)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 4 or Alternative 5 RSAs. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

Heavy Rail Transit Maintenance and Storage Facility (Alternative 6)

Impact Statement

Operational Impact: No Impact

Construction Impact: No Impact

There are no adopted HCPs, NCCPs, or other approved regional or state HCPs that occur within the Alternative 6 RSA. Therefore, no impacts to an adopted HCP, NCCP, or other state HCP would occur.

3.3.6 Mitigation Measures

The following mitigation measures would be implemented to address potential impacts to ecosystems and biological resources. Table 3.3-11 below displays the mitigation measures that are applicable to each alternative and impact threshold. With the exception of MM BIO-11, MM BIO-12, MM BIO-13, MM BIO-14, and MM BIO-28, all mitigation measures would be applicable to all project alternatives. Applicability of MM BIO-11, MM BIO-12, MM BIO-13, MM BIO-14, and MM BIO-28 would be as follows:

- MM BIO-11 applies to Alternative 1 and Alternative 3
- MM BIO-12 applies to Alternative 4 and Alternative 5
- MM BIO-13 applies to Alternative 6
- MM BIO-14 applies to Alternative 1, Alternative 3, and Alternative 6
- MM BIO-28 applies to Alternative 1 and Alternative 3

3.3.6.1 Operational Mitigation Measures

MM BIO-1: ***Avoid and Minimize Operations-Related Impacts to Nesting Birds.*** *Vegetation trimming for operation of the Project related to operational maintenance shall be* under the purview and conducted in compliance with *the existing Metro Tree Policy* on facilities owned by Metro*. The Metro Tree Policy's measures to protect native nesting birds* (generally February 15 through September 15)*, including implementation of bird surveys* conducted by a Qualified Biologist, *if tree maintenance must occur within the breeding season, shall be implemented. Metro shall be responsible for ensuring compliance with the Metro Tree Policy throughout operations* where such activities occur *on its own properties.*

Project features and/or mitigation recommendations to avoid direct impacts to bird movement shall be implemented where possible, such as Implementation of appropriate deterrents (e.g., visual and/or auditory) on aerial vehicles and/or support structures of the aerial alignment (where present) to prevent bird collisions (e.g., using non-reflective glass, glass treatments, or striped bird-safe film on windows).

MM BIO-2: ***Avoid and Minimize Operations-Related Impacts to Special-Status Bat Species.*** *To reduce impacts on roosting bats resulting from operations-related activities on Metro-owned facilities, the following shall be implemented:*

- *Vegetation trimming and removal required for operational maintenance shall be under the purview and conducted in compliance with the existing Metro Tree Policy. Metro shall be responsible for ensuring compliance with the Metro Tree Policy throughout operations where such activities occur on its own properties.*

- *Specific mitigation measures related to operational work for the Project shall be detailed in a Bat Habitat Mitigation and Monitoring Plan (BHMMP), created by a Qualified Biologist and approved by the California Department of Fish and Wildlife prior to initiation of construction. The BHMMP shall include site-specific measures for operational work to avoid and minimize Project-related impacts to roosting, overwintering, and breeding special-status bat species. The BHMMP also shall include reporting requirements to document activities and the results of these measures. Bat protection measures may include, but not be limited to, the following:*
  - *Limiting vegetation removal wherever possible.*
  - *Implementation of appropriate deterrents (e.g., visual, sonar, and/or auditory) on aerial vehicles and/or support structures of the aerial alignment where present to prevent bat collisions (e.g., using non-reflective glass, glass treatments, or striped bird-safe film on windows).*
  - *Flight pathways (i.e., line of flight into and out of the roost) shall be maintained during maintenance Project work. Modifications to ingress and egress routes shall not be allowed, including but not limited to obstacles presented from construction equipment use and staging, location and type of lighting or reconfiguration of staged materials (vehicles, equipment, etc.) at night relative to roosting locations.*
  - *If swallow nests need to be removed during operations, they shall be removed only during the fall (September 1 to October 31) or a time recommended by a Qualified Biologist to ensure removal occurs outside of bat maternity and hibernation seasons. Removal shall occur at night whenever feasible to minimize disturbances. Before removal, a Qualified Bat Biologist shall inspect each swallow nest for occupancy. If the nest is unoccupied, it may be removed immediately. If bats are present, a small portion of the nest shall be carefully removed to make it less suitable for roosting. This process shall be repeated nightly until the nest is vacated. If the next is not vacated after successive attempts, consultation with CDFW shall occur to determine appropriate actions.*
- *Trees, bridges, or other structures that may need to have maintenance work conducted during operations shall be evaluated for potential to support bat roosts. Before work is conducted, a Qualified Biologist shall conduct a one-night emergence survey during acceptable weather conditions. The following measures shall apply to trees, bridges, or other structures on Metro-owned facilities should bat roosts be detected.*
  - *If roosting bats are determined to be present during the maternity season (April 15 through August 31), work on the tree/structure shall be avoided to the extent feasible until after the maternity season when young are self-sufficient. If work on a tree/structure must occur during the maternity season (for repairs or other activities that cannot wait until the end of the maternity season), bat surveys shall be conducted by a Qualified Biologist to determine the use of the roost by bats, if a maternity roost is present, etc.*

This shall help inform additional avoidance and minimization measures that may need to be implemented in conjunction with the California Department of Fish and Wildlife to permit work during the maternity season.

  - *If roosting bats are determined to be present during the winter months when bats are in torpor (i.e., a state in which the bats have significantly lowered their physiological state, which occurs generally October 31 through February 15), and if conditions permit, a Qualified Biologist shall physically examine the roost for the presence or absence of bats before the start of operations activities; equipment such as an electric lift may be utilized to conduct the inspection. If the roost is determined to be occupied during this time, impacts to the roost shall be avoided, to the extent feasible, until after the winter season when bats are once again active. If avoidance of roosting bats is not possible due to the need for repairs, discussion with the California Department of Fish and Wildlife may be necessary to reduce potential impacts while permitting repair activities.*

- *Trees, bridges, or structures on Metro-owned facilities with potential colonial bat habitat that require trimming or repairs during operations outside of the maternity season and winter season (generally February 16 through April 14 and September 1 through October 30, or as determined by a Qualified Biologist) can be conducted using a two-step process that occurs over two consecutive days.*
  - *Day 1, Step 1: Under the supervision of a Qualified Biologist, tree branches and limbs with no cavities that would potentially be used by bats shall be removed by hand (e.g., using handsaws) or smaller components of the structure shall begin to be removed by hand (e.g., hammer, screwdriver). The associated vibrational and noise disturbance and physical alteration of the tree would likely cause bats roosting in the tree to either abandon the roost immediately or avoid returning to the roost after emergence.*
  - *Day 2, Step 2: Removal of the remainder of the tree, bridge, or structure can occur the following day under the supervision of a Qualified Biologist.*
  - *The results of bat surveys, evaluations, and monitoring efforts that are undertaken shall be documented in a report by the biologist and provided to the California Department of Fish and Wildlife in electronic format at the conclusion of all bat-related mitigation activities.*

MM BIO-3: ***Avoid and Minimize Operations-Related Impacts to Protected Trees and Shrubs.*** *Impacts to protected trees and shrubs shall be avoided, minimized, and/or mitigated by incorporation of the following:*

- *Compliance with the applicable tree policies requirements for permitting and mitigation.*
- *Impacts to protected trees and shrubs during operation of the Project shall be minimized to the maximum extent feasible. When impacts to protected trees and shrubs are unavoidable — including alterations made such as trimming and/or encroachment into the tree/shrub protection zone (defined as the dripline or canopy of the tree/shrub) — the following measures shall be required.*

- *Trimming of protected trees/shrubs must comply with the pruning standards set forth by the Western Chapter of the International Society of Arboriculture in a manner that does not cause permanent damage or adversely affect the health of the trees or shrubs. Trimming shall require coordination and permitting with the appropriate entities with jurisdiction as follows:*
  - *Species protected under the Los Angeles Protected Tree and Shrub Ordinance shall coordinate with the City of Los Angeles Board of Public Works, Urban Forestry Division.*
  - *Trees protected under the City of Los Angeles Policy shall require coordination with the City of Los Angeles Department of Public Works, Urban Forestry Division.*
  - *Trees covered by the Metro Tree Policy shall require the Project to prepare a tree protection plan identifying Tree Protection Zones for all trees designated for retention and to prepare a mitigation plan for damaged and removed trees.*
  - *Trees protected by the Los Angeles County Oak Tree Ordinance shall require coordination with the Los Angeles County Director of Public Works prior to tree work.*
  - *Trees within the Santa Monica Mountains National Recreation Area shall require coordination for tree trimming or removal with the appropriate entities (e.g., National Park Service, Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority).*
- *If operations and maintenance requires removal of protected trees or shrubs, the required tree removal permits shall be obtained, and replacement shall occur at the below rates. Mitigation locations of replacement trees shall be determined through the permitting process.*
  - ***Special-status trees afforded protection under the California Endangered Species Act (CESA) or Endangered Species Act (ESA):*** *Impacts to all trees protected by CESA or ESA (e.g., Quercus dumosa) shall require coordination with the California Department of Fish and Wildlife or U.S. Fish & Wildlife Service, as applicable, in addition to the appropriate tree protection ordinance or policy.*
  - ***Los Angeles County Oak Tree Ordinance:*** *All trees within the oak genus (Quercus) shall be replaced at a ratio of 2:1 per individual oak tree.*
  - ***City of Los Angeles Protected Tree and Shrub Ordinance:*** *Protected trees and shrubs included trees of the oak genus (indigenous to California), western sycamore, southern California black walnut and California bay, and two shrub species (Mexican elderberry and toyon). Individual trees and shrubs shall be replaced at a 4:1 ratio by plants that are the same species of protected plant.*
  - ***Policy-Protected Trees****: All policy-protected trees, which fall under the purview of the Los Angeles Street Tree Policy or the Metro Tree Policy, shall*

be replaced at a ratio of 2:1, or an in-lieu fee shall be made. Trees under the Metro Tree Policy that are designated as heritage trees in a local ordinance shall be replaced at a 4:1 ratio with trees of the same variety.

  - ***Santa Monica Mountains National Recreation Area**: Any tree within the Santa Monica Mountains National Recreation Area shall be replaced by trees of a species and ratio at the discretion of National Park Service, Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority.*

- *All trees occurring on private property, including within the Caltrans right-of-way, shall not require permitting, but shall require coordination and negotiation with property owners. Mitigation implementation shall follow Metro Tree Policy's replacement ratio of 2:1.*

MM BIO-28: ***Avoid and Minimize Operations-Related Impacts to Mountain Lion and Vertebrate Movement Corridors.*** *Impacts to mountain lion and other vertebrate movement corridors during operations shall be avoided, minimized, and/or mitigated as follows:*

- *Metro shall develop, in coordination with the California Department of Fish and Wildlife and relevant species experts, and implement a 5-year monitoring plan to track wildlife movement across corridors during operations of the Project. This shall include a survey of the Project area prior to construction to establish baseline conditions, as well as monitoring the Project area during operations. Monitoring shall use camera traps, radio collars, or other wildlife tracking technologies. If the data indicate that mountain lion or other vertebrate movement is adversely impacted by the presence of the Project (e.g., injury or mortality due to collisions and other effects, reduced habitat patch connectivity, disruptions in corridor usage or avoidance of pre-existing travel corridors), additional mitigation measures, such as enhanced crossing infrastructure or more extensive wildlife funneling fencing, shall be implemented within six months. During the 5-year monitoring phase, annual reports summarizing the effectiveness of the mitigation measures, any observed impacts on wildlife movement, and the results of the monitoring program shall be submitted to California Department of Fish and Wildlife, Caltrans, and the Santa Monica Mountains Conservancy. These reports shall also include recommendations for adjustments to ensure compliance with wildlife connectivity standards.*

3.3.6.2 Construction Mitigation Measures

Resource-Specific Mitigation Measures

MM BIO-4: ***Avoid and Minimize Construction-Related Impacts to Nesting Birds.*** *Vegetation clearance for construction of the Project shall occur outside of the nesting bird season (generally February 15 through September 15) to the extent feasible. If vegetation removal outside this time period is not feasible, the following additional measures shall be employed to avoid and minimize impacts to special-status bird species and*

nesting birds protected under the Migratory Bird Treaty Act and California Fish and Game Code:

- *A preconstruction nesting bird survey of the work area (as defined by the Ground Disturbance Area, including staging and laydown yards) plus a 300-foot buffer shall be conducted by a Qualified Biologist within three days prior to the start of ground disturbing activities (including vegetation removal activities) to determine whether active nests (defined as nests with eggs or young) are present within or adjacent to (i.e., within 100 feet for non-special-status songbirds, 300 feet for raptors and special-status species) the work zone. Any active nests found shall be recorded and a nest avoidance zone shall be established where no work shall occur. If project activities are delayed beyond 72 hours, a new nesting bird survey shall be completed within 72 hours prior to the resumption of ground disturbing activities.*
- *Active bird nests for species protected by the Migratory Bird Treaty Act shall have a clearly demarcated (via flagging, fencing and/or signage) no-disturbance buffer established as follows: 300-foot radius buffer for raptors and special-status birds (refer to MM BIO-7 for additional least Bell's vireo measures) and 100-foot-radius buffer for non-raptor and non-special-status avian nests. The Qualified Biologist can adjust buffer distances to increase or decrease the radius contingent on topography, existing noise levels, planned operational activities, species specific tolerances to disturbances such as noise and vibration from construction activities, and observations specific nesting pair tolerance to disturbances. Nest monitoring by the Qualified Biologist shall be required following buffer modifications to ensure new buffer is appropriate; adjustments can be made only following monitoring of nesting pair to determine if the buffer is adequate to protect the nest from construction impacts, including from noise and vibrations. Installation of temporary noise barriers between the work area and nest can also be evaluated, if installation can occur in a manner to not disturb the nesting pair based on the Qualified Biologist's recommendation. If a Qualified Biologist determines work activities may result in nest failure, project work shall cease within the recommended no-disturbance buffer until a Qualified Biologist determines nest status. Additional follow-up surveys shall be conducted as necessary to determine nest status. Once the nest is determined to be fledged or no longer active, the buffer shall be removed.*
- *A Qualified Biologist shall inform maintenance personnel of any active nests, facilitate avoidance measures, and verify operational activities do not cause disturbance. Maintenance personnel shall be updated on nest status and when avoidance buffers are no longer necessary.*
- *A Qualified Biologist shall monitor each nest on a biweekly basis and project activities shall not occur within the buffer until a Qualified Biologist determines the nest is no longer active (either by fledging or failing naturally). If a nest is adjacent to an access road where no project activities are being conducted, vehicles can drive past the nest without stopping or parking. Signage stating no stopping or idling vehicles shall be posted (facing outwards from the buffer) at the start and end of the nest buffer where it crosses the road.*

- *A Qualified Biologist can determine a nest is inactive (defined as eggs and young no longer present or reliant on the nest site, including fledged young that still depend upon the nest) following no observations of activity at the nest location for 1 hour for non-raptor avian nests and 4 hours for raptors.*
- *A summary of nesting bird surveys, monitoring efforts, and any no-disturbance buffers that were installed shall be documented by the biologist at the conclusion of each nesting season and submitted to Metro. In the event that an active bird nest is identified as belonging to a special-status species afforded protection under the California Endangered Species Act or the federal Endangered Species Act, then the appropriate agency shall be immediately informed, and additional coordination shall occur, as needed.*

MM BIO-5: ***Avoid and Minimize Construction-Related Impacts to Roosting Special-Status Bat Species.*** *To reduce impacts on roosting bats resulting from construction activities, the following shall be implemented:*

- *A bat habitat assessment shall be conducted during the bat maternity season (generally April 15 through August 31 for southern California, yearly timing dependent on weather conditions) at least one year prior to construction. A Qualified Biologist shall conduct surveys to determine the presence of bat roosting or maternity habitat within suitable areas where vegetation trimming, tree removal, bridge repair activities, structure demolition, or other construction-related activities may occur and bats may be present. A visual inspection and/or one-night emergence survey of potential bat habitat that may be impacted by activities shall be completed utilizing acoustic recognition technology to determine if any maternity roosts are present. Results from this survey shall be used to create a Bat Habitat Mitigation and Monitoring Plan (BHMMP), produced by a Qualified Biologist, and shall include site-specific minimization and avoidance measures for operations and construction of the Project. These measures shall include but not be limited to establishment of no-disturbance buffers, monitoring of roosting bats to ensure tolerance to disturbances such as noise and vibration from Project activities, mitigation for habitat impacts, and humane eviction or exclusion. If monitoring indicates established no-disturbance buffer is not adequate to prevent disturbances to roosting bats, a Qualified Biologist can adjust the buffer as needed.*
- *Flight pathways, i.e., line of flight into and out of the roost, shall be maintained during maintenance Project work. Modifications to ingress and egress routes are not allowed, including but not limited to obstacles presented from construction equipment use and staging, location and type of lighting or reconfiguration of staged materials (e.g., vehicles, equipment, etc.) at night relative to roosting locations.*

- *If swallow nests need to be removed during construction, removal shall occur in the fall (September 1 to October 31 or based on local expert bat biologist input as long as it is outside of bat maternity or hibernation season), preferably at night. Nests shall be inspected for occupancy by a Qualified Bat Biologist and if empty, removed. If a bat is present, if feasible a small portion of the nest can be carefully removed to make the nest a less suitable for roosting. The following night, if the nest is empty, it can be removed entirely. If not, another small portion can be removed if feasible. If removal is not feasible or bats are still present, consultation with the California Department of Fish and Wildlife may be appropriate.*
- *Trees or structures to be removed as part of the Project shall be evaluated for their potential to support bat roosts. An experienced bat biologist shall conduct a one-night emergence survey during acceptable weather conditions, before the start of removal. The following measures shall apply to trees or structures to be removed that provide potential bat roost habitat; these shall be implemented by a Qualified Bat Biologist.*
  - *If roosting bats are determined present in a tree or on a structure during the maternity season (April 15 through August 31), the tree/structure shall be avoided until after the maternity season when young are self-sufficient. If other trees/structures in the immediate vicinity are slated for removal, or other work shall occur in the immediate vicinity that might disturb roosting bat, a no-work buffer may be needed.*
  - *If roosting bats are determined to be present during the winter months when bats are in torpor (i.e., a state in which the bats have significantly lowered their physiological state that occurs generally October 31 through February 15), and if conditions permit, a Qualified Bat Biologist shall physically examine the roost for the presence or absence of bats before the start of project activities; equipment such as an electric lift may be utilized to conduct the inspection. If the roost is determined to be occupied during this time, the tree or structure shall be avoided until after the winter season when bats are once again active.*
- *Trees or structures with potential to serve as colonial bat habitat can be removed outside of the maternity season and winter season (generally February 16 through April 14 and September 1 through October 30, or as determined by a Qualified Bat Biologist) using a two-step process that occurs over two consecutive days.*
  - *Day 1, Step 1: Under the supervision of a Qualified Bat Biologist, tree branches and limbs with no cavities shall be removed by hand (e.g., using handsaws) or smaller components of the structure shall begin to be removed by hand (e.g., hammer, screwdriver). The associated vibrational and noise disturbance and physical alteration of the tree/structure would likely cause bats roosting to either abandon the roost immediately or avoid returning to the roost after emergence.*

  - *Day 2, Step 2: Removal of the remainder of the tree or structure can occur the following day under the supervision of a Qualified Bat Biologist.*

- *Trees that are only to be trimmed and not removed shall also require a two-step process with these deviations from the removal process explained above: if a branch with a potential roost must be removed, all surrounding branches shall be trimmed on Day 1 under supervision of a Qualified Bat Biologist and then the limb with the potential roost shall be removed on Day 2.*
- *The results of bat surveys, evaluations, and monitoring efforts that are undertaken shall be documented in a report by the biologist and provided to the California Department of Fish and Wildlife in electronic format at the conclusion of all bat-related mitigation activities.*

MM BIO-6: ***Avoid and Minimize Construction-Related Impacts to Crotch's Bumble Bee.*** *To reduce impacts on Crotch's bumble bee from construction activities, the following shall be implemented:*

- *A pre-construction habitat assessment for Crotch's bumble bee shall be conducted by a Qualified Biologist within the Ground Disturbance Area and a surrounding 100-foot buffer to demarcate potentially suitable nesting and foraging habitat.*
- *Nesting surveys and foraging surveys shall be conducted during the most active flight period and peak blooming period of nectar and pollen sources (generally April 1 through July 31). The survey shall be conducted between at least 1 hour after sunrise and at least 2 hours before sunset, with ambient air temperature between 60- and 90-degrees Fahrenheit. Surveys shall not be conducted during windy periods with speeds of over 10 mph, during fog or low visibility, or precipitation heavier than drizzling rain.*
- *Foraging surveys shall focus on areas of high abundance of nectar and pollen sources with meandering transects within these areas at a rate of no more than 2.5 acres per hour.*
- *Nesting surveys shall focus on areas with existing, abandoned, rodent burrows; the biologist shall focus on detecting potential Crotch's bumble bee nest within suitable habitat.*
- *If a nest is documented, a 50-foot "no-disturbance" buffer shall be established and clearly identified in the field for avoidance. Construction activities shall avoid the nest location and surrounding buffer until the nest has senesced.*
- *Results of all survey efforts shall be summarized in writing and submitted to Metro for documentation. In the event species presence is confirmed and/or a nest is located, California Department of Fish and Wildlife shall be informed, and additional coordination shall occur as needed.*

MM BIO-7: ***Avoid and Minimize Project-Related Impacts to Least Bell's Vireo.*** *To reduce impacts on least Bell's vireo from construction activities, the following shall be implemented:*

- *Prior to initiation of construction activities, the Project shall perform one full season of protocol surveys for least Bell's vireo in suitable habitat within 500 feet of construction activities following the accepted U.S. Fish & Wildlife Service protocol. Focused surveys shall be completed prior to construction initiation and results shall be used to inform a consultation process with the U.S. Fish & Wildlife Service for project permitting. Eight surveys shall be conducted between April 10 and July 31, with each survey spaced at least 10 days apart. Reduction in the prescribed number of individual surveys may be evaluated in accordance with the U.S. Fish & Wildlife Service protocol. Surveys shall be conducted between dawn and 11:00am and outside of periods of inclement weather (excessive heat or cold, high winds, rain, etc.). Surveys shall not be conducted concurrently with other surveys. Per the U.S. Fish & Wildlife Service protocol, surveyors shall not survey more than 3 linear kilometers or more than 50 hectares in one day.*
- *Following completion of protocol surveys, pre-construction presence/absence clearance surveys shall be required if construction is planned to begin within the nesting season. Clearance surveys shall be required within 500 feet of suitable habitat and must occur 3 or fewer days prior to start of activities. Presence/absence surveys shall be conducted by a Qualified Biologist who is familiar with species visually and aurally, and who is able to differentiate similar species. The Qualified Biologist shall not be required to have an Endangered Species Act Section 10(a) recovery permit covering this species since recorded vocalizations shall not be used to illicit responses and nest monitoring (i.e., locate and monitor the nest, including removal of brown-headed cowbird (Molothrus ater) eggs and chicks from parasitized nests) and handling of individual are not proposed.*
- *If protocol and pre-construction survey results are negative, construction activities can commence, and a Qualified Biologist shall conduct presence/absence surveys weekly during the breeding season while construction is occurring within 500 feet of suitable habitat. If least Bell's vireo are detected during a survey, a Qualified Biologist shall be required to monitor construction activities within 500 feet of suitable habitat until the end of the breeding season. If construction within 500 feet of suitable habitat is paused for more than 3 days, a new survey must be conducted to verify if least Bell's vireo are present.*

- *If an active nest is documented, a no-disturbance 300-foot radius buffer shall be established and clearly identified in the field. Construction activities shall avoid the nest location and buffer until a Qualified Biologist declares the nest inactive. A Qualified Biologist shall be required to monitor construction activities within 500 feet of suitable habitat every day work is occurring while the nest is active. Noise monitoring shall be required weekly on varying days to account for changes in construction-related noise levels from before the nest is active to after. Monitoring shall be to ensure noise levels remain at or below 60 A-weighted decibels (dBA) or to the ambient noise level if it already exceeds 60 dBA before construction at specified monitoring locations within 100 feet of the nest. The Qualified Biologist shall either conduct the noise monitoring or escort the noise monitor if they are not a Qualified Biologist.*
- *The results of the surveys shall be used to design project features and temporary work areas to avoid direct impacts to occupied habitat for listed riparian bird species. Results of all survey efforts shall be summarized in writing and submitted to Metro for documentation. In the event species presence is confirmed, the U.S. Fish &Wildlife Service shall be informed, and additional coordination shall occur as needed and in compliance with Section 7 of the Endangered Species Act.*

MM BIO-8: ***Avoid and Minimize Construction-Related Impacts to Special-Status Reptiles.*** *To reduce impacts on special-status reptiles from construction activities, the following shall be implemented:*

- *Prior to the start of vegetation removal, the Ground Disturbance Area shall be clearly fenced (usually with silt fencing) to delineate the extent of the construction area.*
- *Once fencing is in place, a Qualified Biologist shall conduct a pre-vegetation clearance sweep to look for and remove any special-status reptile species (e.g., coast horned lizard, two-striped garter snake, southwestern pond turtle, coastal whiptail, and southern California legless lizard) that may occur within the Ground Disturbance Area. If any special-status reptile species are detected within the Ground Disturbance Area, personnel shall allow the species to escape unimpeded if possible. Alternatively, the Qualified Biologist shall move the species outside of the fencing to the closest suitable habitat pending authorization from the U.S. Fish & Wildlife Service or California Department of Fish and Wildlife, if required.*
- *Trash and food items shall be contained in closed containers and removed daily to reduce the attraction of opportunistic predators such as common ravens, coyotes, and feral cats and dogs that may prey on sensitive species.*
- *Any observations of special-status reptiles shall be summarized in writing and submitted to Metro. In the event that an observed special-status species is afforded protection under the California Endangered Species Act (CESA) or Endangered Species Act (ESA), then the appropriate agency shall be immediately informed and additional coordination shall occur, as needed.*

MM BIO-9: ***Avoid and Minimize Construction-Related Impacts to Special-Status Plants.*** *Impacts to special-status plants shall be avoided, minimized and/or mitigated through incorporation of the following:*

- *Prior to any Project activities that may modify vegetation, focused rare plant surveys shall be conducted following California Department of Fish and Wildlife protocols. Focused surveys shall occur during optimal blooming periods for special-status species likely to occur, which typically results in multiple visits within one growing season (e.g., early, mid- and late-season surveys). In the event a federally listed species is confirmed, the U.S. Fish & Wildlife Service shall be informed, and additional coordination shall occur as needed and in compliance with Section 7 of the Endangered Species Act.*
- *If focused rare plant data is more than 1 year old at commencement of construction, pre-construction surveys during the optimal blooming periods shall occur to demarcate special-status plant populations for avoidance (where feasible). The results of the focused surveys shall be used to design project features and temporary work areas to avoid direct impacts to federally and state-listed plant species.*
- *All observations of special-status plants prior to and during Project construction activities shall be documented in writing, including detailed descriptions of the location, species, and condition of the plant. If a special-status species protected under the California Endangered Species Act or the federal Endangered Species Act is observed, Metro shall immediately notify the appropriate agency (e.g., California Department of Fish and Wildlife or U.S. Fish & Wildlife Service) and coordinate further actions as required by law. This may include consultation to determine the need for additional avoidance, minimization, or mitigation measures. If impacts to special-status plants cannot be avoided, the Project shall prepare and implement a Habitat Restoration Plan. The Habitat Restoration Plan shall include mitigation ratios for impacted special-status plants and native habitats, installation methods, a detailed monitoring plan that includes quantifiable data collection, maintenance strategies, reporting requirements, and quantifiable performance criteria for restoration success.*
- *Special-status plant mitigation strategies shall include restoration of impacted areas through seeding and/or plantings. Weed abatement shall be implemented if Project activities result in non-native species within the Ground Disturbance Area that were not present before activities began. Specific strategies shall be implemented as described below:*
  - *If special-status plant species observed during surveys can feasibly be transplanted, such as slender mariposa lily (Calochortus clavatus var. gracilis), individuals shall be salvaged prior to ground disturbance for translocation. Salvage may include collection by hand of individual plants, storage in an appropriate manner depending on species, and replanting within suitable habitat close to its original location following completion of construction activities. For the purposes of this measure, "feasible" shall*

mean the ability to transplant plants without jeopardizing plant viability, project design, or safety requirements.

- *If on-site repair or restoration efforts are not feasible or adequate to mitigate for impacted plants, alternative measures, such as off-site compensation, shall be implemented. Off-site compensation shall achieve equivalent or greater ecological value and shall utilize a minimum 3:1 replacement ratio (three replacement plants for every one impacted plant). The replacement ratio shall be based on the number of individuals impacted or the acreage of habitat affected, depending on the specific circumstances, and the species affected. The compensation area shall be protected in perpetuity through mechanisms such as conservation easements, deed restrictions, or long-term management agreements.*
- *To protect special-status plant populations from human disturbance after construction is completed, fencing or signage shall be installed around restored areas where public access is anticipated.*

MM BIO-10: ***Avoid and Minimize Construction-Related Impacts to Sensitive Vegetation Communities.*** *Impacts to sensitive vegetation communities shall be avoided, minimized, and/or mitigated as follows:*

- *The Project shall prioritize avoiding impacts to sensitive vegetation communities, including but not limited to California walnut woodland and sugar bush shrubland, and any other communities ranked S1 to S3 by the California Department of Fish and Wildlife. When avoidance is not possible, impacts shall be minimized by planning construction activities in previously disturbed areas to the extent feasible. For the purposes of this measure, "feasible" is defined as the ability to avoid impacts without compromising essential project design, safety, regulatory compliance, or causing environmental impacts that would be greater than those being minimized.*
- *Impacts to any natural vegetation communities designated sensitive, such as California walnut woodland and sugar bush shrubland, shall be reduced by trimming vegetation instead of removing entire trees or shrubs where feasible. For the purposes of this measure, "feasible" is defined as the ability to trim vegetation without compromising plant health, public or worker safety, or essential project design requirements. Where trimming alone is infeasible, removal shall be conducted in a manner that avoids further damage to surrounding vegetation.*
- *When feasible, temporary impact areas shall have vegetation trimmed and rootballs left intact to enable regrowth once construction is complete.*
- *In conjunction with appropriate entities with jurisdiction (i.e., Caltrans for their right-of-way, Santa Monica Mountains Conservancy for Santa Monica Mountains National Recreation Area), Metro shall design, develop, and implement a 5-year restoration plan to restore native vegetation communities disturbed by construction activities. A preconstruction assessment of sensitive vegetation communities shall be conducted to collect a comprehensive plant species list,*

community structure data, native and nonnative plant cover assessments, and preconstruction photos for permanent photo points; this information shall be incorporated into the restoration plan. The plan shall include a monitoring program that includes both qualitative and quantitative data collection, quantified performance criteria that consider pre-construction conditions, irrigation and maintenance actions, and the use of native plantings and/or seedlings to restore native communities. Performance criteria shall be defined with a goal of meeting or exceeding pre-construction habitat value for disturbed areas and would include the following habitat characteristics: native plant species cover and diversity, container plant survivorship (if applicable), non-native annual species cover, absence of non-native, woody perennial species cover, and self-sufficiency of restoration plants (i.e., ability to persist without supplemental irrigation).

- *Native species such as succulents, bulb species, and cactus shall be salvaged from the Ground Disturbance Area before work begins, to the maximum extent feasible, and stored in an appropriate manner depending on species requirements. These species shall be replanted within the Ground Disturbance Area at project conclusion as part of the restoration efforts.*
- *Progress toward these performance criteria shall be evaluated on a regular basis as defined in the restoration plan, but a minimum of once annually for the 5-year maintenance period. If the success standards are not met by the end of Year Five, additional measures such as replanting, remedial seeding, and/or supplemental watering shall be implemented. Monitoring shall continue thereafter until performance criteria are attained.*
- *Restoration monitoring results and future recommendations shall be submitted in annual reports submitted to Caltrans, the Santa Monica Mountains Conservancy, and other relevant agencies until success criteria are achieved.*

MM BIO-11: ***Avoid and Minimize Construction-Related Impacts to Protected Trees and Shrubs (Applicable to Alternatives 1 and 3).*** *Impacts to protected trees and shrubs shall be avoided, minimized, and/or mitigated by incorporation of the following:*

- *A Tree Expert, as defined under the City of Los Angeles Protected Tree and Shrub Ordinance, shall complete a detailed tree survey report prior to construction and once access is obtained to properties within the alignment. The report shall build upon the Initial Protected Tree and Shrub Inventory Memorandum (Appendix B of the Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report [Metro, 2025a]) and include detailed field methods and data for each protected tree or shrub, such as species, height, diameter, canopy spread, physical condition, and precise location. The City of Los Angeles Protected Tree and Shrub Ordinance has jurisdiction in the Project; therefore, a Tree Expert shall be required to conduct the detailed survey and procure permit for protected tree/shrub removal from the Los Angeles Board of Public Works. The Tree Expert's follow-up report shall expand upon the initial assessment to provide a comprehensive dataset with verification of tree/shrub species, height, canopy width, and tree/shrub health for the Ground Disturbance Area. This follow-up report shall be used to procure the required permit prior to commencement of tree impacts within the City of Los Angeles.*
- *Impacts to protected trees and shrubs shall be minimized to the maximum extent feasible. For the purposes of this measure, "feasible" is defined as the ability to avoid or minimize impacts while meeting project design, safety, and operational requirements, as determined by the Tree Expert and project engineers. When trimming and/or encroachment into the tree/shrub protection zone (defined as the dripline or canopy) is needed, the following measures shall be implemented.*
- *Trimming of protected trees/shrubs must comply with the pruning standards set forth by the Western Chapter of the International Society of Arboriculture and conducted in a manner that does not cause permanent damage or adversely affect the health of the trees or shrubs. Trimming shall require coordination and permitting with the appropriate entities as follows:*
  - *Species protected under the Los Angeles Protected Tree and Shrub Ordinance shall coordinate with the City of Los Angeles Board of Public Works, Urban Forestry Division.*
  - *Trees protected under the City of Los Angeles Street Tree Policy shall require coordination with the City of Los Angeles Department of Public Works, Urban Forestry Division.*
  - *Trees covered by the Metro Tree Policy and designated for retention shall require the Project to prepare a Tree Protection Plan. The Tree Protection Plan shall identify Tree Protection Zones for all trees designated for retention and shall protect larger trees from immediate damage during construction and delayed damage from construction activities, such as loss of root area or soil compaction. The Project shall prepare a mitigation plan for damaged and removed trees with a minimum replacement ratio of 2:1 per removed street tree.*

  - *Trees protected by the Los Angeles County Oak Tree Ordinance shall require coordination with the Los Angeles County Director of Public Works prior to tree work.*
  - *Trees within the Santa Monica Mountains National Recreation Area shall require coordination for tree trimming or removal with the appropriate entities (e.g., National Park Service, Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority).*

- *For impacts to protected trees and shrubs beyond trimming, the required tree removal permits shall be obtained, and replacement shall occur at the below rates. Mitigation locations of replacement trees shall be determined through the permitting process.*
  - ***Los Angeles County Oak Tree Ordinance:*** *All trees within the oak genus (Quercus) shall be replaced at a ratio of 2:1 per individual oak tree.*
  - ***City of Los Angeles Protected Tree and Shrub Ordinance:*** *Protected trees and shrubs included trees of the oak genus (indigenous to California), western sycamore, southern California black walnut and California bay, and two shrub species (Mexican elderberry and toyon). Individual trees and shrubs shall be replaced at a 4:1 ratio by plants that are the same species of protected plant.*
  - ***Policy-Protected Trees:*** *All policy-protected trees, which fall under the purview of the Los Angeles Street Tree Policy or the Metro Tree Policy, shall be replaced at a ratio of 2:1 per individual. The Los Angeles Street Tree Policy allows for an in-lieu fee to be made with approval of the Board of Public Works following verification that replacement trees cannot be feasibly planted onsite. Trees under the Metro Tree Policy that are designated as heritage trees in a local ordinance shall be replaced at a 4:1 ratio with trees of the same variety.*
  - ***Santa Monica Mountains National Recreation Area:*** *Any tree within the Santa Monica Mountains National Recreation Area shall be replaced by trees of a species and ratio at the discretion of National Park Service, Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority.*

- *All trees occurring on private property or Caltrans right-of-way shall not require permitting but shall require coordination and negotiation with property owners. Mitigation implementation shall follow Metro Tree Policy's replacement ratio of 2:1 per individual.*

- *For protected trees and shrubs that are not anticipated to be impacted, a Tree Protection Zone shall be established around each tree/shrub or cluster of trees/shrubs prior to the commencement of work. The Tree Protection Zone shall be erected using temporary fencing in an environmentally sensitive manner and remain in place until all site work has been completed. Specific installation timeframe may vary but the Tree Protection Zone must be inspected and approved by a Qualified Arborist prior to construction work occurring, including staging of equipment. Work can commence directly following arborist inspection and approval. No construction-related materials shall be stored or staged within the Tree Protection Zone (fenced areas).*
- *The LA Street Tree Policy would require coordination with the City of Los Angeles Department of Public Works for removal or maintenance of protected trees; this policy does not apply to trees within private property, University of California, Los Angeles, or within the California Department of Transportation right-of-way. The Metro Tree Policy would not require permitting but would require coordination with the landowners (i.e., private landowners, University of California, Los Angeles, California Department of Transportation) when a tree must be removed. Additionally, Metro Tree Policy states a mitigation plan would be required to be developed in consultation with a Certified Arborist if construction impacts resulted in damage to or removed a protected tree; decisions would be made in accordance with local ordinances identifying protected trees.*

MM-BIO-12: ***Avoid and Minimize Construction-Related Impacts to Protected Trees and Shrubs (Applicable to Alternatives 4 and 5).*** *Impacts to protected trees and shrubs shall be avoided, minimized, and/or mitigated by incorporation of the following:*

- *A Tree Expert, as defined under the City of Los Angeles Protected Tree and Shrub Ordinance, shall complete a detailed tree survey report prior to construction and once access is obtained to properties within the alignment. The report shall build upon the Initial Protected Tree and Shrub Inventory Memorandum (Appendix B of the Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report [Metro, 2025a]) and include detailed field methods and data for each protected tree or shrub, such as species, height, diameter, canopy spread, physical condition, and precise location. The City of Los Angeles Protected Tree and Shrub Ordinance has jurisdiction in the Project; therefore, a Tree Expert shall be required to conduct the detailed survey and procure permits for protected tree/shrub removal from the Los Angeles Board of Public Works. The Tree Expert's follow-up report shall expand upon the initial assessment to provide a comprehensive dataset with verification of tree/shrub species, height, canopy width, and tree/shrub health for the Ground Disturbance Area. This follow-up report shall be used to procure the required permit prior to commencement of tree impacts within the City of Los Angeles.*

- *Impacts to protected trees and shrubs shall be minimized to the maximum extent feasible. For the purposes of this measure, "feasible" is defined as the ability to avoid or minimize impacts while meeting project design, safety, and operational requirements, as determined by the Tree Expert and project engineers. When trimming and/or encroachment into the tree/shrub protection zone (defined as the dripline or canopy) is needed, the following measures shall be required:*
  - *Trimming of protected trees/shrubs must comply with the pruning standards set forth by the Western Chapter of the International Society of Arboriculture and conducted in a manner that does not cause permanent damage or adversely affect the health of the trees or shrubs.*
  - *Trimming shall require coordination and permitting with the appropriate entities* as follows:
    - *Species protected under the Los Angeles Protected Tree and Shrub Ordinance shall coordinate with the City of Los Angeles Board of Public Works, Urban Forestry Division.*
    - *Trees protected under the City of Los Angeles Street Tree Policy shall require coordination with the City of Los Angeles Department of Public Works, Urban Forestry Division.*
    - *Trees protected under the City of Santa Monica Tree Code shall require coordination with the Director of Community and Cultural Services for pruning, maintenance, removal, and care for all affected trees.*
    - *Trees covered by the Metro Tree Policy shall require the Project to prepare a tree protection plan identifying Tree Protection Zones for all trees designated for retention and to prepare a mitigation plan for damaged and removed trees.*
- *For impacts to protected trees and shrubs beyond trimming, the required tree removal permits shall be obtained, and replacement shall occur at the below rates. Mitigation locations of replacement trees shall be determined through the permitting process.*
  - ***City of Los Angeles Protected Tree and Shrub Ordinance:*** *Protected trees and shrubs included trees of the oak genus (indigenous to California), western sycamore, southern California black walnut and California bay, and two shrub species (Mexican elderberry and toyon). Individual trees and shrubs shall be replaced at a 4:1 ratio by plants that are the same species of protected plant.*
  - ***City of Santa Monica Tree Code****: Trees protected under the City of Santa Monica Tree Code shall require coordination with the Director of Community and Cultural Services for pruning, maintenance, removal, and care for all affected trees.*
  - ***Policy-Protected Trees:*** *All policy-protected trees, which fall under the purview of the Los Angeles Street Tree Policy or the Metro Tree Policy, shall be replaced at a ratio of 2:1. The Los Angeles Street Tree Policy allows for an*

in-lieu fee to be made with approval of the Board of Public Works following verification that replacement trees cannot be feasibly planted onsite. Trees under the Metro Tree Policy that are designated as heritage trees in a local ordinance shall be replaced at a 4:1 ratio with trees of the same variety.

- *All trees occurring on private property, or Caltrans right-of-way, shall not require permitting, but shall require coordination and negotiation with property owners. Mitigation implementation shall follow Metro Tree Policy's replacement ratio of 2:1.*
- *For protected trees and shrubs that are not anticipated to be impacted, a Tree Protection Zone shall be established around each tree/shrub or cluster of trees/shrubs prior to the commencement of work. The Tree Protection Zone shall be erected using temporary fencing in an environmentally sensitive manner and remain in place until all site work has been completed. Specific installation timeframe may vary but the Tree Protection Zone must be inspected and approved by a Qualified Arborist prior to construction work occurring including staging of equipment. Work can commence directly following arborist inspection and approval. No construction-related materials shall be stored or staged within the Tree Protection Zone (fenced areas).*
- *The LA Street Tree Policy would require coordination with the City of Los Angeles Department of Public Works for removal or maintenance of protected trees; this policy does not apply to trees within private property, University of California, Los Angeles, or within the California Department of Transportation right-of-way. Metro Tree Policy would not require permitting but would require coordination with the landowners (i.e., private landowners, University of California, Los Angeles, California Department of Transportation) when a tree must be removed. Additionally, Metro Tree Policy states a mitigation plan would be required to be developed in consultation with a Certified Arborist if construction impacts damaged or removed a tree; decisions would be made in accordance with local ordinances identifying protected trees.*

MM-BIO-13: ***Avoid and Minimize Construction-Related Impacts to Protected Trees and Shrubs (Applicable to Alternative 6).*** *Impacts to protected trees and shrubs shall be avoided, minimized, and/or mitigated by incorporation of the following:*

- *A Tree Expert, as defined under the City of Los Angeles Protected Tree and Shrub Ordinance, shall complete a detailed tree survey report prior to construction and once access is obtained to properties within the alignment. The report shall build upon the Initial Protected Tree and Shrub Inventory Memorandum (Appendix B of the Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report [Metro, 2025a]) and include detailed field methods and data for each protected tree or shrub, such as species, height, diameter, canopy spread, physical condition, and precise location. The City of Los Angeles Protected Tree and Shrub Ordinance has jurisdiction in the Project; therefore, a Tree Expert shall be required to conduct the detailed survey and procure permits for protected tree/shrub removal from the Los Angeles Board of Public Works. The Tree Expert's follow-up report shall expand upon the initial assessment to provide a comprehensive dataset with verification of tree/shrub species, height, canopy width, and tree/shrub health for the Ground Disturbance Area. This follow-up report shall be used to procure the required permit prior to commencement of tree impacts within the City of Los Angeles.*
- *Impacts to protected trees and shrubs shall be minimized to the maximum extent feasible. For the purposes of this measure, "feasible" is defined as the ability to avoid or minimize impacts while meeting project design, safety, and operational requirements, as determined by the Tree Expert and project engineers. When trimming and/or encroachment into the tree/shrub protection zone (defined as the dripline or canopy) is needed, the following measures shall be required:*
  - *Trimming of protected trees/shrubs must comply with the pruning standards set forth by the Western Chapter of the International Society of Arboriculture and conducted in a manner that does not cause permanent damage or adversely affect the health of the trees or shrubs.*
  - *Trimming shall require coordination and permitting with the appropriate entities as follows:*
    - *Species protected under the Los Angeles Protected Tree and Shrub Ordinance shall coordinate with the City of Los Angeles Board of Public Works, Urban Forestry Division.*
    - *Trees protected under the City of Los Angeles Street Tree Policy shall require coordination with the City of Los Angeles Department of Public Works, Urban Forestry Division.*
    - *Trees covered by the Metro Tree Policy shall require the Project to prepare a tree protection plan identifying Tree Protection Zones for all trees designated for retention and to prepare a mitigation plan for damaged and removed trees.*

- *For impacts to protected trees and shrubs beyond trimming, the required tree removal permits shall be obtained, and replacement shall occur at the below rates. Mitigation locations of replacement trees shall be determined through the permitting process.*
  - ***City of Los Angeles Protected Tree and Shrub Ordinance:*** *Protected trees and shrubs included trees of the oak genus (indigenous to California), western sycamore, southern California black walnut and California bay, and two shrub species (Mexican elderberry and toyon). Individual trees and shrubs shall be replaced at a 4:1 ratio by plants that are the same species of protected plant.*
  - ***Policy-Protected Trees:*** *All policy-protected trees, which fall under the purview of the Los Angeles Street Tree Policy or the Metro Tree Policy, shall be replaced at a ratio of 2:1. The Los Angeles Street Tree Policy allows for an in-lieu fee to be made with approval of the Board of Public Works following verification that replacement trees cannot be feasibly planted onsite. Trees under the Metro Tree Policy that are designated as heritage trees in a local ordinance shall be replaced at a 4:1 ratio with trees of the same variety.*
- *All trees occurring on private property, or California Department of Transportation right-of-way, shall not require permitting, but shall require coordination and negotiation with property owners. Mitigation implementation shall follow Metro Tree Policy's replacement ratio of 2:1.*
- *For protected trees and shrubs that are not anticipated to be impacted, a Tree Protection Zone shall be established around each tree/shrub or cluster of trees/shrubs prior to the commencement of work. The Tree Protection Zone shall be erected using temporary fencing in an environmentally sensitive manner and remain in place until all site work has been completed. Specific installation timeframe may vary but the Tree Protection Zone must be inspected and approved by a Qualified Arborist prior to construction work including staging of equipment. Work can commence directly following arborist inspection and approval. No construction-related materials shall be stored or staged within the Tree Protection Zone (fenced areas).*
- *The LA Street Tree Policy would require coordination with the City of Los Angeles Department of Public Works for removal or maintenance of protected trees; this policy does not apply to trees within private property, University of California, Los Angeles, or within the California Department of Transportation right-of-way. Metro Tree Policy would not require permitting but would require coordination with the landowners (i.e., private landowners, University of California, Los Angeles, California Department of Transportation) when a tree must be removed. Additionally, Metro Tree Policy states a mitigation plan would be required to be developed in consultation with a Certified Arborist if construction impacts resulted in a damaged or removed tree; decisions would be made in accordance with local ordinances identifying protected trees.*

MM BIO-14: ***Avoid and Minimize Construction-Related Impacts to Mountain Lion and Vertebrate Movement Corridors.*** *Impacts to mountain lion and other vertebrate movement corridors shall be avoided, minimized, and/or mitigated as follows:*

- *Prior to any ground-disturbing activity, a Qualified Biologist shall conduct a detailed analysis of wildlife movement and corridors within the Santa Monica Mountains as they relate to ground disturbance activities for the Project. Analysis shall include desktop review of publicly available documentation — including research publications, project reports, environmental analyses, and high-quality aerial imagery — to anticipate wildlife movement patterns within the project vicinity. Field surveys shall also be conducted to identify and document wildlife crossings.*
- *Prior to construction, Metro shall coordinate with the California Department of Fish and Wildlife, California Department of Transportation, the Santa Monica Mountains Conservancy/Santa Monica Mountains National Recreation Area, and species experts (as appropriate) to identify and implement appropriate minimization and avoidance measures to facilitate mountain lion and other vertebrate movement and connectivity across the Santa Monica Mountains. Performance standards for wildlife connectivity shall require that post-construction conditions maintain or improve wildlife movement. Specifically, the Project shall achieve a 0 percent increase in road mortality for mountain lions and other sensitive species in the Project Study Area, as measured through tracking and monitoring for at least five years post-construction.*
- *Prior to any ground-disturbing activities, field surveys shall be conducted by a Qualified Biologist to (1) confirm mountain lion presence or absence (2) identify known or potential mountain lion natal dens within suitable habitat with 600 feet of ground-disturbing activities during the breeding season (April through September), and (3) identify and document wildlife crossings in the Project vicinity. Surveys shall be conducted at dawn and dusk to increase probability of detection.*
- *If a mountain lion natal den is identified during the survey, the Qualified Biologist shall establish a clearly demarcated (via flagging, fencing and/or signage) no-disturbance buffer where work shall cease until the den is no longer occupied or the cubs have successfully reared. The size of the buffer shall be determined based on characteristics of the den (i.e., distance, direction facing, observed behavior) and through consultation with species experts and California Department of Fish and Wildlife to ensure the buffer is of appropriate size to not adversely affect rearing of cubs.*
- *Vegetation removal shall be limited wherever possible, particularly within the Santa Monica Mountains.*
- *Vegetation restoration within temporarily disturbed areas adjacent to wildlife crossings shall be designed to facilitate wildlife movement. Installed vegetation patches shall be designed to act as "stepping stones" to provide cover for wildlife approaching crossings. All vegetation provided shall be consistent with any Habitat Restoration Plan required pursuant to MM BIO-9.*

- *A summary of survey results from presence/absence and den surveys shall include maps of the survey area and possible denning locations and shall be submitted to Metro and California Department of Fish and Wildlife. If a natal den or presence is confirmed, California Department of Fish and Wildlife shall be immediately informed, and additional coordination shall occur, as needed.*
- *Metro shall also develop a 5-year monitoring plan, in coordination with California Department of Fish and Wildlife and species experts, to track wildlife movement across corridors during and after construction. Monitoring shall use camera traps, radio collars, or other wildlife tracking technologies. If the data indicate that mountain lion or other vertebrate movement is negatively impacted, additional mitigation measures, such as enhanced crossing infrastructure or more extensive wildlife funneling fencing, shall be implemented within six months. During the 5-year monitoring phase, annual reports summarizing the effectiveness of the mitigation measures, any observed impacts on wildlife movement, and the results of the monitoring program shall be submitted to California Department of Fish and Wildlife, Caltrans, and the Santa Monica Mountains Conservancy. These reports shall also include recommendations for adjustments to ensure compliance with wildlife connectivity standards.*

MM BIO-15: ***Avoid and Minimize Construction-Related Impacts to Jurisdictional Aquatic Resources.*** *Potential impacts to drainages shall be avoided and/or minimized when working in or adjacent to aquatic resources as defined in the Aquatic Resources Delineation Report (Appendix A from the Sepulveda Transit Corridor Project Ecosystems and Biological Resources Technical Report) through incorporation of the following:*

- *A Qualified Biologist/Aquatic Specialist shall monitor construction activities adjacent to jurisdictional aquatic resources during vegetation clearing and/or initial ground-disturbance activities. Additionally, they shall support impact avoidance and minimization measures detailed in permits and approvals obtained for the Project.*
- *Limits of the Ground Disturbance Areas shall be designated with lathe staking or a similar method. All equipment and workers shall remain within approved work limits.*
- *Wherever possible, construction personnel shall utilize existing access roads or previously disturbed areas to reach the project area or stage their vehicles and equipment.*
- *Maintenance personnel shall also not leave any waste or debris behind which would impact natural habitats.*
- *To protect water quality:*
  - *Appropriate best management practices shall be installed to prevent erosion and guide runoff during rain events.*

- *Equipment and materials shall be staged within the alignment and away from water drainages. Parked equipment shall have secondary containment to prevent any fluid leaks from coming into contact with the ground surface.*
- *Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter into an aquatic resource.*
- *Disposal or temporary placement of excess fill, brush, or other debris shall not be allowed in Waters of the United States, Waters of the State, and California Department of Fish and Wildlife streambeds or their banks.*

MM BIO-29: ***Avoid and Minimize Construction-Related Impacts to Overwintering Burrowing Owls.*** *To avoid and reduce impacts on overwintering burrowing owls from construction activities, the following shall be implemented:*

- *Prior to initiation of construction activities, a Qualified Biologist familiar with the ecology of burrowing owls shall conduct the following field investigations:*
  - *A habitat assessment to map Project areas with potential to support overwintering burrowing owls. The habitat assessment shall follow the methodology outlined in Appendix C of the Staff Report on Burrowing Owl Mitigation (CDFW, 2012) and shall include the Project footprint and a 150 meter buffer of these areas.*
  - *One season of non-breeding season surveys, including at least four (4) visits spread evenly throughout the non-breeding season (defined as September 1 to January 31).*
  - *Results of these investigations shall be summarized in writing and submitted to the California Department of Fish and Wildlife, and used to inform the need for pre-construction take avoidance surveys or additional permitted as needed.*
- *A Qualified Biologist shall conduct a pre-construction take avoidance survey in all areas of known or potentially suitable overwintering habitat, following the methodology outlined in Appendix D of the Staff Report on Burrowing Owl Mitigation (CDFW, 2012). The take avoidance survey shall be conducted no less than 14 days prior to initiating ground disturbance and may be repeated if work activities are paused for a period of 7 days or more during the non-breeding season (September 1 to January 31).*
  - *At the discretion of the Qualified Biologist, an additional pre-construction clearance survey shall be conducted no more than 24 hours prior to ground disturbance, to ensure that no burrowing owls have colonized the work areas or adjacent habitats.*
  - *If an occupied wintering burrow is located, an appropriate no-disturbance buffer shall be implemented. The width of the buffer shall be determined by the Qualified Biologist with consideration of the level of disturbance that is anticipated for the burrowing, following the recommended buffer distances outlined below.*

- *Low level of disturbance: 50 meters*
- *Medium level of disturbance: 100 meters*
- *High level of disturbance: 500 meters*

– *Results of the survey shall be summarized in writing and submitted to the California Department of Fish and Wildlife for review.*

– *If an occupied burrow cannot be avoided, work in the vicinity of the burrow shall stop, the California Department of Fish and Wildlife shall be contacted, and additional coordination shall occur as needed in compliance with the California Endangered Species Act.*

General Construction Measures

The following general construction measures are proposed for implementation during construction activities:

MM BIO-16: *Prior to vegetation clearing, grading, and/or construction activities that may impact habitats of special-status species, a Qualified Biologist(s) shall oversee installation of appropriate temporary Environmentally Sensitive Area fencing and/or flagging to delineate the limits of construction and the approved construction staging areas for protection of identified sensitive resources outside the approved construction/staging zones. All construction access and circulation shall be limited to designated construction/staging zones. Fencing shall be of a type that shall not entangle or otherwise detrimentally effect wildlife or the environment. Fencing shall be checked weekly to ensure it is intact and functioning as intended, to look for signs of degradation that might cause harm to wildlife or the environment, and to ensure fenced construction limits are not exceeded. This fencing shall be removed upon completion of construction activities.*

MM BIO-17: *A Qualified Biologist(s) shall monitor project activities during vegetation clearing, grading, and/or construction within or adjacent to areas identified as sensitive habitat and/or jurisdictional aquatic resources. If special-status species and/or sensitive habitats adjacent to the project sites are inadvertently impacted by activities, then the Qualified Biologist(s) shall immediately inform the on-site construction supervisor, who shall temporarily halt or redirect work away from the area of impact. If unanticipated impacts occur to occupied habitat for special-status species, the Project shall consult with the appropriate regulatory agencies.*

MM BIO-18: *A Worker Environmental Awareness Plan (WEAP) shall be developed and implemented prior to the start of construction. Environmental training shall be led by the Qualified Biologist(s) and shall cover the sensitive resources found on-site, flagging/fencing of exclusion areas, permit requirements, and other environmental issues. New workers added to construction after the initial training at work start shall be required to receive WEAP training before they may begin work on the Project. Documentation of personnel who have attended WEAP training shall be maintained and submitted to Metro. All information included in WEAP training shall be kept on*

Project sites to be readily accessible to any personnel in a form deemed appropriate for the Project (e.g., wallet cards, printed flyers, etc.).

MM BIO-19: *Wildfires shall be prevented by exercising care when driving to prevent sparks and by not parking construction vehicles where catalytic converters would ignite dry vegetation. All construction vehicles shall carry water and shovels or fire extinguishers in the field. The use of shields, protective mats, or other fire prevention equipment shall be used during grinding and welding to prevent or minimize the potential for fire. Smoking shall take place within designated areas and away from vegetated areas.*

MM BIO-20: *Construction workers shall be prohibited from bringing pets and firearms to the site.*

MM BIO-21: *To prevent unnecessary erosion, runoff, and sedimentation, all construction activities within 100 feet of drainages or wetlands shall cease during Stormwater Pollution Prevention Plan-defined rain events and shall not resume until conditions are suitable for the movement of equipment and materials. Vehicle access along unpaved access routes shall not occur during saturated soil condition to avoid rutting or other soil disturbance.*

MM BIO-22: *If night work shall occur, all lighting used during night construction shall be temporary and shall be implemented to reduce lighting effects onto adjacent open space areas (i.e., downcast, away from habitat) and/or shall also be directed away from nests/roosting sites on man-made structures. Light shields shall be used to minimize light pollution adjacent to the Project.*

MM BIO-23: *Prior to entering the construction areas, equipment and personnel shall be free of mud, debris, or vegetation to prevent the introduction and spread of weeds or invasive species to the Project. If required, vehicle washing shall occur within designated areas within project construction areas where appropriate containment has been established, or at a suitable off-site facility.*

MM BIO-24: *Dust suppression measures shall be implemented during construction to minimize the creation of dust clouds and possible degradation of sensitive vegetation communities and special-status species suitable habitat. These measures shall include applying water at least once per day or as determined necessary by the Qualified Biologist(s) to prevent visible dust emissions from exceeding 100 feet in length in any direction. In addition, watering frequency shall be increased to four times per day if winds exceed 25 miles per hour. Nontoxic soil stabilizers may be used on access roads to control fugitive dust, as needed.*

MM BIO-25: *Vehicle speeds shall be restricted to posted speed limits on existing paved roads and to 15 miles per hour on dirt or gravel access roads during all phases of the Project. Speed limit signs shall be posted on dirt or gravel access roads throughout the site to remind workers of travel speed restrictions.*

MM BIO-26: *Trenches and excavations located within open areas shall be backfilled with earth at the end of each workday or have one edge sloped into an escape ramp with a less than 1:1 (45 degree) slope to prevent wildlife entrapment. A non-slip material may be used (e.g., wooden ramp with traction) when an earthen escape ramp cannot be created. For instances when these methods are not feasible (e.g., deep, long-term*

excavations for underground segments), temporary exclusion fencing can be installed around the perimeter of the work area to prevent animal entrapment. The Qualified Biologist shall ensure the temporary exclusion fencing is sufficiently supported to maintain integrity under all conditions and shall be checked daily to ensure integrity is maintained and inspect it daily while work is occurring. Fencing shall be repaired each day, as needed to ensure integrity is maintained. A Qualified Biologist shall inspect all trenches and excavations for trapped animals at the beginning and end of each day, as well as before excavations are backfilled. Should wildlife become trapped in any trenches or excavations, a Qualified Biologist(s) shall remove and relocate them outside the construction zone. When entrapped wildlife is a listed species with handling restrictions, relocation must be conducted by a biologist permitted to handle the species. Where trenches or excavations cannot be immediately backfilled or sloped, open excavations shall be covered and the end of each day with boards or plates. The edges of the boards shall be sealed with native spoils to prevent wildlife from entering the excavation in gaps at the board edges.

MM BIO-27 *Spoils, trash, and any construction-generated debris shall be removed to an approved off-site disposal facility. Trash and food items shall be contained in closed containers and removed daily to reduce the attraction of opportunistic predators such as common ravens, coyotes, and feral cats and dogs that may prey on sensitive species.*

Impacts After Mitigation

Implementation of the mitigation measures previously listed would mitigate impacts to biological resources related to project operations and construction to a level that is considered less than significant. Table 3.3-11 summarizes the mitigation measures applicable to each impact type for each alternative, and Table 3.3-12 summarizes them for the MSFs.

Table 3.3-11. Summary of Mitigation Measures and Impacts Before and After Mitigation for the Project Alternatives

CEQA Impact Topic		No Project	Alt 1	Alt 3	Alt 4	Alt 5	Alt 6
Operational							
Impact BIO-1: Would the 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 US Fish and Wildlife Service?	Impacts Before Mitigation	LTS	PS	PS	PS	PS	PS
	Applicable Mitigation	NA	MM BIO-1 through MM BIO-3	MM BIO-1 through MM BIO-3	MM BIO-1 through MM BIO-3	MM BIO-1 through MM BIO-3	MM BIO-1 through MM BIO-3
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS	LTS
Impact BIO-2: Would the 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 US Fish and Wildlife Service?	Impacts Before Mitigation	LTS	NI	NI	NI	NI	PS
	Applicable Mitigation	NA	NA	NA	NA	NA	MM BIO-10, MM BIO-16 through MM BIO-18, MM BIO-23 through MM BIO-25
	Impacts After Mitigation	LTS	NI	NI	NI	NI	LTS
Impact BIO-3: Would the 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?	Impacts Before Mitigation	LTS	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA	NA
	Impacts After Mitigation	LTS	NI	NI	NI	NI	NI
Impact BIO-4: Would the 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?	Impacts Before Mitigation	LTS	PS	PS	PS	PS	PS
	Applicable Mitigation	NA	MM BIO-1 MM BIO-2, MM BIO-28	MM BIO-1 MM BIO-2, MM BIO-28	MM BIO-1 MM BIO-2	MM BIO-1 MM BIO-2	MM BIO-1 MM BIO-2
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS	LTS

CEQA Impact Topic		No Project	Alt 1	Alt 3	Alt 4	Alt 5	Alt 6
Impact BIO-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Impacts Before Mitigation	LTS	PS	PS	PS	PS	PS
	Applicable Mitigation	NA	MM BIO-3	MM BIO-3	MM BIO-3	MM BIO-3	MM BIO-3
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS	LTS
Impact BIO-6: Would the 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?	Impacts Before Mitigation	LTS	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA	NA
	Impacts After Mitigation	LTS	NI	NI	NI	NI	NI
Construction							
Impact BIO-1: Would the 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 US Fish and Wildlife Service?	Impacts Before Mitigation	LTS	PS	PS	PS	PS	PS
	Applicable Mitigation	NA	MM BIO-4 through MM BIO-10, MM BIO-16 through MM BIO-20, MM BIO-22 through MM BIO-27, MM BIO-29	MM BIO-4 through MM BIO-10, MM BIO-16 through MM BIO-20, MM BIO-22 through MM BIO-27, MM BIO-29	MM BIO-4 through MM BIO-10, MM BIO-16 through MM BIO-20, MM BIO-22 through MM BIO-27, MM BIO-29	MM BIO-4 through MM BIO-10, MM BIO-16 through MM BIO-20, MM BIO-22 through MM BIO-27, MM BIO-29	MM BIO-4 through MM BIO-10, MM BIO-17, MM BIO-18, MM BIO-29
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS	LTS

CEQA Impact Topic		No Project	Alt 1	Alt 3	Alt 4	Alt 5	Alt 6
Impact BIO-2: Would the 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 US Fish and Wildlife Service?	Impacts Before Mitigation	LTS	PS	PS	PS	PS	PS
	Applicable Mitigation	NA	MM BIO-10, MM BIO-16 through MM BIO-18, MM BIO-23 through MM BIO-25	MM BIO-10, MM BIO-16 through MM BIO-18, MM BIO-23 through MM BIO-25	MM BIO-10, MM BIO-16 through MM BIO-18, MM BIO-23 through MM BIO-25	MM BIO-10, MM BIO-16 through MM BIO-18, MM BIO-23 through MM BIO-25	MM BIO-10, MM BIO-16 through MM BIO-18, MM BIO-23 through MM BIO-25
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS	LTS
Impact BIO-3: Would the 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?	Impacts Before Mitigation	LTS	PS	PS	PS	NI	PS
	Applicable Mitigation	NA	MM-BIO-15, MM-BIO-18, MM-BIO-21	MM-BIO-15, MM-BIO-18, MM-BIO-21	MM-BIO-15, MM-BIO-18, MM-BIO-21	NA	MM-BIO-15, MM-BIO-18, MM-BIO-21
	Impacts After Mitigation	LTS	LTS	LTS	LTS	NI	LTS
Impact BIO-4: Would the 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?	Impacts Before Mitigation	LTS	PS	PS	PS	PS	PS
	Applicable Mitigation	NA	MM BIO-4, MM BIO-5, MM BIO-7, MM BIO-14	MM BIO-4, MM BIO-5, MM BIO-7, MM BIO-14	MM BIO-4, MM BIO-5, MM BIO-7, MM BIO-14	MM BIO-4, MM BIO-5, MM BIO-7, MM BIO-14	MM BIO-4, MM BIO-5, MM BIO-7, MM BIO-14
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS	LTS

CEQA Impact Topic		No Project	Alt 1	Alt 3	Alt 4	Alt 5	Alt 6
Impact BIO-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Impacts Before Mitigation	LTS	PS	PS	PS	PS	PS
	Applicable Mitigation	NA	MM BIO-3, MM BIO-5 through MM BIO-9, MM BIO_11, MM BIO-14, MM BIO-23	MM BIO-5 through MM BIO-11, MM BIO-14, MM BIO-15, MM BIO-23	MM BIO-5 through MM BIO-10, MM BIO-12, MM BIO-15 through MM BIO-17, MM BIO-20, MM BIO-22, MM BIO-23, MM BIO-26	MM BIO-5 through MM BIO-10, MM BIO-12, MM BIO-15 through MM BIO-17, MM BIO-20, MM BIO-22, MM BIO-23, MM BIO-26	MM BIO-5 through MM BIO-10, MM BIO-13, MM BIO-14
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS	LTS
Impact BIO-6: Would the 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?	Impacts Before Mitigation	LTS	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA	NA
	Impacts After Mitigation	LTS	NI	NI	NI	NI	NI

Source: Metro, 2025a

BIO = biological resources
LTS = less than significant
MM = mitigation measure
NA = not applicable
NI = no impact
PS = potentially significant

Table 3.3-12. Summary of Mitigation Measures and Impacts Before and After Mitigation for the Maintenance and Storage Facilities

CEQA Impact Topic		MRT MSF Base Design (Alts 1 and 3)	MRT MSF Design Option 1 (Alts 1 and 3)	Electric Bus MSF (Alt 1)	HRT MSF (Alts 4 and 5)	HRT MSF (Alt 6)
Operational						
Impact BIO-1: Would the 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 US Fish and Wildlife Service?	Impacts Before Mitigation	PS	PS	PS	PS	PS
	Applicable Mitigation	MM BIO-1 and MM BIO-2	MM BIO-1 and MM BIO-2	MM BIO-1 and MM BIO-2	MM BIO-1 and MM BIO-2	MM BIO-1 and MM BIO-2
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS
Impact BIO-2: Would the 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 US Fish and Wildlife Service?	Impacts Before Mitigation	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI
Impact BIO-3: Would the 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?	Impacts Before Mitigation	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI
Impact BIO-4: Would the 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?	Impacts Before Mitigation	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI

CEQA Impact Topic		MRT MSF Base Design (Alts 1 and 3)	MRT MSF Design Option 1 (Alts 1 and 3)	Electric Bus MSF (Alt 1)	HRT MSF (Alts 4 and 5)	HRT MSF (Alt 6)
Impact BIO-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Impacts Before Mitigation	PS	PS	PS	PS	PS
	Applicable Mitigation	MM BIO-3	MM BIO-3	MM BIO-3	MM BIO-3	MM BIO-3
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS
Impact BIO-6: Would the 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?	Impacts Before Mitigation	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI
Construction						
Impact BIO-1: Would the 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 US Fish and Wildlife Service? Impact BIO-2: Would the 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 US Fish and Wildlife Service?	Impacts Before Mitigation	PS	PS	PS	PS	PS
	Applicable Mitigation	MM BIO-4 and MM BIO-5	MM BIO-4 and MM BIO-5	MM BIO-4 and MM BIO-5	MM BIO-4 and MM BIO-5	MM BIO-4 and MM BIO-5
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS
	Impacts Before Mitigation	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI
Impact BIO-3: Would the 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?	Impacts Before Mitigation	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI
	Impacts Before Mitigation	NI	NI	NI	NI	NI

CEQA Impact Topic		MRT MSF Base Design (Alts 1 and 3)	MRT MSF Design Option 1 (Alts 1 and 3)	Electric Bus MSF (Alt 1)	HRT MSF (Alts 4 and 5)	HRT MSF (Alt 6)
Impact BIO-4: Would the 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?	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI
Impact BIO-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Impacts Before Mitigation	PS	PS	PS	PS	PS
	Applicable Mitigation	MM BIO-11	MM BIO-11	MM BIO-11	MM BIO-12	MM BIO-13
	Impacts After Mitigation	LTS	LTS	LTS	LTS	LTS
Impact BIO-6: Would the 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?	Impacts Before Mitigation	NI	NI	NI	NI	NI
	Applicable Mitigation	NA	NA	NA	NA	NA
	Impacts After Mitigation	NI	NI	NI	NI	NI

Source: Metro, 2025a

BIO = biological resources
LTS = less than significant
MM = mitigation measure
NA = not applicable
NI = no impact
PS = potentially significant