6.4 Biological Resources and Wetlands

6.4.1 Introduction

This section describes impacts under CEQA that would result from construction and operation of the CEQA Alternatives.

Discussions of existing conditions regarding biological resources and wetlands is provided in Chapter 4, Section 4.3.2, *Environmental and Regulatory Setting*. Additional information on biological resources and wetlands is provided in *VTA's BART Silicon Valley—Phase II Extension Project Special-Status Species Lists* technical report (ICF 2016).

6.4.2 Environmental Setting

This section discusses the existing biological resources along the alignment, which is the area of disturbance, including construction staging areas. Sources for the information provided in this section are described in Chapter 4, Section 4.3.1, *Introduction*.

6.4.2.1 Land Cover Types

The alignment would be within the central California Coast Range. Land cover types identified in the alignment consist of ruderal/disturbed, willow scrub/riparian woodland, and riverine (Guadalupe River and creeks). Land cover types in the alignment are highly fragmented, which diminishes their value in most cases. See Chapter 4, Section 4.3.2.1, *Environmental Setting*, for descriptions of vegetation and wildlife resources within each land cover type in the alignment.

6.4.2.2 Special-Status Species

Special-status species that may occur in or near the alignment consist of Central California Coast steelhead (*Oncorhynchus mykiss*), fall- run Chinook salmon (*Oncorhynchus tshawytscha*), California red-legged frog (*Rana draytonii*), western pond turtle (*Actinemys marmorata*), burrowing owl (*Athene cunicularia hypogea*), tricolored blackbird (*Agelaius tricolor*), and several species of bats. All federal and state special-status and protected species are described in Chapter 4, Section 4.3.2.1, *Environmental Setting*. Note that the species described in Section 4.3.2.1 may also have local protections (Bay checkerspot butterfly, burrowing owl, and tricolored blackbird) under the Santa Clara Valley Habitat Plan (SCVHP).

6.4.2.3 Jurisdictional Features

Waters of the United States and State

Waters of the United States and state within the alignment consist of three creeks and one river: Lower Silver Creek, Coyote Creek, Los Gatos Creek, and Guadalupe River. The streams and their respective floodplains are jurisdictional features regulated by the U.S. Army Corps of Engineers (USACE) and San Francisco Bay Regional Water Quality Control Board pursuant to Sections 404 and 401 of the federal Clean Water Act and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). These streams were not studied intensively for the project because the BART Extension would be constructed in underground tunnels 20 to 50 feet below the creek and riverbeds and, thus, would avoid the potential for impacts on jurisdictional waters of the United States and state.

Fish and Game Code Section 1602 Jurisdiction

Under Section 1602 of the California Fish and Game Code, the California Department of Fish and Wildlife (CDFW) has the authority to regulate work that will "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake." Therefore, the four streams and associated riparian vegetation within the alignment are subject to CDFW jurisdiction. However, because all project facilities would be underground and would not affect the bed, channel, or bank of these streams nor associated riparian vegetation, the project is not expected to result in impacts on resources subject to CDFW's Section 1602 jurisdiction.

6.4.2.4 Other Protected or Managed Biological Resources

Other protected or managed biological resources potentially occurring in the alignment include nesting birds and roosting bats, which are discussed in Chapter 4, Section 4.3.2.1, *Environmental Setting*.

6.4.3 Regulatory Setting

Federal regulations that are relevant to the project are discussed in Chapter 4, Section 4.3, *Biological Resources and Wetlands*.

State

California Endangered Species Act

The California Endangered Species Act (CESA) protects wildlife and plants listed as threatened and endangered under the act by the California Fish and Game Commission. It is administered by CDFW. The CESA prohibits all persons from taking species that are state-

listed as threatened or endangered except under certain circumstances; the CESA definition of *take* is any action or attempt to "hunt, pursue, catch, capture, or kill."

Section 2081 of CESA provides a means by which agencies or individuals may obtain authorization for incidental take of state-listed species, except for certain species designated as fully protected under the California Fish and Game Code. Take must be incidental to, and not the purpose of, an otherwise lawful activity. Requirements for a Section 2081 permit are similar to those used in the federal Endangered Species Act (ESA) Section 7 process. They include identification of adverse effects on listed species, development of mitigation measures that minimize and fully mitigate adverse effects, development of a monitoring plan, and assurance of funding to implement mitigation and monitoring.

California Native Plant Protection Act

The California Native Plant Protection Act (CNPPA) prohibits importation of rare and endangered plants into California, take of rare and endangered plants, and sale of rare and endangered plants. CESA prohibits take of listed plants except as otherwise authorized by the CNPPA, which ensures that state-listed plant species are protected when state agencies are involved in projects subject to CEQA.

Removal of rare and endangered plants for performance of a public service by a public agency or a publicly or privately owned public utility is exempt from the CNPPA. Accordingly, some activities associated with the project may be considered exempt from the CNPPA. However, evaluation of the potential for adverse effects on state-listed plant species is required pursuant to State CEQA Guidelines Section 15380(c)(1).

California Fish and Game Code

Protection for Individual Species

The California Fish and Game Code provides protection from take for a variety of species, defining *take* as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Certain species are considered fully protected, meaning that the regulations explicitly prohibit all take of individuals of these species, except for take required for scientific research, which may be authorized by CDFW in some situations. Sections 3511, 4700, 5515, and 5050 of the Fish and Game Code list fully protected birds, mammals, fishes, and amphibians and reptiles, respectively.

The regulations provide less stringent protection for other species, prohibiting most take but permitting CDFW to issue regulations authorizing take under some circumstances. Eggs and nests of all birds are protected under Section 3503, nesting birds (including raptors and passerines) under Sections 3513 and 3503.5, birds of prey under Section 3503.5, migratory non-game birds under Section 3800, and other specified birds under Section 3505.

Lake or Streambed Alteration Agreement (Sections 1600 to 1616)

Fish and Game Code Sections 1600 to 1616 regulate activities that interfere with the natural flow, or substantially alter the channel, bed, or bank, of a lake, river, or stream. Lakebed and streambed alteration activities are covered under Section 1602 for public and private entities. Requirements to protect the integrity of biological resources and water quality are often conditions of Lake or Streambed Alteration Agreements.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act in part implements the federal CWA to provide a mechanism for protecting the quality of the state's waters through the State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards (Regional Water Boards). Chapter 6, Section 6.15.2.1, *State Laws and Local Requirements*, describes the provisions of the Porter-Cologne Act.

The State Water Board and San Francisco Bay Regional Water Board have taken the position that the Porter-Cologne Act and basin plans developed pursuant to the act provide independent authority to regulate discharge of fill material to wetlands outside the jurisdiction of USACE. This applies specifically to isolated wetlands considered non-jurisdictional based on the *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers* decision (121 S.CT. 675, 2001), which limited USACE's jurisdiction over isolated wetlands.

The State Water Board and Regional Water Boards also regulate activities on creek banks that are above the ordinary high water mark. For example, clear span bridges with abutments above the ordinary high water mark would not need a Section 401 permit, but may require issuance of waste discharge requirements from the Regional Water Board. In addition, the State Water Board recently adopted General Waste Discharge Requirements for activities that occur in waters of the state that are outside of USACE jurisdictional waters. Coverage under these requirements can be obtained by filing a Notice of Intent with the Regional Water Board.

Regional

Santa Clara Valley Habitat Plan

In 2013, the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the Cities of Gilroy, Morgan Hill, and San Jose (collectively referred to as the Local Partners) adopted the SCVHP, a habitat conservation plan and natural community conservation plan. The SCVHP promotes the protection and recovery of covered species while accommodating planned public and private development, infrastructure, and operation and maintenance activities. The plan was developed in association with the U.S. Fish and Wildlife Service (USFWS) and CDFW in consultation with a stakeholder group and the general public.

Santa Clara Valley Water District

Under the jurisdiction of the District Act (Chapter 279, Assembly Bill 2435), the Santa Clara Valley Water District is authorized to enhance, protect, and restore streams, riparian corridors, and natural resources.

Local

City of San Jose Municipal Code Chapter 13.28

Chapter 13.28 of the San Jose Municipal Code deals with protection of street trees and heritage trees. This chapter defines street trees as any vegetation over 6 feet in height growing within a public right-of-way. Street trees themselves are not considered a sensitive resource unless they have been designated as a heritage tree by the City Council as per Section 13.28.330. Heritage trees are those that have been protected because of their size, location, unique qualities, or other special significance to the community. Civil penalties are established in Section 13.32.090 for individuals damaging a designated heritage tree. A permit is required for removal and replacement of heritage trees. Replacement ratios and species for trees removed are generally established by the City's Arborist Inspector during implementation. A Live Tree Removal Application or Permit Adjustment, depending on size, is also required for all trees proposed to be removed on multifamily residences, commercial properties, or industrial properties.

Additionally, the City of San Jose has adopted the Tree City U.S.A. Program. The Tree City U.S.A. Program is sponsored primarily by the Arbor Day Foundation. For a city to be considered a Tree City U.S.A., it must have a tree board or department, a tree care ordinance, a community forestry program with an annual budget of at least $2 per capita, and an Arbor Day observance and proclamation (Arbor Day Foundation 2015).

City of San Jose General Plan: Riparian Corridors

Envision San Jose 2040 General Plan (City of San Jose 2011) recognizes the value of riparian lands as a natural resource supporting diverse habitats. The plan contains the following policies for riparian corridors.

ER-2.1 Ensure that new public and private development adjacent to riparian corridors in San José are consistent with the provisions of the City's Riparian Corridor Policy Study and any adopted Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP).

ER-2.2 Ensure that a 100-foot setback from riparian habitat is the standard to be achieved in all but a limited number of instances, only where no significant environmental impacts would occur.

ER-2.3 Design new development to protect adjacent riparian corridors from encroachment of lighting, exotic landscaping, noise and toxic substances into the riparian zone.

ER-2.4 When disturbances to riparian corridors cannot be avoided, implement appropriate measures to restore, and/or mitigate damage and allow for fish passage during construction.

City of Santa Clara: Tree Protection

The City of Santa Clara regulates all trees and shrubs planted along public streets and within the associated rights-of-way. Additionally, the City of Santa Clara has adopted the Tree City U.S.A. Program for the past 27 consecutive years (City of Santa Clara 2015).

6.4.4 CEQA Methods of Analysis

Biologists compiled a variety of natural resource information for the project by consulting documentary sources, including the California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife 2015), the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants* (California Native Plant Society 2015), and the USFWS list of threatened and endangered species (U.S. Fish and Wildlife Service 2015). A reconnaissance survey was conducted on November 4, 2015, to confirm existing biological resources in the alignment. In addition, biologists reviewed the *Silicon Valley Rapid Transit Corridor Environmental Impact Statement and 4(f) Evaluation* (Santa Clara Valley Transportation Authority and Federal Transit Administration 2010) and associated biological technical studies prepared for that Final EIS to obtain additional background information on the alignment. The CNDDB, CNPS, and USFWS lists are included in the *Special-Status Species Lists* technical report.

6.4.5 CEQA Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the project would be considered to have a significant effect if it would result in any of the conditions listed below.

- 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 CDFW or 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 CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, 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 habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

6.4.6 Environmental Consequences and Mitigation Measures

This section identifies the impacts on biological resources, including wetlands, under CEQA and mitigation measures necessary to reduce the level of potentially significant impacts.

6.4.6.1 No Build Alternative

The No Build Alternative consists of the existing transit and roadway networks and planned and programmed transportation improvements (see Chapter 2, Section 2.2.1, *NEPA No Build Alternative*, for a list of these projects) and other land development projects planned by the Cities of San Jose and Santa Clara.

The No Build Alternative projects could result in effects on biological resources typically associated with transit, highway, bicycle, and pedestrian facilities, and roadway projects, as well as land development projects.

All individual projects planned under the No Build Alternative would undergo separate environmental review to identify effects on biological resources. Review would include an analysis of impacts and identification of mitigation measures to reduce potential impacts.

6.4.6.2 BART Extension Alternative

Construction of the BART Extension, including stations and associated infrastructure (ventilation facilities, systems facilities, station boxes, trackwork including crossovers, and cross passages), station campuses, and the Newhall Maintenance Facility, and the relocation of utilities could result in disturbance of special-status wildlife species. Oversized equipment, such as cranes, bulldozers, loaders, pavement breakers, excavators, and backhoes, would be used extensively. Demolition activities would primarily be at the construction staging areas along the alignment and at the four stations, two mid-tunnel ventilation facility sites, and two tunnel portals. In addition, cross passages are required every 460 to 750 feet between the two tunnels and may require surface ground treatment. Surface ground treatment would be a minimum of 200 feet from any river or creek.

Impact BART Extension BIO-1: Adversely affect a special-status species or habitat

Construction

Connection to Phase I Berryessa Extension

The connection to Phase I Berryessa Extension would be at grade near Las Plumas Avenue, north of Lower Silver Creek, and then enter the East Tunnel Portal. Approximately 900 feet south of the portal, the tunnel (under both Single-Bore and Twin-Bore options) would pass 25–30 feet beneath Lower Silver Creek near the U.S. Highway 101 (U.S. 101) crossing. Tunnel boring would occur underground and there would be no construction activities near Lower Silver Creek. Nesting birds have the potential to occur in street or urban trees and

could be impacted if tree removal or pruning occurred during the nesting season. Roosting bats have the potential to occur in existing buildings and trees in construction staging areas that would be removed. However, implementation of Mitigation Measures BIO-CNST-A, BIO-CNST-B, and BIO-CNST-C would ensure impacts on special-status species or habitat are *less than significant* for both the Twin-Bore and Single-Bore Options.

Alum Rock/28th Street Station

Alum Rock/28th Street Station would be in an area that is already urbanized. The nesting bird and bat discussion and mitigation provided above under *Construction, Connection to Phase 1 Berryessa Extension* also applies to this station.

Tunnel Alignment Near Coyote Creek

Construction underneath Coyote Creek would not disturb special-status species, including western pond turtle or Central California coast steelhead. Boring for the Twin-Bore and Single-Bore Options would occur approximately 20 feet and 55 feet below the Coyote Creek bed, respectively, and the use of heavy equipment in this area would occur entirely underground. Construction staging locations would occur in an already disturbed and urban area; however, roosting bats have the potential to occur in existing buildings and trees that would be removed during construction. The nesting bird and bat discussion and mitigation provided above under *Construction, Connection to Phase 1 Berryessa Extension* also applies to this section of the alignment. Because the Twin-Bore Option alignment would veer slightly to the north of the Single-Bore Option alignment near Coyote Creek; the Santa Clara Street bridge foundations are avoided. However, impacts would be similar for either option and would be *less than significant*. No mitigation is required.

Downtown San Jose Station (East and West Options)

Both the East and West Options of the Downtown San Jose Station would be in a downtown commercial area with high human disturbance, and use of heavy construction equipment and tunnel boring would occur underground. The nesting bird and bat discussion and mitigation provided above under *Construction, Connection to Phase 1 Berryessa Extension* also applies to this station.

Diridon Station (South and North Options)

Prior to reaching the Diridon Station South Option and Diridon Station North Option, the alignment would cross at least 40 feet and 45 feet below the Guadalupe River bed, respectively. Tunnel boring under the Guadalupe River would not disturb special-status bats in the riparian area, western pond turtles, or Central California coast steelhead and Chinook salmon.

For the Diridon Station South Option, the Twin-Bore and Single-Bore Options would occur approximately 20 feet and 50 feet below the Los Gatos Creek bed, respectively. Aboveground system facilities proposed at the Diridon Station South Option (both Twin-Bore and Single-Bore Options) would be constructed adjacent to Los Gatos Creek. For

the Diridon Station North Option, the Twin-Bore and Single-Bore Options would occur approximately 25 feet and 50 feet below the Los Gatos Creek bed, respectively, and the aboveground system facilities would be located west of Autumn Street. The Diridon Station North Option would also utilize a previously disturbed, triangular parcel for construction staging and/or underground station system facilities (Single-Bore Option) adjacent to the west of the Caltrain tracks.

The nesting bird and bat discussion and mitigation provided above under *Construction, Connection to Phase 1 Berryessa Extension* also applies to this station.

Along the Guadalupe River and Los Gatos Creek, tricolored blackbird surveys are required under the SCVHP and would be conducted before construction commences, as described in Mitigation Measure BIO-CNST-E. Avoidance and minimization measures and biological monitoring would be determined and established if individuals are found. As discussed in Section 6.14, *Water Resources, Water Quality, and Floodplains*, as part of compliance with the Construction General Permit, standard erosion control measures and other best management practices would be identified in a Storm Water Pollution Prevention Plan. Therefore, at the Diridon Station impacts would be *less than significant* with the implementation of mitigation measures.

Continuation of Tunnel Alignment

The continuation of the tunnel alignment would be in an urbanized area with extensive human disturbance. The ventilation structure locations along Stockton Avenue would be in a highly urbanized area with no onsite habitat. The nesting bird and roosting bat discussion and mitigation provided above under *Construction, Connection to Phase 1 Berryessa Extension* also applies to this section of the alignment.

Newhall Maintenance Facility

The Newhall Maintenance Facility would be in an urbanized area with extensive human disturbance. However, the SCVHP has designated the portion of the maintenance facility within the City of San Jose as occupied nesting burrowing owl habitat and a burrowing owl survey area (Santa Clara Valley Habitat Agency 2016). Construction activities could have a significant impact on burrowing owls if they occur in the ruderal habitats in the area, at the Newhall Maintenance Facility. The nesting bird discussion and mitigation provided above under *Construction, Connection to Phase 1 Berryessa* Extension also applies to the Newhall Maintenance Facility.

Santa Clara Station

The Santa Clara Station would be in an area that is already urbanized. The nesting bird discussion and mitigation provided above under *Construction, Connection to Phase 1 Berryessa Extension* also applies to this station. No other impacts on special-status species or habitat are expected to result from construction of this station.

Operation

Operation of the BART Extension elements discussed above are expected to have minimal impacts on special-status species because the majority of the alignment is in a tunnel or located in highly urbanized and disturbed areas. There would be *no impact* on special-status species or habitat.

Impact BART Extension BIO-2: Adversely affect a sensitive natural community

Construction

Connection to Phase I Berryessa Extension

Riparian habitat is found along the alignment at Lower Silver Creek; however, the connection to Phase I Berryessa Extension would go under Lower Silver Creek near U.S. 101 (for both the Twin-Bore and Single-Bore Options) and, therefore, would result in *no impact* on sensitive natural communities. No mitigation is required. However, a construction staging area (CSA) is proposed on an existing former UPRR bridge that crosses over Lower Silver Creek. Compliance with the City of San Jose's riparian setback policy and implementation of Mitigation Measure BIO-CNST-C would ensure impacts associated with construction of the BART Extension on sensitive natural communities would be *less than significant* for both the Twin-Bore and Single-Bore Options.

Alum Rock/28th Street Station

No sensitive natural communities occur at the Alum Rock/28th Street Station. There would be *no impact* for both the Twin-Bore and Single-Bore Options. No mitigation is required.

Tunnel Alignment Near Coyote Creek

Riparian habitat is found along the alignment at Coyote Creek; however, the Twin-Bore and Single-Bore Options alignment near Coyote Creek would be approximately 20 feet and 55 feet beneath the creek bed, respectively and, therefore, would result in *no impact* on sensitive natural communities. The 13th Street Ventilation Structure would be located one-quarter mile west of Coyote Creek. The site consists of an existing parking lot and building with no vegetated habitat onsite. No mitigation is required.

Downtown San Jose Station (East and West Options)

No sensitive natural communities occur at the location of either the Downtown San Jose Station East Option or the Downtown San Jose Station West Option. There would be *no impact* for both the Twin-Bore and Single-Bore Options. No mitigation is required.

Diridon Station (South and North Options)

Riparian habitat is found along the tunnel alignment, east of the Diridon Station South and North Options at the Guadalupe River and Los Gatos Creek. However, the tunnel alignment near the Guadalupe River would be at least 40 feet underground. Construction staging under State Route 87 near the Guadalupe River would comply with the City of San Jose's riparian

setback policy by avoiding the riparian area and would not impact special-status species. Additionally, implementation of Mitigation Measure BIO-CNST-D would further avoid any impact on riparian habitat and special-status species.

The tunnel alignment at Los Gatos Creek would be at least 20 feet underground. For the Diridon Station North Option, system facilities would be located on the north side of Autumn Street in a previously disturbed area. For the Diridon South Station Option, riparian habitat is found along Los Gatos Creek adjacent to the system facilities. Nonetheless, construction activities for both tunnel options would be located in an existing parking lot with associated buildings, would avoid the riparian habitat, and would comply with San Jose's riparian setback policy. Additionally, Implementation of Mitigation Measure BIO-CNST-D would further ensure that riparian habitat is mapped and protected during construction.

Continuation of Tunnel Alignment

No sensitive natural communities occur at the continuation of the tunnel alignment or at the ventilation structure locations along Stockton Avenue. There would be *no impact,* and no mitigation is required.

Newhall Maintenance Facility

No sensitive natural communities occur at the Newhall Maintenance Facility. There would be *no impact*, and no mitigation is required.

Santa Clara Station

No sensitive natural communities occur at the Santa Clara Station. There would be *no impact*, and no mitigation is required.

Operation

Riparian habitat is found along the alignment at Lower Silver Creek, Coyote Creek, Guadalupe River, and Los Gatos Creek. BART Extension operations would occur in highly developed urban areas, on previously developed sites and not in existing riparian habitat. Therefore, impacts associated with operation of the BART Extension on sensitive natural communities would be *less than significant*. No mitigation is required.

Impact BART Extension BIO-3: Adversely affect federally or state protected wetlands or waters of the United States or state

Construction

Connection to Phase I Berryessa Extension

The connection to Phase I Berryessa Extension would be at grade near Las Plumas Avenue, north of Lower Silver Creek, and then enter the East Tunnel Portal. South of the portal, the Twin-Bore and Single-Bore Options would pass approximately 25 feet and 30 feet beneath the Lower Silver Creek bed, respectively, near the U.S. 101 crossing. No construction

activities would occur aboveground at Lower Silver Creek. Therefore, there would be *no impact* on protected wetlands or waters of the United States or state at Lower Silver Creek for both the Twin-Bore and Single-Bore Options. No mitigation would be required.

Alum Rock/28th Street Station

No protected wetlands or waters of the United States or state occur at the location of the Alum Rock/28th Street Station. All aboveground construction activities would be in previously developed areas. Therefore, construction activities would have *no impact* on protected wetlands or waters of the United States or state at this location. No mitigation is required.

Tunnel Alignment near Coyote Creek

The tunnel alignment would pass at least 20 feet beneath Coyote Creek. Construction would not be required aboveground at Coyote Creek. West of Coyote Creek there would be a ventilation structure at 13th Street. The site consists of an existing parking lot and building with no habitat onsite. Therefore, construction activities would have *no impact* on protected wetlands or waters of the United States or state at this location. No mitigation is required.

Downtown San Jose Station (East and West Options)

No protected wetlands or waters of the United States or state occur at the locations of the Downtown San Jose Station East Option or the Downtown San Jose Station West Option. Therefore, construction activities would have *no impact* on protected wetlands or waters of the United States or state at this location. No mitigation is required.

Diridon Station (South and North Options)

For the Diridon Station North Option, tunnels for the Twin-Bore and Single-Bore Options would pass approximately 45 feet and 50 feet beneath the Guadalupe River bed, respectively. For the Diridon Station South Option, tunnels for the Twin-Bore and Single-Bore Options would pass approximately 40 feet and 50 feet beneath the Guadalupe River bed, respectively. As the alignment approaches the Diridon Station, it would continue under the Los Gatos Creek bed, approximately 25 feet (North Twin-Bore Option), 50 feet (North Single-Bore Option), 50 feet (South Twin-Bore Option) and 50 feet (South Single-Bore Option) beneath the creek. Therefore, there would be *no impact* on wetlands and waters of the United States or state at this location for both the Diridon Station North and South Options under either the Twin-Bore or Single-Bore Option. No mitigation would be required.

Continuation of Tunnel Alignment

No wetlands or waters of the United States or state occur along the tunnel alignment from Diridon Station to just north of Interstate 880. Therefore, while the aboveground Stockton Avenue ventilation structure would be in this alignment, there would be *no impact* on protected wetlands or waters of the United States or state at this location. No mitigation is required.

Newhall Maintenance Facility

No protected wetlands or waters of the United States or state occur at the location of the Newhall Maintenance Facility. Therefore, there would be *no impact* on protected wetlands or waters of the United States or state at this location. No mitigation is required.

Santa Clara Station

No protected wetlands or waters of the United States or state occur at the Santa Clara Station site. Therefore, there would be *no impact* on protected wetlands or waters of the United States or state at this location. No mitigation is required.

Operation

BART Extension operations would be in a highly urbanized area, on previously developed sites and not protected wetlands or waters of the United States or state. Therefore, impacts associated with operation on these sensitive natural communities would be *less than significant.* No mitigation is required.

Impact BART Extension BIO-4: Interfere with wildlife movement or impede use of wildlife nursery sites

Construction

Alignment

Noise and disturbance from heavy equipment and tunnel boring machines is not expected to disturb nesting birds or temporarily deter aquatic species such as central California coast steelhead, Chinook salmon, and western pond turtles from using aquatic sites. Construction of stations would necessitate removal and pruning of trees potentially supporting nesting birds, which would result in a significant impact. With implementation of Mitigation Measures BIO-CNST-A and BIO-CNST-B, impacts on wildlife movement or wildlife nursery sites would be *less than significant*.

Stations and Facilities

Existing trees at the Alum Rock/28th Street Station, Downtown San Jose Station (East and West Options), Diridon Station (South and North Options), Santa Clara Station, ventilation structures, and system facilities provide nesting habitat for birds. Tree removals at these location during the nesting season (February 1 through August 31, although some raptors may nest as early as January 1) may result in the destruction of active nests, which would be a significant impact. Implementation of Mitigation Measures BIO-CNST-A and BIO-CNST-B would ensure that impacts on nesting birds are *less than significant*.

Operation

BART Extension operations would not interfere with wildlife movement or impede use of wildlife nursery sites. There would be *no impact*, and no mitigation is necessary.

Impact BART Extension BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

Construction

Existing trees occurring along the alignment and at station and facility locations are predominately landscaping trees. Construction of the BART Extension would include removing landscaping and other trees. As described in Mitigation Measure AES-CNST-A, tree removal would comply with the overall intent and spirit of local tree ordinances as applicable.. Replacement trees would be planted to mitigate the effects. This impact would be *less than significant* with mitigation.

Operation

BART Extension operations are not expected to interfere with local policies or ordinances protecting biological resources. There would be *no impact*, and no mitigation is necessary.

Impact BART Extension BIO-6: Conflict with an adopted habitat conservation plan or local policies or ordinances protecting biological resources

Construction

The BART Extension would be within the SCVHP permit area. Within the permit area, the BART Extension would be within wildlife survey areas established by the SCVHA for tricolored blackbird at the State Route 87 CSA along Guadalupe River and at Diridon Station near Los Gatos Creek and for burrowing owl at the Newhall Maintenance Facility and would also be within the burrowing owl fee zone. Construction activities could result in a significant impact on these species if found. VTA would perform preconstruction surveys, and if necessary implement avoidance measures for tricolored blackbird (Mitigation Measure BIO-CNST-E) and burrowing owls (Mitigation Measure BIO-CNST-F). Additionally, the BART Extension would be within the burrowing owl fee zone, and fees will be paid to the SCVHA to offset any potential impacts on burrowing owls. The fee would be calculated by determining how much occupied burrowing owl habitat the BART Extension is removing. With implementation of these mitigation measures and compliance with the SCVHP burrowing owl fee zone, impacts would *be less than significant*.

Operation

The SCVHP *addresses* nitrogen deposition in the region as it relates to the degradation of serpentine grasslands and, specifically, habitat for Bay checkerspot butterfly. Bay checkerspot butterflies spend their entire life cycle on host plants, including but not limited to the dwarf plantain (*Plantago pusilla*) and California goldfields (*Lasthenia californica*), which mainly occur in serpentine soils, found in the region. Serpentine soils have low productivity and naturally low nitrogen levels. This allows the Bay checkerspot butterfly native host plants to thrive in serpentine soils. As a result of increased air pollution, nitrogen has been depositing into the serpentine soils, allowing for other nonnative invasive species to

persist and compete with the Bay checkerspot butterfly host plants. Serpentine soils are also important to a variety of native grasses. Nitrogen deposition poses threats to many resources in the region (Santa Clara County 2012). As discussed in Section 6.3, *Air Quality*, and Section 6.7, *Energy*, the BART Extension would actually decrease nitrogen output because of fewer vehicle miles traveled as a result of fewer vehicles on the road. Therefore, there would be *no impact*, and no mitigation is required.

6.4.6.3 BART Extension with TOJD Alternative

Impact BART Extension + TOJD BIO-1: Adversely affect a special-status species or habitat

Construction and Operation

Construction and operations impacts and mitigation measures would be similar to those discussed under the BART Extension Alternative for all locations. After implementation of mitigation measures, impacts would be *less than significant*.

Impact BART Extension + TOJD BIO-2: Adversely affect a sensitive natural community

Construction and Operation

Construction and operations impacts and mitigation measures would be similar to those discussed under the BART Extension Alternative for all locations. After implementation of mitigation measures, impacts would be *less than significant*.

Impact BART Extension + TOJD BIO-3: Adversely affect wetlands or other waters of the United States or state

Construction and Operation

Construction and operations impacts would be similar to those discussed under the BART Extension Alternative for all locations. Impacts would be *less than significant*, and no mitigation is required.

Impact BART Extension + TOJD BIO-4: Interfere with wildlife movement or impede use of wildlife nursery sites

Construction

The BART Extension would clear all of the area that would be needed for TOJD. Therefore, TOJD would not clear any more vegetation, and impacts would be *less than significant*. No mitigation is necessary.

Operation

The BART Extension and TOJD operations would not interfere with wildlife movement or impede use of wildlife nursery sites. There would be *no impact*, and no mitigation is necessary.

Impact BART Extension + TOJD BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

Construction and Operation

Construction and operations impacts and mitigation measures would be similar to those discussed under the BART Extension Alternative for all locations. After implementation of mitigation measures, impacts would be *less than significant*.

Impact BART Extension + TOJD BIO-6: Conflict with an adopted habitat conservation plan, or local policies or ordinances protecting biological resources

Construction and Operation

Construction and operations impacts would be similar to those discussed under the BART Extension Alternative for all locations. For operational impacts only, under the BART Extension with TOJD Alternative, long-term traffic and vehicle miles traveled would increase, resulting in an increase in nitrogen deposition. However, VTA will pay required fees to be in compliance with the Santa Clara Valley Habitat Conservation Plan. Therefore, impacts would be *less than significant*.

6.4.7 CEQA Conclusion

Under Impact BART Extension BIO-1 and Impact BART Extension + TOJD BIO-1 (Adversely affect a special-status species or habitat), Impact BART Extension BIO-2 and Impact BART Extension + TOJD BIO-2 (Adversely affect a sensitive natural community), Impact BART Extension BIO-4 and Impact BART Extension + TOJD BIO-4 (Interfere with wildlife movement or impede use of wildlife nursery sites), Impact BART Extension BIO-5 and Impact BART Extension + TOJD BIO-5 (Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance) and Impact BART Extension BIO-6 and Impact BART Extension + TOJD BIO-6 (Conflict with an adopted habitat conservation plan, or local policies or ordinances protecting biological resources), the BART Extension Alternative and BART Extension with TOJD Alternative has the potential to result in significant impacts under CEQA. The mitigation measures presented above would reduce impacts to a *less-than-significant* level.