4.8 Ecosystems/Biological Resources

This section summarizes the existing biological resources located in the project area and the potential impacts of the proposed alternatives on these resources. Information in this section is based on the Ecosystems/Biological Resources Technical Memorandum prepared for the project contained in Appendix T of this EIS/EIR.

This section has been updated since publication of the Draft EIS/EIR based on refinements to the Locally Preferred Alternative (LPA). A vertical line in the margin is used to show where revisions have occurred to this section since publication of the Draft EIS/EIR, excluding minor edits for consistency and correction of formatting and minor typographical errors. Minor modifications have been made to this section since publication of the Draft EIS/EIR, which include the addition of information from Appendix T, Ecosystems/Biological Resources Technical Memorandum. Since designation of an LPA, mitigation measures have been refined and confirmed for the LPA, which are listed in Section 4.8.4.2 below, based on input received during the Draft EIS/EIR public review period. No changes to the NEPA impact findings or CEQA impact determinations were identified as a result of refinements to the LPA that have occurred since publication of the Draft EIS/EIR. Mitigation measures listed for the LPA in this section have been carried forward and included in the Mitigation Monitoring and Reporting Program (MMRP) for the LPA, Chapter 8, of this Final EIS/EIR.

The analysis of ecosystems and biological resource impacts associated with the LPA is detailed below in Section 4.8.3.5.

4.8.1 Regulatory Framework

Biological resources within the project area are protected by several federal, state, and local laws and policies, such as the Endangered Species Act, the Migratory Bird Treaty Act (MBTA), the California Endangered Species Act, the California Fish and Game Code, and the City of Los Angeles Native Tree Protection Ordinance.

Under the Endangered Species Act, consultation with the United States Fish and Wildlife Service (USFWS) is required if there is potential for a federally threatened or endangered species to be affected by the project. Because there would be no effects to federally threatened or endangered species (or critical habitat) from the project, no consultation with the USFWS was conducted.

The City of Los Angeles Native Tree Protection Ordinance (Ordinance No. 177,404) protects native oak tree species, California Sycamore, California Bay, and California Black Walnut. It was passed to slow the decline of native tree habitat. The ordinance applies to trees greater than four inches in diameter on both public and private lots and requires replacement of removed trees.

Thresholds for biological resources are identified in Section C of the L.A. CEQA Thresholds Guide. The measures below state that a project would normally have a significant impact on biological resources if it could:

- Result in the loss of individuals, or the reduction of existing habitat, of a state- or federally-listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern, or federally-listed critical habitat.

- Result in the loss of individuals, the reduction of existing habitat of a locally designated species, or a reduction in a locally designated natural habitat or plant community.

- Interfere with habitat such that normal species behaviors are disturbed (e.g., from introducing noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.

More information regarding these laws and policies is available in Appendix T, Ecosystems/Biological Resources Technical Memorandum, of this EIS/EIR.

4.8.2 Affected Environment

Due to its densely developed and urbanized nature, the project area provides little opportunity for wildlife species or other biological resources to exist. There are no Habitat Conservation Plans for this area, and no Significant Ecological Areas located within 0.25 mile of either side of the proposed alignments (City of Los Angeles 2001). There are no wildlife corridors within this area to support movement of wildlife species. There are no wetlands, oak woodlands, or coastal sage scrub habitat within the project area. The Los Angeles River, which is contained within a concrete channel through the downtown area, is located more than 0.25 mile away from the project area.

A review of the California Natural Diversity Database (CNDDB) was conducted to identify sensitive plants and animals potentially occurring in the project area. CNDDB results are reported for the United States Geological Survey (USGS) Los Angeles 7.5-minute quadrangle which is an approximately 60-square mile area. One vegetation community, seven wildlife species, one of which is federally and California endangered, and eight plant species, two of which are seriously endangered in California, were listed on the CNDDB in the Los Angeles quadrangle. The results for this large area may not be accurate for the project area which is only about 1.6 square miles. Therefore, a field survey of the project area was also conducted on May 17, 2009. The field survey included parks and other public open spaces within 0.25 mile of either side of the proposed alignments, and included visual observation and photographic documentation of all parks, open space areas, and mature trees within the project area. Based on the field survey, there is no habitat within the project area that could support the sensitive species and vegetation community identified by the CNDDB as potentially occurring within the Los Angeles quadrangle. There is also no potential for the sensitive species and vegetation community identified by the CNDDB within the Los Angeles quadrangle to occur in the project area.

However, mature trees were observed along the proposed alignments and within roadway medians. Due to their mobility, some migratory bird species may utilize these mature trees during migration. While unlikely, there is potential for migratory birds, including raptors, to utilize these mature trees for breeding.

California Sycamore, a native tree species protected under the City of Los Angeles Native Tree Protection Ordinance, is found in several locations within the project area.

Table 4.8-1 shows trees that were identified in the project area.

Table 4.8-1. Trees Potentially Affected by the Build Alternatives

Location	At-Grade Emphasis LRT		Underground Alternatives[9]	
	Native (CA sycamores)	Palms and other mature non-native trees	Native (CA sycamores)	Palms and other mature non-native trees
Los Angeles Library (at Flower and 5th Streets)[1]	10	25	10	15
Flower Street to 2nd Street	0	15	0	0
Flower Street where alignment turns[2]	5	25	5	25
Along 2nd Street to Los Angeles Street[3]	20	35	0	0
Underground station at 2nd Street - Broadway[4]	0	0	10	15
Underground Emphasis LRT station at 2nd Street - Los Angeles Street Option[5]	0	0	10	25
Main Street (At-Grade Emphasis LRT only)[6]	20	40	0	0
Los Angeles Street (At-Grade Emphasis LRT only)[7]	5	35	0	0
Temple Street (At-Grade Emphasis LRT only)[8]	0	15	0	0
2nd Street east of Los Angeles Street (Underground Emphasis LRT only)	0	0	5	35
At-grade tracks along Alameda and underpass (Underground Emphasis LRT only)	0	0	0	15
LPA station at 1st Street and Central Avenue	0	0	0	7[10]

Table 4.8-1. Trees Potentially Affected by the Build Alternatives (continued)

Location	At-Grade Emphasis LRT		Underground Alternatives[9]	
	Native (CA sycamores)	Palms and other mature non-native trees	Native (CA sycamores)	Palms and other mature non-native trees
LPA portal east of Alameda Street	0	0	0	0[11]
Totals				
At-Grade Emphasis LRT Alternative	60	190	N/A	N/A
Underground Emphasis LRT Alternative	N/A	N/A	40	130
LPA[12]	N/A	N/A	25	62

Notes:
[1] The station at this location is underground for the build alternatives, but the potential impact is calculated based on the at-grade construction footprint.
[2] The station footprints are identical for the build alternatives since alignments are located underground.
[3] Alignments are along 2nd Street but impacts are different depending on whether proposed LRT is at-grade or underground.
[4] No station proposed at this location for the At-Grade Emphasis LRT Alternative.
[5] No station proposed at this location for the At-Grade Emphasis LRT Alternative or the LPA.
[6] Table lists existing sycamores and mature non-native trees along Main Street.
[7] Large pines located in the center median, other trees located along Los Angeles Street.
[8] Inventory includes large ficus, etc. along Temple Street.
[9] Underground alternatives include the Underground Emphasis LRT Alternative and the LPA.
[10] Includes trees on the west side of Alameda between 1st and 2nd Streets that may be affected and one mature cherry tree on Central Avenue that could be impacted if the building containing the Weiland Brewery is removed.
[11] There are several small trees along 1st Street that are much less than four inches dbh.
[12] Trees potentially impacted by the LPA (which only includes three stations) would be less than or equal to the number of trees potentially impacted by the Fully Underground LRT Alternative (which included four stations).

4.8.3 Environmental Impacts/Environmental Consequences

Impact conclusions for all of the alternatives are based on the thresholds identified above in Section 4.8.1.

4.8.3.1 No Build Alternative

The No Build Alternative would have no direct or indirect effects on ecosystems or biological resources in the project area since there would be no construction activities. Since the No Build Alternative would not result in direct or indirect impacts to ecosystems or biological resources, there would be no cumulative impacts.

4.8.3.2 TSM Alternative

The two new express shuttle bus lines created under the TSM Alternative would not require construction that would directly or indirectly impact ecosystems or biological resources in the

project area. The TSM Alternative would have no direct or indirect effects on ecosystems or biological resources in the project area. Since the TSM Alternative would not result in direct or indirect impacts to ecosystems or biological resources, there would be no cumulative impacts.

4.8.3.3 At-Grade Emphasis LRT Alternative

During construction of the At-Grade Emphasis LRT Alternative, some mature trees located along the proposed alignment could be removed or disturbed. However, it is unknown at this time exactly how many trees could be affected by construction of this alternative. Table 4.8-1 shows the maximum number of trees that could be affected. There are currently 250 mature trees in the area that could potentially be affected by construction, and a subset of these trees could be removed or disturbed during construction of the At-Grade Emphasis LRT Alternative. Of this total, 60 trees are protected native California sycamore trees. As project design progresses and construction plans are finalized, it may be possible to minimize the number of trees affected by avoidance or fencing. Potential mitigation measures are described in Section 4.8.4 of the Draft EIS/EIR and include compliance with the Native Tree Protection Ordinance. Compliance with the Native Tree Protection Ordinance would reduce this potential impact to a less than significant level. Additionally, station landscaping and urban design along the entire alignment would include planting new trees. Therefore, after mitigation, the At-Grade Emphasis LRT Alternative could result in a net increase in total tree inventory.

Removal or disturbance of mature trees could increase competition for food and nesting habitat for migratory bird species, which could result in a potential indirect impact. This adverse impact would not be significant, since the project area provides only low quality habitat for a small number of migratory birds, if any. Further, mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce potential indirect impacts to a less than significant level.

Construction activities associated with future projects have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures for any potential impacts to biological resources, particularly migratory birds, as required under either the MBTA or the California Fish and Game Code. Therefore, there would be no cumulative impacts from the At-Grade Emphasis LRT Alternative with respect to biological resources.

Since the project area is already highly urbanized and the LRT project would be consistent with the urban character of the project area, there would be no operational impacts on ecosystems or biological resources.

4.8.3.3.1 NEPA Finding

The At-Grade Emphasis LRT Alternative would not have an adverse effect on ecosystems or biological resources in the project area.

4.8.3.3.2 CEQA Determination

With implementation of proposed mitigation measures, the At-Grade Emphasis LRT Alternative would not have a significant impact on ecosystems or biological resources.

4.8.3.4 Underground Emphasis LRT Alternative

Construction of the Underground Emphasis LRT Alternative could require less removal or disturbance of mature trees located along the proposed alignment than under the At-Grade Emphasis LRT Alternative. There are currently 170 mature trees in the area that could potentially be affected by construction, and a subset of these trees could be removed or disturbed during construction of the Underground Emphasis LRT Alternative. However, it is unknown at this time exactly how many trees could be affected by construction of this alternative. Table 4.8-1 shows the maximum number of trees that could be affected. An estimated 40 protected native California sycamore trees occur in the potential area of impact and could be affected by this alternative. As project design progresses and construction plans are finalized, it may be possible to minimize the number of trees affected by avoidance or fencing. Potential mitigation measures are described in Section 4.8.4 of the Draft EIS/EIR and include compliance with the Native Tree Protection Ordinance. Compliance with the Native Tree Protection Ordinance would reduce this potential impact to a less than significant level. Additionally, station landscaping and urban design along the entire alignment would include planting new trees. Therefore, after mitigation, the Underground Emphasis LRT Alternative could result in a net increase in total tree inventory.

Removal or disturbance of mature trees could increase competition for food and nesting habitat for migratory bird species, which could result in a potential indirect impact. This impact would not be significant because the project area provides only low quality habitat for a small number of migratory birds and only a small number of birds (if any) could be displaced. Mitigation taken to comply with the MBTA and the California Fish and Game Code would reduce these potential indirect impacts to a less than significant level.

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects would be required to implement mitigation measures to address any potential impacts to migratory birds under either the MBTA or the California Fish and Game Code. Therefore, there would be no cumulative impacts from the Underground Emphasis LRT Alternative with respect to biological resources.

Since the project area is already highly urbanized and the LRT project would be consistent with the urban character of the project area, there would be no operational impacts on ecosystems or biological resources.

4.8.3.4.1 NEPA Finding

The Underground Emphasis LRT Alternative would not have an adverse effect on ecosystems or biological resources in the project area.

4.8.3.4.2 CEQA Determination

With implementation of proposed mitigation measures, the Underground Emphasis LRT Alternative would not have a significant impact on ecosystems or biological resources.

4.8.3.5 Locally Preferred Alternative

The LPA has the potential to affect fewer trees compared to the Underground Emphasis LRT Alternative. The vehicle underpass along Alameda Street between Temple and 2nd Streets proposed for the Underground Emphasis LRT Alternative would affect more trees than the LPA alignment which is underground at this location. Currently 87 mature trees in the area could potentially be affected by construction, and a subset of these trees could be removed or disturbed during construction of the LPA. However, it is unknown at this time exactly how many trees could be affected by construction of the LPA. Table 4.8-1 shows the maximum number of trees that could be affected. An estimated 25 protected native California sycamore trees occur in the potential area of impact and could be affected by the LPA. As project design progresses and construction plans are finalized, it may be possible to minimize the number of trees affected by avoidance or fencing. Mitigation measures described below in Section 4.8.4.2, which include consistency with the Native Tree Protection Ordinance, would be required to reduce potential impacts associated with tree removal or disturbance during construction to a less than significant level. Additionally, station landscaping and urban design along the entire alignment would include planting new trees. Therefore, after mitigation, the LPA could result in a net increase in total tree inventory.

The northern portion of the block bounded by 1st, 2nd, and Alameda Streets and Central Avenue is required for construction and the Señor Fish, Weiland Brewery, the former Café Cuba (The Spice Table), and associated parking must be removed. This would result in the removal of one additional cherry tree that is slightly larger than four inches diameter breast height (dbh) in the sidewalk on Central Avenue. This effect would be less than significant.

Removal or disturbance of mature trees could increase competition for food and nesting habitat for migratory bird species, which could result in a potential indirect impact. Indirect impacts to migratory birds from the LPA would not be significant because the project area provides only low quality habitat for a small number of migratory birds and only a small number of birds (if any) could be displaced. Mitigation measures, which include compliance with the MBTA and the California Fish and Game Code, would further reduce these potential indirect impacts.

Construction activities associated with future projects within the project area have the potential to affect migratory birds if nesting habitat is disturbed during the breeding season. Other ongoing and future construction projects in the project area would be required to implement mitigation measures to address any potential impacts to migratory birds either under the MBTA or the California Fish and Game Code. Therefore, cumulative impacts would be less than significant with respect to biological resources.

Since the project area is already highly urbanized and the LRT project would be consistent with the urban character of the project area, there would be no operational impacts on ecosystems or biological resources.

4.8.3.5.1 NEPA Finding

The LPA would not have an adverse effect on ecosystems or biological resources in the project area.

4.8.3.5.2 CEQA Determination

With implementation of proposed mitigation measures, the LPA would not have a significant impact on ecosystems or biological resources.

4.8.4 Mitigation Measures

4.8.4.1 Updates to the Candidate Mitigation Measures from the Draft EIS/EIR

The Draft EIS/EIR included candidate mitigation measures for review and comment by the public, agencies and other stakeholders. Since publication of the Draft EIS/EIR, Metro has adjusted and added specificity to the candidate mitigation measures for ecosystems and biological resource impacts presented in the Draft EIS/EIR. The final LPA mitigation measures, shown in Section 4.8.4.2 below, are included in the MMRP for the LPA, Chapter 8, of this Final EIS/EIR, and supersede candidate mitigation measures identified in the Draft EIS/EIR.

4.8.4.2 Final Mitigation Measures for the Locally Preferred Alternative

Mitigation measures listed for the LPA in this section have been carried forward and included in the MMRP for the LPA, Chapter 8, of this Final EIS/EIR. They are the final committed mitigation measures for the LPA. MMRP index numbers are shown in parenthesis after each mitigation measure.

In order to reduce the number of trees potentially removed or disturbed during construction of the LPA, the following mitigation measures shall be implemented:

- The construction contractor shall minimize disturbance to trees through avoidance or fencing. (EB-1)
- If disturbance is unavoidable, the construction contractor shall trim individual trees instead of removing them completely where feasible to reduce the scale of disturbance. (EB-2)
- The construction contractor shall replant or replace disturbed or removed trees as soon as practicable. (EB-3)
- The construction contractor shall schedule necessary tree removal and trimming activities that would affect bird nesting outside of the bird breeding season, which can extend from February 1 to August 31. (EB-4)

If it is not feasible to avoid tree removal and trimming related to construction during the breeding bird season from February 1 to August 31, breeding bird surveys shall be conducted as recommended by the California Department of Fish and Game and in accordance with the MBTA.

- A qualified biologist shall conduct two biological surveys, one 15 days prior and a second 72 hours prior to construction activities that would remove or disturb suitable nesting habitat. The biologist shall prepare survey reports documenting the presence or absence of active nests of any protected native bird (as identified in the Migratory Bird Treaty Act) in the habitat to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors). (EB-5)

- If an active native bird species nest is located, construction within 300 feet of the nest (500 feet for raptor nests) shall be postponed or modified in consultation with the qualified biologist until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting. (EB-6)

A tree survey shall be conducted by a qualified arborist to identify native trees that could be affected by project construction. If construction of the project requires removal of any of the native trees located along the proposed alignment and stations for the LPA, the following mitigation measure shall be applied:

- A removal permit shall be obtained from the Los Angeles Board of Public Works in accordance with the City of Los Angeles Native Tree Protection Ordinance. Tree replacement shall comply with the ordinance and the terms of the removal permit. If construction would require pruning of any protected native tree, the pruning shall be performed in a manner that does not cause permanent damage or adversely affect the health of the trees. (EB-7)

New trees planted at station locations shall be regularly monitored by Metro to ensure healthy growth and development. Metro shall replace trees as close as possible to original locations. (EJ-30)