Section 4.10

Ecosystems and Biological Resources

This section summarizes the existing ecosystems and biological resources in the project area and the potential impacts of the proposed alternatives on these resources. Information in this section is based on, and updated where appropriate from, the Ecosystems/Biological Resources Technical Memorandum, which is incorporated into this Draft EIS/EIR as Appendix U.

4.10.1 Regulatory Framework/Methodology

Biological resources within the project area, including within one-quarter mile of each proposed alignment, station, maintenance yard, and park and ride area, are protected by several federal, state, and local laws and policies such as the Endangered Species Act, Migratory Bird Treaty Act (MBTA), Clean Water Act (CWA), Executive Order 11990, California Endangered Species Act, California Fish and Game Code, Native Plant Protection Act, and Executive Order 13112. All cities within the project area, except South El Monte, have tree protection ordinances that prohibit removal or disturbance of native trees. More information about these laws and policies is available in Appendix U, Ecosystems/Biological Resources Technical Memorandum, of this Draft EIS/EIR.

Applying the criteria in Appendix G of the *CEQA Guidelines*, the project would result in a significant impact if it 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 California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS);
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the CWA 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;
- Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Impact analysis methodology was based on a review of existing data sources, including the California Natural Diversity Database (CNDDB) and National Wetlands Inventory (NWI), followed by a field reconnaissance to establish the presence and existing condition of resources within the project area. The potential for the operation of each

alternative to affect any identified resources was evaluated in Appendix U,

Ecosystems/Biological Resources Technical Memorandum, of this Draft EIS/EIR and is summarized below in Section 4.10.3.

4.10.2 Affected Environment/Existing Conditions

The project area is urban and heavily developed with some open space and parklands. Vegetation within the project area includes ornamental trees, shrubs, groundcovers, herbaceous cultivars (common flowering garden plants), and grass lawns along surface streets, sidewalks, and medians as well as surrounding commercial businesses and residences. Sensitive ecosystems and biological resources exist in the area, particularly in the vicinity of the Rio Hondo, the San Gabriel River, and the adjacent spreading grounds, as illustrated in **Figure 4.10-1**. The rivers support natural riparian vegetation, particularly within the Whittier Narrows Flood Control Basin (Whittier Narrows or Basin) located along SR 60. Figure 14.10-1 shows Significant Ecological Areas (SEAs) as designated by Los Angeles County as well as Environmentally Sensitive Areas, which are a U.S. Army Corps of Engineers (USACE) land use classification.

Designated critical habitat for one species, the Coastal California gnatcatcher (*Polioptila californica californica*) occurs in the Whittier Narrows Basin, south of Montebello Boulevard and San Gabriel Boulevard. No other critical habitat has been designated within the project area.

The Whittier Narrows Flood Control Basin is owned by the federal government and operated and maintained by the USACE. The primary purpose of the Basin is flood risk management and the secondary purpose is recreation in the public interest. Los Angeles County and the city of Pico Rivera lease 1,378 acres from USACE for parkland and open space and manage and maintain those areas for recreation. The proposed alignment follows the right-of-way (ROW) of SR 60 as it cuts through the northern third of the Basin.

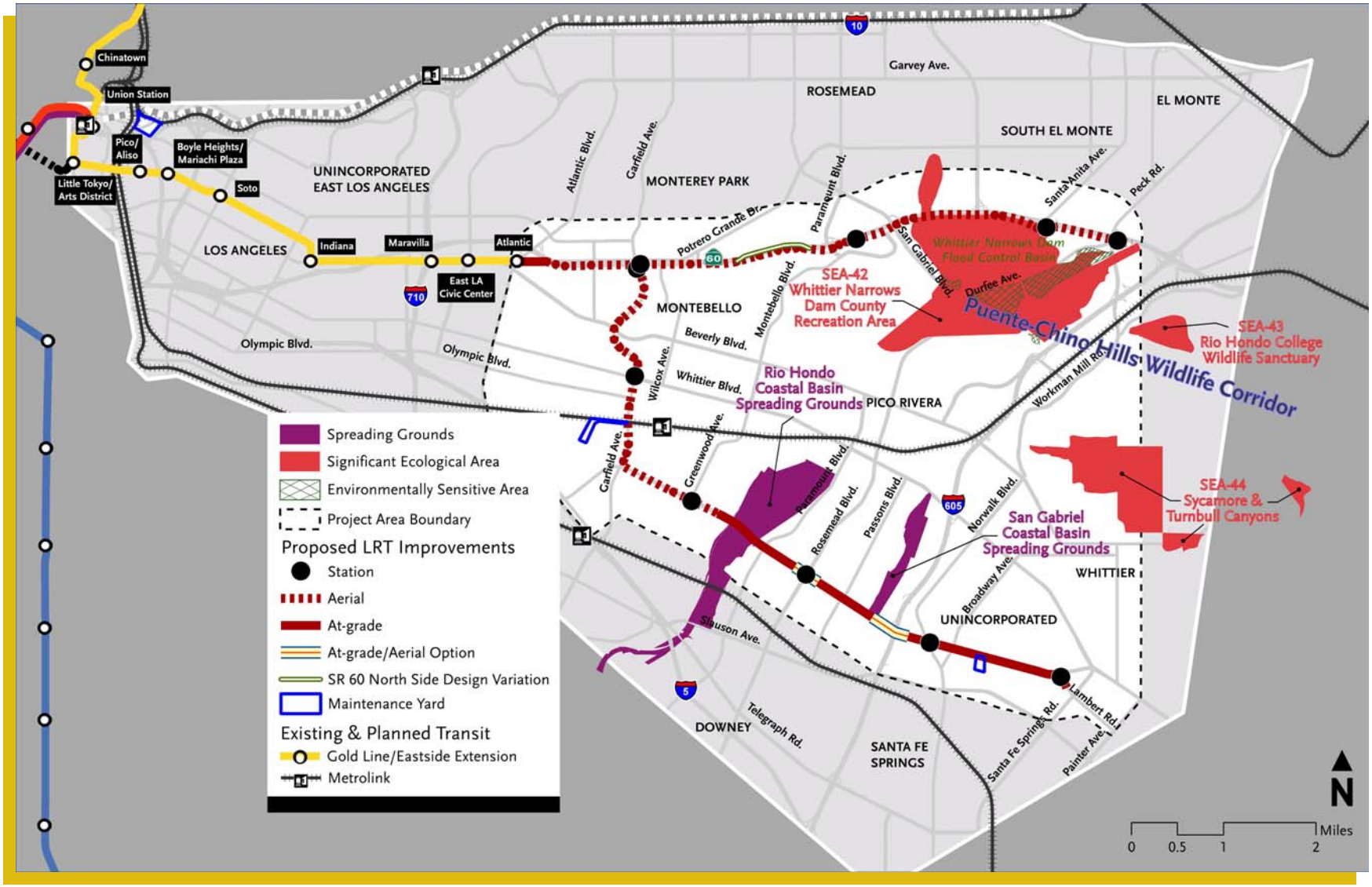
The Whittier Narrows Flood Control Basin includes both active recreation and natural habitat areas. During the field review, it was observed that the proposed alignment crosses natural riparian habitats and the Rio Hondo. It then passes by a shooting range and Legg Lake to the south of SR 60 and recreational trails, picnic areas, and active recreation fields to the north of SR 60. Large protected natural areas that include additional lakes, riparian and marsh habitats, and a nature center are located south of SR 60. There is a screen of mature vegetation along the SR 60 ROW between the highway uses and recreational areas.

SR 60 crosses the Rio Hondo at Whittier Narrows. The field review verified that the Rio Hondo is unlined as it flows under the SR 60 bridge and it supports riparian vegetation, including willow and other native species. Upstream from the SR 60 bridge, the Rio Hondo runs along a narrow riparian corridor adjacent to a large sandy wash supporting native scrub vegetation.

The Rio Hondo Coastal Basin Spreading Grounds, located at the Washington Boulevard crossing of the Rio Hondo, consist of approximately 570 acres and are the largest of the spreading grounds owned and operated by the Los Angeles County Department of Public Works. Water is diverted from the concrete-lined Rio Hondo channel into adjacent spreading grounds with highly permeable soils for groundwater recharge. The Washington Boulevard crossing of the Rio Hondo extends across the concrete-lined river channel west to the adjacent spreading basin, which is unlined and contains some aquatic vegetation.

The Rio Hondo Coastal Basin Spreading Grounds provide aquatic habitat for an abundance of wintering waterbirds (loons, grebes, herons, ducks, and geese) and shorebirds.

Washington Boulevard also crosses the San Gabriel River Coastal Basin Spreading Grounds, which are approximately 128 acres in size. These spreading grounds are also used by the Los Angeles County Department of Public Works for groundwater recharge by diverting water from the river into adjacent spreading grounds. Although this reach of the San Gabriel River is channelized throughout with



Source: County of Los Angeles, Department of Regional Planning, 2009.

Figure 4.10-1. Significant Ecological Areas Located Within the Project Area

concrete banks, it has a soft (mud) bottom. Vegetation in this reach is generally of moderate quality, but there are some areas of high-quality riparian habitat. There is also some low- to medium-quality alluvial sage scrub habitat in this reach (*County of Los Angeles 2006*).During the field review, the San Gabriel River was observed to be a wide channel containing grass and other non-native vegetation with some patchy riparian vegetation, including willow, along the concrete-lined sides.

Non-native fish expected to occur in the reach of the San Gabriel River in this location include channel catfish, common carp, red shiner, fathead minnow, rainwater killifish, and western mosquitofish. Common amphibian species expected to occur include the western toad, Pacific treefrog, black-bellied slender salamander, California treefrog, and bullfrog (*County of Los Angeles 2006*).

Special-Status Species

Based on the California Natural Diversity Database (CNDDB) search, 23 special-status wildlife and plant species (i.e., species that are federally - or state-listed endangered, threatened, or candidate species) have the potential to occur in the project area (the El Monte and Whittier 7.5-minute United States Geological Survey topographic quadrangles). Table 4-1 in Appendix U lists these species and their potential to occur based on the habitat present in the project area.

The CNDDB considers historical sightings as evidence that species still exist; however, many of the observations are based on historical sightings which are dated prior to significant alterations to the habitat. Given that much of the project area is now highly developed, the rivers have been channelized, and habitats have been altered and degraded, many of these species are not expected to currently occur.

Special-status riparian birds including the western yellow-billed cuckoo, southwestern willow flycatcher, and least Bell's vireo are known to occur in Whittier Narrows (*CNDDB 2010*). These species are most likely to occur within high-quality riparian habitat such as along Lario Creek and just upstream of the dam. Recent observations in the vicinity of Whittier Narrows have only been documented for the least Bell's vireo, which was observed nesting in the vicinity of the nature area as recently as 2011 (*CNDDB 2013*). Two other special-status riparian bird species, the yellow-breasted chat and the yellow warbler, have been observed in Whittier Narrows and may utilize the riparian habitat along the Rio Hondo near the SR 60 crossing during migration.

The varied riparian habitats may also support three species of special-status bats including the pallid bat, Western mastiff bat, and the hoary bat. These bats each have different preferred roosting habitats, but they all could occur in the project area. In addition, alluvial sage scrub habitat in this area may support the coast horned lizard, a special-status reptile.

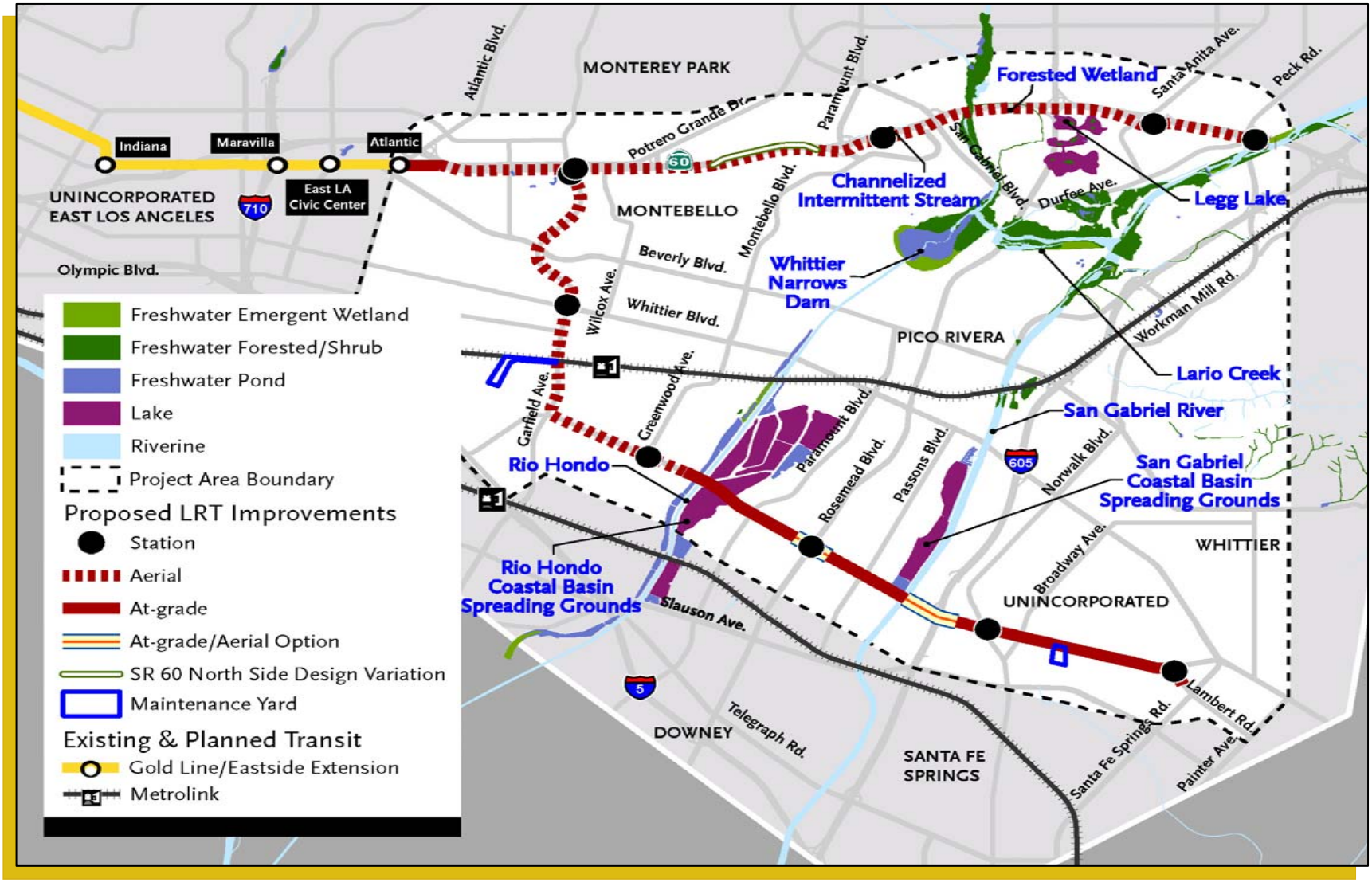
A special-status plant, the southern tarplant, is known to occur in scrub habitat south of SR 60 next to the shooting range (*CNDDB 2010*). Other special-status plants that have the potential to occur along the stream bank in this vicinity include southern mountains skullcap and Nevin's barberry.

At the Washington Boulevard crossing of the Rio Hondo River, special-status riparian bird species are unlikely to occur due to the lack of high-quality riparian vegetation. Some special-status riparian bird species may occur at the Washington Boulevard crossing of the San Gabriel River during migration, but are not likely to breed there due to a lack of sufficient cover. Further, the disturbed nature of the river washes is unlikely to support alluvial sage scrub species such as the coast horned lizard.

No special-status plants or animals were observed during the field review.

Wetlands

The National Wetlands Inventory (NWI) identifies several wetlands located within the project area, as shown in **Figure 4.10-2**. Wetlands exist within Whittier Narrows, including freshwater emergent (palustrine) wetlands along Lario Creek and upstream of the dam and forested/scrub wetlands along Lario Creek, the Rio Hondo and San Gabriel rivers, and at Legg Lake (*NWI 2013*). In addition to palustrine wetlands, a small drainage, classified as



Source: National Wetlands Inventory, USFWS 2010.

Figure 4.10-2. Wetlands within the Project Area

riverine, was identified running along Town Center Drive just south of SR 60 near the Shops at Montebello. Wetlands provide aquatic habitat for many species.

Wildlife Corridor

The Puente-Chino Hills Wildlife Corridor is approximately 26 miles long and supports significant biological and ecological diversity by linking large habitat patches to the 460,000-acre Cleveland National Forest in the Santa Ana Mountains (see Figure 4.10-1). The corridor extends across several SEAs designated by Los Angeles County. The wildlife corridor is significantly fragmented by roads and development.

Protected Trees

Most of the cities in which the project area is located have local regulations pertaining to the protection of native or locally important trees and/or street trees in public areas. All of the various general plan policies and municipal codes are very similar; generally they all require the protection of native trees of a certain size, designated heritage trees, and/or street trees, and have a permit or review process to evaluate proposed impacts to these protected trees. **Table 4.10-1** shows the maximum number of mature trees that would be affected by each alternative.

Conservation Plans

There are no approved habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans for the project area.

4.10.3 Environmental Impacts/Environmental Consequences

Table 4.10-2 summarizes the potential biological resources adverse effects under NEPA and impacts under CEQA for each alternative. For adverse effects and potential impacts to biological resources, an area within one-quarter mile of either side of the proposed alignments, stations, maintenance yards, and park and ride areas for each of the project alternatives was evaluated.

Table 4.10-1. Affected Trees

Alternative	Affected Trees
No Build	None
TSM	None
SR 60 LRT[1]	25 non-native street trees from Atlantic Station to Garfield Avenue; 40 native trees and 52 non-native trees from Garfield Avenue to end of alignment; and 22 native trees and 58 non-native trees at station and park and ride areas
Washington Boulevard LRT[1]	25 non-native street trees from Atlantic Station to Garfield Avenue; 50 native trees and 550 non-native trees on streets along approximately 8 miles from Garfield Avenue to end of alignment; 5 native trees and 245 non-native tree at station and park and ride areas; and 10 non-native trees at Santa Fe Spring Yard option

Notes:
[1] Tree counts show all of the trees along each alignment. The number of trees potentially affected would be less than the amounts shown. Aerial segments would not likely affect as many trees, as column supports would not affect all of the trees along a block and trees impacted to avoid interference with aerial trackways may be limited to trimming. Final column placement would likely avoid many trees. At-grade segments may require tree removal in medians and redesign of sidewalks, with associated tree removal or trimming.

4.10.3.1 No Build Alternative

4.10.3.1.1 Impact Analysis

There would be no new transit construction or new operations under the No Build Alternative. Therefore, there would be no adverse construction or operational effects under NEPA or significant impacts under CEQA to ecosystems or biological resources, including sensitive species, habitat, or locally protected trees, from the No Build Alternative.

Table 4.10-2. Summary of Potential Biological Resources Impacts

Alternative	Migratory Birds	Special-Status Species	Riparian Habitats and Other Sensitive Natural Communities	Wetlands and Waters of the U.S.	Wildlife Corridors	Protected Trees
No Build	None	None	None	None	None	None
TSM	None	None	None	None	None	None
SR 60 LRT[1]	**Construction:** Not adverse after mitigation/ Less than significant after mitigation **Operation:** Not adverse/Less than significant	**Construction:** Not adverse after mitigation/ Less than significant after mitigation **Operation:** Not adverse/Less than significant	**Construction:** Not adverse/ Less than significant **Operation:** Not adverse/Less than significant	**Construction:** Not adverse/ Less than significant **Operation:** Not adverse/Less than significant	**Construction:** Not adverse/ Less than significant **Operation:** Not adverse/Less than significant	**Construction:** Not adverse after mitigation/ Less than significant after mitigation **Operation:** Not adverse after mitigation/Less than significant after mitigation
Washington Boulevard LRT	**Construction:** Not adverse after mitigation/ Less than significant after mitigation **Operation:** Not adverse/Less than significant	**Construction:** Not adverse after mitigation/ Less than significant after mitigation **Operation:** Not adverse/Less than significant	**Construction:** Not adverse/ Less than significant **Operation:** Not adverse/Less than significant	**Construction:** Not adverse/ Less than significant **Operation:** Not adverse/Less than significant	NA	**Construction:** Not adverse after mitigation/ Less than significant after mitigation **Operation:** Not adverse after mitigation/Less than significant after mitigation

Notes: [1] Includes the SR 60 North Side Design Variation.

NA: Not applicable because the Washington Boulevard LRT does not cross a wildlife corridor.

4.10.3.1.2 Mitigation Measures

Since the No Build Alternative would have no adverse effects or significant impact to biological resources, no mitigation measures are required.

4.10.3.1.3 Impacts Remaining After Mitigation

NEPA Finding

There would be no effect to biological resources under the No Build Alternative.

CEQA Determination

There would be no impact to biological resources under the No Build Alternative.

4.10.3.2 TSM Alternative

4.10.3.2.1 Impact Analysis

Construction Impacts

Construction of the TSM Alternative would be limited to the installation of new bus stops and associated structures within existing street and sidewalk ROWs, which do not contain biological resources. Therefore, there would be no adverse

construction effects under NEPA or significant impacts under CEQA to ecosystems or biological resources.

Operational Impacts

The new bus lines created under the TSM Alternative would operate in existing traffic and would not alter the character of the existing road uses in a way that would affect existing trees or other potential wildlife habitat. Therefore, there would be no adverse operational effects under NEPA or significant impacts under CEQA to ecosystems or biological resources associated with the TSM Alternative.

4.10.3.2.2 Mitigation Measures

Since the TSM Alternative would not have adverse effects or significant impacts on biological resources, including sensitive species, habitat, or locally protected trees, no mitigation measures are required.

4.10.3.2.3 Impacts Remaining After Mitigation

NEPA Finding

There would be no effect to biological resources under the TSM Alternative.

CEQA Determination

There would be no impact to biological resources under the TSM Alternative.

4.10.3.3 SR 60 LRT Alternative

4.10.3.3.1 Impact Analysis

The biological resources potentially affected by the SR 60 North Side Design Variation would be the same as for the SR 60 LRT Alternative. Therefore, there would be no difference in impacts between the design variations.

Construction Impacts

Migratory Birds

Construction of the SR 60 LRT Alternative would have adverse effects under NEPA and impacts under CEQA to migratory birds if an active migratory bird nest is located in any tree or vegetation removed or disturbed during construction. Although trees within 100 feet of the construction footprint would not likely be directly impacted through removal or pruning, there would still be disturbance of nesting birds due to increased noise and vibration during construction activities. In addition, the SR 60 LRT Alternative would have adverse effects under NEPA and impacts under CEQA to migratory birds if an active migratory bird nest located under the SR 60 bridge over the Rio Hondo were disturbed during construction. Mitigation would be implemented to reduce adverse effects to migratory birds under NEPA to not adverse and potentially significant impacts under CEQA to less than significant.

Special-Status Species

As described in Section 4.10.2, several species that are federally or state-listed endangered, threatened, or candidate species could occur in the project area. However, habitat for most of these special-status species would not be affected by the SR 60 LRT Alternative.

Suitable habitat for special-status bats is present under the SR 60 bridges over the Rio Hondo and San Gabriel Rivers, and bats are known to have historically roosted in these areas. While bats were not observed during field surveys, there is the potential for special-status bat species to occur in the project area. Therefore, impacts on special-status bats could occur during construction from disturbance of any active bat roosting sites at the bridges, although no long-term loss of roosting habitat would be expected.

Disturbance of active bat roosting sites during construction would result in adverse effects under NEPA and significant impacts under CEQA. Mitigation would be implemented to reduce adverse effects to special-status bat species under NEPA to not adverse and potentially significant impacts under CEQA to less than significant.

Construction would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

Riparian Habitats and Other Sensitive Natural Communities

The SR 60 LRT Alternative crosses the Rio Hondo at Whittier Narrows, where riparian vegetation occurs in a narrow band lining the river corridor. Impacts to this riparian vegetation would occur during construction of the new bridge supporting the aerial LRT tracks over the Rio Hondo. However, these impacts would be localized and short-term in duration, and riparian vegetation is expected to quickly become re-established following construction. No other sensitive natural community would be affected, and no operational impacts would occur. Therefore, there would be no adverse effects under NEPA or significant impacts under CEQA on riparian habitat or other sensitive natural community.

Wetlands and Waters of the U.S.

Construction of the SR 60 LRT Alternative has the potential to impact existing wetlands that occur at the Rio Hondo. Adverse effects to wetlands under NEPA and potentially significant impacts under CEQA would occur during construction of the new bridge supporting the aerial LRT tracks over the Rio Hondo if the new bridge were to require placement of columns and footings that would directly fill wetlands. Current plan and profile drawings of the alignment show the LRT completely spanning the Rio Hondo River, thereby avoiding wetland impacts. Impacts to water quality in wetlands not directly adjacent to the project alignment could occur from sedimentation caused by runoff from construction areas. However, Best Management Practices (BMPs) for erosion control would be employed during construction to avoid downstream effects. Potential impacts related to water quality in wetlands are discussed in the Water Resources Technical Memorandum, included as Appendix W in this Draft EIS/EIR.

Because the Rio Hondo River is considered a water of the U.S. subject to the jurisdiction of USACE, implementation of the proposed project could require a Clean Water Act Section 404 permit and a Section 401 Water Quality Certification prior to construction.

Wildlife Corridor

During construction of the SR 60 LRT Alternative, temporary fences may be constructed for public safety. However, as construction fences would be located along SR 60, they would not create barriers to wildlife movement through the Puente-Chino Hills Wildlife Corridor. Therefore, there would be no adverse effect under NEPA or significant impact under CEQA related to wildlife movement.

Protected Trees

It is unknown at this time exactly how many protected trees would be affected during construction of the SR 60 LRT Alternative, including construction of park and ride areas. At a maximum, 62 native and 135 non-native trees would be affected under the SR 60 LRT Alternative. Table 4.10-1 provides further details regarding the number of trees affected within each segment of the alignment. As project design progresses and construction plans are finalized it may be possible to minimize the number of affected trees by avoidance or fencing. Prior to construction, local ordinances and municipal codes regarding protection of both native trees and street trees would be considered and mitigation would be implemented to ensure that adverse effects under NEPA associated with tree disturbance or removal would be reduced to not adverse, and potentially significant impacts would be reduced to a less than significant level.

Operational Impacts

Migratory Birds

Adverse effects under NEPA and potentially significant impacts under CEQA to biological resources would occur if the SR 60 LRT Alternative resulted in disturbance of nesting birds due to increased noise or vibration associated with ongoing operation. The alignment would run along existing roads, primarily the SR 60 Freeway, which already experiences background noise and vibration levels higher than those predicted for the SR 60 LRT Alternative. Background noise levels and the lack of nesting habitat in this area are likely to discourage birds from nesting nearby. Therefore, noise and vibration associated with operation of the proposed

SR 60 LRT Alternative would not disturb nesting birds or alter existing nesting behavior of migratory birds, including raptors, within the project area; thus, there would be no adverse effects under NEPA and no significant impacts under CEQA.

Special-Status Species

Operation of the SR 60 LRT, including the SR 60 North Side Design Variation, would not occur within designated critical habitat for the California gnatcatcher, which is located south of Montebello Boulevard and San Gabriel Boulevard. No other designated critical habitat is located within the project area.

The only special-status species that could occur in the project area during operation of the SR 60 LRT, including the SR 60 North Side Design Variation, are special-status bat species that may roost under the SR 60 bridges over the Rio Hondo and San Gabriel Rivers. Operation of the SR 60 LRT is not anticipated to result in impacts to roosting bats under the bridges because noise and disturbance would be similar to existing conditions to which bats using these sites are accustomed. No suitable habitat is present to support other special-status species. Therefore, there would be no adverse effects under NEPA and no significant impacts under CEQA.

Operation would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

Riparian Habitats and Other Sensitive Natural Communities

No adverse operational effects under NEPA or potentially significant impacts under CEQA to riparian habitats or other sensitive natural communities are anticipated.

Wetlands and Waters of the U.S.

There would be no adverse effects under NEPA on wetlands and no significant impacts under CEQA.

Wildlife Corridor

Operation of the SR 60 LRT Alternative would occur along existing roads and the alignment would be in an aerial configuration. No new barriers to wildlife movement would be created. Therefore, there would be no adverse effects under NEPA and no significant impacts under CEQA on wildlife movement through the Puente-Chino Hills Wildlife Corridor.

Protected Trees

If operation requires pruning of protected trees, mitigation identified in Section 4.10.3.3.2 would be implemented. This mitigation would reduce adverse effects to locally protected trees under NEPA to not adverse and potentially significant impacts under CEQA to less than significant.

4.10.3.3.2 Mitigation Measures

Construction Mitigation Measures

The construction contractor and Metro shall be responsible for assuring the implementation of the following mitigation measures.

4.10-i. Construction activities that involve tree removal or trimming would be timed as much as possible by Metro to occur outside the migratory bird nesting season, which occurs generally from March 1 through August 31, and as early as February 1 for raptors. In addition, construction activities within 150 feet of the SR 60 bridge over the Rio Hondo or the bridge over the San Gabriel River would be timed to occur outside the migratory bird nesting season.

4.10-ii. If construction must occur during the nesting season, two biological surveys would be conducted by Metro, one 15 days and the second 72 hours prior to construction, that would remove or disturb suitable nesting habitat. The surveys would indicate the presence or absence of any protected native bird in the habitat to be removed and any other habitat within 300 feet of the construction work area. If a protected native bird is found, surveys would be continued in order to locate any nests. If an active nest is found,

construction within 300 feet of the nest (500 feet for raptor nests) would be postponed until the nest is vacated and juveniles have fledged (minimum of six weeks after egg-laying), and there is no evidence of a second attempt at nesting.

If construction at the SR 60 bridge over the Rio Hondo or the bridge over the San Gabriel River cannot be conducted outside the migratory bird nesting season, old mud nests located under the bridge would be removed by Metro prior to the start of nesting season and exclusion devices would be installed to prevent swallows or other birds from building new nests prior to February 15th of the year construction would occur.

4.10-iii. Prior to construction activities, Metro would ensure that qualified bat biologists would conduct bat surveys at the SR 60 bridges over the Rio Hondo and San Gabriel River to determine bat use patterns. Surveys would be conducted during the time of year most likely to detect bat usage (March through October).

4.10-iv. If surveys indicate the SR 60 bridges are utilized as bat roosting areas, then one of two mitigation options below would be employed by Metro to minimize disturbance and mortality to roosting bats: a) Construction at the SR 60 bridges would be conducted outside the bat roosting and breeding period (i.e., construction would occur from November 1 to March 1); or b) Bat exclusion methods to seal-up entry sites (e.g., blocking and netting or installing sonic bat deterrence equipment) would be deployed prior to March 1 of the year construction would occur.

4.10-v. During the preliminary engineering phase of the project, Metro would ensure that columns would be located to avoid wetlands and removal of trees and vegetation where feasible.

4.10-vi. If construction of the project requires removal or pruning of a protected tree, consideration by Metro of applicable municipal codes and ordinances of the city in which the affected tree is located would ensure that impacts would be less than significant. This may include replanting of protected trees within the project area or at another location to mitigate the removal of these trees. Replanting would be done at a ratio of one new tree for every one removed.

Operational Mitigation Measures

4.10-vii. If operation of this alternative would entail pruning of any protected tree, the pruning would be performed by Metro in a manner that does not cause permanent damage or adversely affect the health of the tree.

4.10.3.3.3 Impacts Remaining After Mitigation

NEPA Finding

Mitigation would be implemented to ensure that there would be no adverse effects to nesting migratory birds or protected trees during construction of the SR 60 LRT Alternative.

If it is determined that a protected tree would be pruned during operation of the SR 60 LRT Alternative (including the SR 60 North Side Design Variation), mitigation would ensure that no adverse effects to protected trees would occur.

CEQA Determination

Mitigation measures would be implemented to reduce potentially significant impacts to migratory birds and protected trees to less than significant.

If it is determined that a protected tree would be pruned during operation of the SR 60 LRT Alternative (including the SR 60 North Side Design Variation), mitigation would ensure that impacts to protected trees would remain less than significant.

4.10.3.4 Washington Boulevard LRT Alternative

4.10.3.4.1 Impact Analysis

Construction Impacts

Migratory Birds

Construction of the Washington Boulevard LRT Alternative would result in adverse effects under NEPA and potentially significant impacts under CEQA to migratory birds if an active migratory bird nest is located in any tree or vegetation removed or disturbed during construction. Although trees within 100 feet of the construction footprint would not likely be directly impacted through removal or pruning, there would still be disturbance of nesting birds due to increased noise and vibration during construction activities. In addition, the Washington Boulevard LRT Alternative would have adverse effects under NEPA and impacts under CEQA to migratory birds if an active migratory bird nest located under the bridge over the Rio Hondo River or the bridge over the San Gabriel River is disturbed during construction. Mitigation would be implemented to reduce adverse effects under NEPA to migratory birds to not adverse and potentially significant impacts under CEQA to less than significant.

Special-Status Species

Native fish species are not expected to inhabit the concrete-lined channel of the Rio Hondo in the vicinity of the proposed Washington Boulevard LRT Alternative crossing and special-status riparian bird species are unlikely to occur due to the lack of high-quality riparian vegetation. Vegetation in the reach of the San Gabriel River is generally of moderate quality. Riparian bird species may utilize this area during migration, but are not likely to breed there due to a lack of sufficient cover. Further, the disturbed nature of the river washes is unlikely to support alluvial sage scrub habitats. Special-status wildlife and plant species are unlikely to occur during construction of the LRT. Therefore, no adverse effects under NEPA or significant impacts under CEQA are anticipated.

Furthermore, construction would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

Riparian Habitats and Other Sensitive Natural Communities

At the Washington Boulevard LRT Alternative crossings of the Rio Hondo and San Gabriel Rivers, patchy riparian vegetation occurs. During construction of new bridges or modifications to existing bridges, adverse effects under NEPA and potentially significant impacts under CEQA to this riparian vegetation would occur. However, these impacts would be localized and short-term in duration, and riparian vegetation is expected to quickly become re-established following construction. No other sensitive natural community would be affected. Therefore, there would not be adverse effects under NEPA or significant impacts under CEQA on riparian habitat or other sensitive natural communities.

Wetlands and Waters of the U.S.

Construction of the Washington Boulevard LRT Alternative would require new bridges or modifications to the existing bridges over the Rio Hondo and San Gabriel Coastal Basin Spreading Grounds, which are considered waters of the U.S. However, since these spreading grounds are designed to accept flood waters from the adjacent rivers and to allow water to quickly infiltrate into the ground, they do not meet the definition of wetlands. While wetlands are habitats for wildlife since they contain a permanent or semi-permanent water supply, spreading grounds are only temporary catchment areas for water in case of flood and these waters are quickly absorbed into the soil.

Work within the spreading grounds would require a CWA Section 404 permit from USACE, a CWA Section 401 Water Quality Certification from LARWQCB, and possibly a Streambed Alteration Agreement from CDFG. Coordination with and an encroachment permit from LACFCD may also be

required. No mitigation measures are required for wetlands, since the spreading grounds are not considered wetlands.

Protected Trees

It is unknown at this time exactly how many trees would be affected during construction of the Washington Boulevard LRT Alternative, including construction of park and ride areas. At a maximum, 55 native and 830 non-native trees would be affected under the Washington Boulevard LRT Alternative. Table 4.10-1 provides further details regarding the number of trees affected within each segment of the alignment. Where the proposed alignment is in an aerial configuration, column placement would require tree removal and the overhead guideways may also require both tree removal and trimming to keep them clear of vegetation. At-grade segments would require tree removal from medians and may require both tree removal and tree trimming along sidewalks as streets are widened or sidewalks are reconfigured. Therefore, not all of the trees along a block would be affected. As project design progresses and construction plans are finalized, it may be possible to further minimize the number of affected trees by avoidance or fencing. Prior to construction, local ordinances and municipal codes regarding protection of native trees and street trees would be considered and mitigation would be implemented to reduce adverse effects under NEPA associated with tree disturbance or removal to not adverse and potentially significant impacts under CEQA to a less than significant level.

Operational Impacts

Migratory Birds

Adverse effects under NEPA and potentially significant impacts under CEQA to biological resources would occur if the Washington Boulevard LRT Alternative resulted in disturbance of nesting birds due to increased noise or vibration associated with ongoing operation. The proposed alignment would run along existing roads, which already experience noise and vibration levels that likely discourage birds from nesting close to the proposed alignment. Therefore, noise and vibration associated with operation of the proposed Washington Boulevard LRT Alternative would not disturb nesting birds or alter existing nesting behavior of migratory birds, including raptors, within the project area. Thus, there would be no adverse effects under NEPA and impacts under CEQA would be less than significant.

Special-Status Species

Special-status wildlife and plant species are unlikely to occur during operation of the Washington Boulevard LRT Alternative because habitat for special-status species is limited and because the LRT alignment would not travel through a designated critical habitat. Therefore, no adverse effects under NEPA or significant impacts under CEQA to special status species are anticipated.

For the same reason, operation would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

Riparian Habitats and Other Sensitive Natural Communities

No adverse operational effects under NEPA or significant impacts under CEQA to riparian habitats or other sensitive natural communities would occur.

Wetlands and Waters of the U.S.

No adverse operational effects under NEPA or significant impacts under CEQA would occur to wetlands.

Protected Trees

If operation requires pruning of protected trees, mitigation identified in Section 4.10.3.4.2 would be implemented, which would reduce adverse effects under NEPA to locally protected trees to not adverse and ensure that impacts under CEQA would remain less than significant.

4.10.3.4.2 Mitigation Measures

Construction Mitigation Measures

The construction contractor and Metro shall be responsible for the same mitigation measures (mitigation measures 4.10-i. through 4.10-vi.) identified above in Section 4.10.3.3.2 for the SR 60 LRT Alternative and summarized in Table ES-2, as it relates to the construction of the Washington Boulevard LRT Alternative, with the exception of mitigation measures 4.10-iii and 4.10-iv. These mitigation measures are specific to bats under the SR 60 bridge over the Rio Hondo, which the Washington Boulevard LRT Alternative alignment does not cross.

Operational Mitigation Measures

The construction contractor and Metro shall be responsible for the same mitigation measures (mitigation measure 4.10-vii.) identified above in Section 4.10.3.3.3 for the SR 60 LRT Alternative and summarized in Table ES-2, as it relates to the operation of the Washington Boulevard LRT Alternative.

4.10.3.4.3 Impacts Remaining After Mitigation

The level of impact would be reduced with the implementation of mitigation measures, including measures as required by permits.

NEPA Finding

Mitigation would be implemented to ensure there would be no adverse effects to nesting migratory birds or protected trees during construction of the Washington Boulevard LRT Alternative.

If it is determined that a protected tree would be pruned during operation of the Washington Boulevard LRT Alternative, mitigation would ensure that no adverse effects to protected trees would occur.

CEQA Determination

Mitigation measures would be implemented to reduce potentially significant impacts to migratory birds and protected trees to less than significant.

If it is determined that a protected tree would be pruned during operation of the Washington Boulevard LRT Alternative, mitigation would ensure that impacts to protected trees would remain less than significant.