2.4 Cumulative Impacts

2.4.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed Project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the Project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

2.4.2 Methodology

This cumulative impact analysis was prepared in accordance with the 2005 guidance developed by Caltrans in conjunction with the FHWA and the United States EPA. Consistent with that guidance, the extent of analysis is based on the size and type of the project proposed, its location, potential for direct and indirect impacts on environmental resources, and the health of any potentially affected resource. The following eight steps summarize the process and approach to this analysis:

1. Identify/define the project-specific resources to consider in a cumulative effect analysis. List each resource area for which the Project could cause direct or indirect impacts. If a project will not cause direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource, and need not be further evaluated.
2. Define the geographic boundary or Resource Study Area (RSA) for each resource to be addressed in the cumulative impact analysis.
3. Describe the current health and the historical context of each resource.
4. Identify the direct and indirect impacts of the proposed Project that might contribute to a cumulative impact on the identified resources.

5. Identify the set of other current and reasonably foreseeable future actions or projects and their associated environmental impacts to include in the cumulative impact analysis.
6. Assess the potential cumulative impacts.
7. Report the results of the cumulative impact analysis.
8. Assess the need for mitigation and/or recommendations for actions by other agencies to address a cumulative impact.

As stated in the eight-step process summarized above, if a proposed project would not cause direct or indirect impacts on a resource, the Project would not contribute to a cumulative impact on that resource, and, therefore, that resource would not need to be further evaluated with respect to determining whether the proposed project would result in a potential cumulative impact.

Based on the analysis completed for the resources listed below, it was determined that the proposed Project would not result in direct or indirect impacts to these resources; accordingly, these resources were not included in the cumulative impact analysis for this Project:

- Farmland/Timberlands
- Community Character and Cohesion
- Hydrology/Floodplains
- Geology/Soils

2.4.3 Cumulative Impact Analysis

A list of the reasonably foreseeable projects associated with the cumulative impacts analysis is presented in **Table 2-70: Cumulative Projects List**. The definition of the Resource Study Area (RSA) for each of the respective resources addressed determines which projects are included in the associated analysis.

The following were evaluated for potential cumulative impacts:

- Traffic and Transportation
- Visual/Aesthetics
- Water Quality and Storm Water Runoff
- Cultural Resources
- Paleontological Resources
- Air Quality
- Noise
- Biological Resources

Table 2-70: Cumulative Projects List

Project Name	Location	Project Description	Est. Date of Completion	Source
TRANSIT				
California High Speed Rail Station at ARTIC	ARTIC station, located south of Katella Ave, east of SR 57, and west of the Santa Ana River	The California High Speed rail system, which is currently under construction in other parts of the state, is planned to end at the ARTIC station in Anaheim, CA at the end of phase 1.	2029	California High-Speed Rail Authority, Connecting California 2014 Business Plan (April 2014)
ROADWAY				
I-5 Enhancement Project	SR 57 to SR 55	Proposing to add a second carpool lane on each side of the freeway as well as removing the HOV on and off ramps at I-5 and Main Street.	2019	OCTA Projects and Programs, I-5 (SR 57 to SR 55) (June 2017)
SR 57 Pavement Project	South of Angel Stadium in Anaheim to south of SR 90	Replacement of broken slabs and resurfacing concrete pavement on over 46 lane miles of SR 57 in the cities of Orange, Anaheim, Placentia, and Fullerton. The Project will also add rubberized asphalt, increase the visibility of lane delineation, and extend the service life of the highway.	2018	Caltrans Media Advisory, (October 2017)
Orangewood Avenue Bridge Widening Project	Santa Ana River to SR 57	Widen the Orangewood Avenue bridge over the Santa Ana River and Orangewood Avenue under the SR-57 Freeway bridge. Improvements will add one additional westbound lane, add sidewalks on both sides of the bridge and accommodate the implementation of future bike lanes to improve the multimodal service for this corridor. Will also provide a retaining wall, water quality treatment devices, relocate street lights, and modify traffic signals.	2019	City of Anaheim, City Council Agenda Report (January 2018)

Table 2-70: Cumulative Projects List (continued)

Project Name	Location	Project Description	Est. Date of Completion	Source
Orangewood Avenue Street Widening Project	State College Boulevard to the Santa Ana River	Widen Orangewood Avenue from four to six lanes to accommodate an additional lane in each direction. Work to include modifying traffic signals, relocating utilities, upsizing water and sewer facilities, providing new curb and gutter, asphalt roadway, sidewalk, landscaped parkways, raised landscaped medians, street lights, a changeable message sign, and water quality treatment devices.	2019	City of Anaheim, City Council Agenda Report (January 2018)
Class II bike lane on Cerritos Avenue and Douglas Road	From S Haster Street to Katella Avenue	Proposed Class II bike lane on Cerritos Avenue and Douglas Road, crossing SR 57 at the Union Pacific Railroad and connecting to the Santa Ana River Trail.	Unknown	City of Anaheim, Bicycle Master Plan (May 2017)
LARGE-SCALE REDEVELOPMENT (100,000+ SQFT)				
The Platinum Triangle	920 acres between I-5 and the Santa Ana River, and between Cerritos Ave and Orangewood Ave (including office parks south of Orangewood Ave)	Large scale redevelopment and various sidewalk related projects. Mostly multiple mixed use developments. Various projects include: 1. Stadium lofts 2. Gateway Apartment Homes 3. Stadium Towers shops 4. Park Veridian 5. Jefferson Platinum Triangle 6. 1818 Platinum Triangle 7. Anavia 8. Anaheim Apartment Communities 9. Avalon Angel Stadium 10. A-Town Metro 11. LT Platinum Center 12. Jefferson Stadium Park 13. The George 14. Platinum Vista 15. Katella Grand 16. Gateway Apartment Homes Phase II 17. Trumark Homes	All development scheduled to end no later than 2022	City of Anaheim, Platinum Triangle Project Description (June 2017)
Simply Self Storage industrial building	1600 N. Glassell Street, Orange, CA	A proposal to demolish three existing buildings and construct a 156,654-square foot., three-story industrial building for use as a self-storage facility with related on-site improvements. Approved 6/5/17.	Unknown	City of Orange, Planning Commission Agenda (June 2017)

Table 2-70: Cumulative Projects List (continued)

Project Name	Location	Project Description	Est. Date of Completion	Source
Outlets at Orange redevelopment area	General area around The Outlets at Orange shopping center (1 W. City Blvd, Orange, CA)	Large scale redevelopment project with multiple mid-size apartment complexes being proposed for the area in and around the current Outlets at Orange shopping center. Projects include The Oakmont Senior Living tower, AMLI Residential, Chapman Apartments, Orange Collection developments.	Unknown	City of Orange, News Flash: Economic Development (April 2017)
MEDIUM-SCALE REDEVELOPMENT (50,000 – 100,000 SQFT)				
Town and Country Mixed Use building	999 Town and Country Road, Orange CA	Medium scale redevelopment project aims to build a 98,551-square foot office building/residential complex with 449 surface parking spaces.	Unknown	City of Orange, Current Projects Notices and Related Environmental Documents, (June 2017)
Metrolink Parking Structure at the Orange Transportation Center	Orange Transportation Center, Old Towne, Orange, CA	To provide for current demand and future growth, OCTA and the city of Orange are constructing a new shared use multi-story parking structure. Designed to reflect the community's historic setting, the parking structure will provide over 600 parking spaced, bike lockers, car charging stations and include solar panels on the top level. This joint use parking structure will increase accessibility to and from the Orange Transportation Center and downtown Orange.	Unknown	OCTA, Rail Projects (June 2017)
Park Vue Inn	1570 S Harbor Blvd, Anaheim, CA	To demolish an existing two-story 86-room hotel with restaurant and retail uses and construct a new seven-story, 180-room hotel with a restaurant and retail uses with smaller interior building and landscape setbacks, fewer trees in the surface parking lot, and less parking spaces than required by the Zoning Code.	Unknown, approved December 2015	City of Anaheim, Anaheim Resort, Development Status (December 2017)
Cambria Hotel and Suites	1721 S Manchester Ave	The applicant requests approval of a final site plan to construct a 12-story, 352-room hotel, 15,000 square feet of restaurant space, and one-level of subterranean parking.	2019	City of Anaheim, Anaheim Resort, Development Status (December 2017)

Table 2-70: Cumulative Projects List (continued)

Project Name	Location	Project Description	Est. Date of Completion	Source
Hampton Inn & Suites	100 W Katella Avenue	Construction of a 178-room hotel.	2018	City of Anaheim, Anaheim Resort, Development Status (December 2017)
Anaheim Plaza	1700 S Harbor Blvd, Anaheim, CA	To demolish an existing hotel and reconstruct a 580-room, 8-story luxury hotel with 50,000 square feet of meeting space - 25,600 square feet of restaurant space - 20,188 square feet of concierge lounge space - fewer parking spaces than required by the Code - and, a request to adopt a development agreement between the city of Anaheim and Good Hope International for the proposed hotel project.	2021	City of Anaheim, Anaheim Resort, Development Status (December 2017)
RECREATION				
Union Pacific Railroad bike path	Between Harbor Blvd. and Orange City limit	Proposed bicycle and pedestrian trail that follows the Union Pacific railway into the city of Orange. Path intersects numerous large streets as well as SR 57.	Unknown	City of Anaheim, Bicycle Master Plan (May 2017)

Source: CIA 2018.

2.4.3.1 Traffic & Transportation

The RSA for the traffic and transportation impact analysis includes the project area which encompasses the approximately 1-mile section of SR 57 from PM 11.5 to PM 12.5. The area encompasses ramp terminus intersections, all freeway segments, and the intersections leading to the freeway ramps. Currently, the RSA defined by the cumulative impact analysis shows the LOS of the SR 57 section and intersections adjacent to the Project as LOS D.

All Build Alternatives would result in temporary, short-term construction impacts to access and circulation, including detours and delays. Such impacts include full closures during off-peak times, lane modifications, mainline lane closures, and ramp closures. A TMP was prepared for the Project that includes strategies and measures to avoid and minimize disruption to the local access, roadways, and bike and pedestrian facilities during construction. Operations of the mainline of northbound SR 57 may be impacted across all alternatives positively, with mobility and congestion improvement, or with maintenance of or slightly improved LOS. Intersection LOS and ramp LOS is anticipated to be impacted differently across alternatives due to variations among design features.

Potential contributions to cumulative impacts for traffic and transportation may result from reasonably foreseeable future projects such as the California High Speed Rail, I-5 Enhancement Project, SR 57 Pavement Project, Orangewood Avenue Bridge Widening Project, and Orangewood Avenue Street Widening Project. These transportation projects are anticipated to potentially result in a cumulative impact on traffic and transportation patterns in the region.

This Project, along with other planned transportation projects, is anticipated to improve congestion and mobility within the region. It is not anticipated that the Project would cumulatively contribute to adverse impacts on traffic conditions and transportation facilities in conjunction with past, present, and future transportation projects.

2.4.3.2 Visual / Aesthetics

The RSA for the Visual/Aesthetic impact analysis includes the SR 57 corridor within the project area and the scenic resources that can be seen from the SR 57 freeway mainline, SR 57 on-ramps and ARTIC station platform. The landscape that is included in the impact analysis includes foreground views of urban infrastructure, such as the ARTIC, Honda Stadium, and SR 57 structure as well as the banks of the Santa Ana River. The analysis also includes background views of the San Bernardino and Saddleback Mountain formations.

The Project would not construct any structures that would be dominant or prominent along the scale, quality, and character of the existing environment. All additions to existing structures and newly constructed ramps would only result in temporary construction impacts on visual resources but not in permanent visual impacts to viewers. Due to the design of the Project, the scale, character, and quality of the surrounding views and infrastructure will not change with implementation of the Project. With incorporation of the project measures to offset temporary

visual impacts, such as replacement in- kind of disturbed landscaping within the corridor and plans to preserve existing plants where possible, revegetating disturbed areas and addressing corridor themes such as structure aesthetics, there would be no cumulative impacts on visual resources from the Project.

Any future developments or improvements for the SR 57 corridor would be subject to the same design standards. The corridor is already developed as a highly urbanized facility. It is not anticipated that the proposed Project or future projects would add to cumulative impacts on visual and aesthetic quality, character, or resources.

2.4.3.3 Water Quality & Storm Water Runoff

The RSA for the Water Quality and Storm Water Runoff impact analysis includes the Santa Ana River watershed which encompasses water features such as floodplains, aquifers, and surface waters in vicinity to the Project. The geographic context for the analysis of cumulative impacts associated with groundwater in the area is the watershed underlain by the Orange County Groundwater Management Zone. The RSA for water quality includes the watersheds and receiving waters that are potentially affected by the Project. Located between the San Gabriel Mountains and the San Bernardino Mountains to the north, and the San Jacinto Mountains to the east, the Orange County Groundwater Basin (OCGB) is recharged approximately 1.3 miles north of the project area. A section of the Santa Ana River's Reach 2 is included within the project area. The Santa Ana River that flows through the project site carries surface flows (e.g., storm water, water from precipitation events, surface run-off, and irrigation flows) through the study area, and continues approximately 12 miles southwest before draining into the Pacific Ocean near Newport Beach.

The project site is in a highly urbanized area and has a high amount of impervious, paved surfaces due to development. Storm water runoff is conveyed at the shoulders of the Santa Ana River channel by dikes leading to drainage inlets. The existing Orangewood Avenue ramps drain to the storm-drain line that flows along Orangewood Avenue until it discharges to the Santa Ana River. The existing Katella Avenue ramps drain to the culvert system that follows the right of way south until it discharges to the Santa Ana River. The Project crosses the Santa Ana River approximately 1.3 miles downstream from the OCWD Recharge Basins. The Santa Ana River Reach 2, the receiving waters of the project site, is listed by the Final California 2012 Integrated Report as impaired for the pollutant indicator bacteria which may pose health risks for recreational uses and groundwater recharge into the Orange County Aquifer upstream from the Project.

Work in the Santa Ana River to widen the Santa Ana River bridge may potentially impact the receiving and downstream waters of the Santa Ana River. Construction activities include demolition, paving, excavation, extending the bridge piers, slope protection and water diversion. These activities have the potential to result in increased localized erosion and polluted storm water runoff that could enter Santa Ana River Reach 2, affecting water quality and clarity downstream. Anticipated changes associated with sediment transport to receiving water bodies

would be a decrease in water clarity, which would cause a decrease in aquatic plant production, and obscure sources of food, habitat, refuges, and nesting sites for fish downstream of the section of the river in the project site. It is possible that dewatering activities could result in the release of unsuitable and untreated water if discharged directly to the environment. Water diversion activities would also have the potential to impact water quality, especially during installation and removal of the diversion system.

The result of the Project's wider cross section and increase in impervious surfaces will result in additional runoff being transferred to the storm water conveyance facility which will likely have some incremental effect on turbidity at the discharge location and in the downstream receiving waters. The result of the project's wider cross section and impervious pavement also would not result in the Santa Ana River Reach 2's increase in volume of downstream flow at the discharge location and in the downstream receiving waters.

Compliance with applicable SWRCB and Santa Ana RWQCB regulations would ensure that water quality is maintained to the maximum extent practicable for potential development projects within the RSA. With implementation of the project features there are no adverse impacts to water quality and no Avoidance, Minimization and/or Mitigation Measures are required. Therefore, there would be no water quality impacts associated with implementation of the Northbound SR 57 Improvement Project, and the Project would not have a cumulatively considerable contribution to the cumulative effects related to water quality.

Construction of new development in addition to the Project throughout the RSA could result in the erosion of soil, thereby cumulatively degrading water quality. In addition, the increase in impervious surface area resulting from future development may also adversely affect water quality by increasing the amount of storm water runoff, transportation-related pollutants, and associated TDCs entering the storm drain system. New development, however, would have to comply with existing regulations regarding construction practices that minimize risks of erosion and runoff. This would minimize degradation of water quality at individual project construction sites. Consequently, cumulative water quality impacts would be minimized during the construction and operational phases of the future projects.

2.4.3.4 Cultural Resources

The RSA for the Cultural resources impact analysis includes the Area of Potential Effects (APE), which is subdivided into direct and indirect APEs. The Direct APE measures 34.26 acres and encompasses all areas that may be directly and physically impacted by the Project. Direct APE refers to physical impacts generally limited to proposed and existing right of way (ROW) and include horizontal and vertical APE. Vertical APE is the maximum depth of any project related ground disturbing work. For this Project, a maximum depth of 12 feet of ground disturbance for pier walls and less than 5 feet for other activities is anticipated. The Direct APE consists of the Project Limits of Disturbance plus a 10-foot buffer. The Indirect APE is a 100-foot buffer around the Direct APE and incorporates whole parcels where the buffer intersects a parcel. Indirect APE

incorporates effects such as visual, noise, or other effects and generally include all properties that are adjacent to the proposed ROW unless they are undeveloped. The RSA is within an urban environment and has been completely disturbed by construction of SR 57, existing roads, modern commercial and residential development, and urban infrastructure.

The deepest excavation work would occur within the Santa Ana riverbed for extending the pier walls in support of widening the Santa Ana River Bridge. The segment of the Santa Ana River within the RSA has been found to be historically subject to alluvial deposition and episodic scouring during flooding prior to construction of flood control facilities in the 1940s and 1970s. A review of historic topographic maps shows that this segment of the Santa Ana River has been in the same location through time and has been subject to additions of artificial fill during channelization of the river and prior construction of the bridges. Given the historic hydrogeologic setting of the Santa Ana River section in the RSA, the riverwash sediments would be too active to contain buried archaeological deposits. The previous disturbances within the river from construction of the existing freeway and annual ground disturbing activities conducted by the OCFCD as well as the lack of prehistoric archaeological resources in the vicinity of the river result in a low potential for subsurface archaeological deposits within this segment of the Santa Ana River.

A Sacred Land File search from the Native American Heritage Commission (NAHC) also failed to indicate the presence of Native American sacred lands or cultural resources within one-mile of the APE. Tribes were contacted for due diligence to support this finding. No prehistoric resources were identified through the record searches, Native American consultation, and the field survey.

Four bridge structures are within the APE and are listed as Category 5 (Not Eligible for the NRHP) in Caltrans Historic Bridge Inventory. The Section 106 findings for this Project is No Historic Properties Affected. As the only historic built environment resource, the former BNSF Railroad, will not be impacted, no historic built environment resources will be impacted. Previous ground disturbance within the river, as well as annual ground disturbing activities, and the lack of prehistoric archaeological resources in the vicinity of the river result in a low potential for subsurface archaeological deposits within the project APE. In addition, no prehistoric resources were identified in the APE. The Section 106 findings for the Project is No Historic Properties Affected as the only historic built environment resource, the former BNSF Railroad, would not be impacted. Finally, in the event that undiscovered resources are encountered during project construction, Caltrans Standard Specifications would address these finds and reduce the potential for impacts. Therefore, the Project would not result in impacts to cultural resources and would not result in a cumulative effect on cultural resources.

2.4.3.5 Paleontological Resources

The RSA for Paleontological resources includes 9.2 acres of direct impact within the project area's 1-mile boundary and a 5-mile radius around the boundary. Maximum depth of project excavations is approximately 10 feet to 12 feet for pier walls in the Santa Ana River. Outside of the walls, less than five feet of impacts are planned and will primarily be in artificial fill which has a low potential of disturbing paleontological resources. The surface of the Project is mapped as late Holocene very young wash deposits and Holocene to late Pleistocene young alluvial fans. No records of fossil localities were found from late Pleistocene alluvial sediments within the study area or a 5-mile radius.

During the field survey, only the surface of the late Holocene wash sands in the Santa Ana River and the Holocene to late Pleistocene young alluvial fans could be observed. No fossils were encountered during the survey. Based on the maximum planned depth of excavations and the results of the records search and survey, fossils are unlikely to be encountered during construction activities. Auguring and pile driving activities may rotate up fragmentary fossils but will lack context including depth/elevation, formation identification and other elements that are critical to scientific significance. An unprovenanced fossil will only be significant if the specimen recovered is a species that is currently not known in the area. Therefore, the Project will not contribute to cumulative effects on the paleontological resources of the area.

2.4.3.6 Air Quality

The RSA for the Cultural resources impact analysis includes the South Coast Air Basin (SCAB). The Basin is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

The South Coast Air Basin is currently designated as a state and federal nonattainment area for O3 and PM2.5. The South Coast Air Basin is designated as a federal attainment and state nonattainment area for PM10. The South Coast Air Basin is designated as attainment and/or unclassified for all other pollutants.

The SR57 Northbound Improvement Project was included in the regional emissions analysis conducted by the SCAG for the conforming 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy. The Project's design concept and scope have not changed significantly from what was analyzed in the regional emission analysis. This analysis found that the plan, which takes into account regionally significant projects and financial constraint, will conform to the SIP(s) for attaining and maintaining the NAAQS as provided in Section 176(c) of the Clean Air Act. FHWA determined that the RTP conforms to the SIP on June 4, 2012, that Amendment #1 to the RTP conforms to the SIP on July 15, 2013, and that Amendment #2 to the RTP conforms to the SIP on December 15, 2014.

The SR 57 Northbound Improvement Project is also included in the SCAG 2019 FTIP. The Project's open-to-traffic year is consistent with (within the same regional emission analysis period as) the construction completion date identified in the federal TIP and RTP. The federal TIP gives priority to eligible Transportation Control Measures (TCMs) identified in the SIP and provides sufficient funds to provide for their implementation. FHWA determined that the TIP conforms to the SIP on December 17, 2018.

The Project will result in a 2% increase in VMT and a corresponding 2% increase in CO2 emissions. However, the CO2 emissions will decrease by 25% as compared to existing conditions. As such, the Project is not expected to affect GHG emissions. Construction emissions will produce temporary GHG emissions from the operation of equipment, but there will likely be long-term GHG benefits with the new roadway's smoother pavement surfaces.

Because the Project conforms to regional transportation plan's conformity requirements imposed by the EPA and SCAQMD, the Project is not expected to contribute to cumulative SCAB air quality impacts.

The Project is one in a series of proposed transportation projects planned for the region. These projects were also included in the regional air quality analysis and are subject to conformity standards. Therefore, the proposed future projects are not anticipated to contribute significantly to cumulative impacts on air quality.

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its incremental change in emissions when combined with the contributions of all other sources of GHG.

2.4.3.7 Noise

The RSA for the Noise impact analysis includes the surrounding land uses of the project site. This includes the residential neighborhoods, hotels, and commercial retail uses adjacent to the project site that may be sensitive towards the noise levels of the SR 57 Project.

Noise analysis focuses on a comparison of the existing noise level from traffic at the time of the NOP's existing conditions of the site and the future build noise level. The noise analysis entails looking at the setting of the noise impact and then how large or perceptible any noise increase would be in the given area. Key considerations include the uniqueness of the setting, the sensitive nature of the noise receptors, the magnitude of the noise increase, the number of residences affected, and the absolute noise level. Traffic noise impacts are considered to occur at receptor locations where predicted design-year noise levels are 12 dB or greater than existing noise levels, or where predicted design-year noise levels approach or exceed the NAC for the applicable activity category.

Changes in traffic noise levels between existing and future with-project conditions at noise-sensitive receptors would range from a -1.8 decibel (dB) decrease to a 1.9 dB increase. The modeling result of less than 1 dBA increase between existing noise levels and the Build Alternatives would be barely perceptible to the human ear. Therefore, no significant noise impact would occur as a result of the Project and would not contribute significantly to cumulative impacts on the existing noise environment.

It is uncertain that the proposed future developments related to traffic and transportation in addition to the proposed Project would not be anticipated to contribute significantly to cumulative impacts on the noise environment. Future studies for those projects would have to be taken into consideration.

2.4.3.8 Biological Resources

The BSA for the Biological resources impact analysis includes the Project's proposed ground disturbance footprint and an approximately 500-foot buffer to include nearby areas that are not merely adjacent to the project footprint that may be impacted directly and indirectly.

This area includes three land cover types: developed/disturbed land from anthropogenic activities, the Santa Ana River (i.e. WoS/WoUS), and ornamental vegetation. Like most of the surrounding lands, biological resources such as threatened and endangered species and natural communities are minimal due to anthropogenic disturbance. None of the vegetation communities and land cover types detected within the Project are characterized as sensitive or unique natural communities. It is worth noting that Natural Communities of Special Concern are those locales that include rare plant and animal species, or are habitats with unique biological functions and values.

Where potential temporary impacts to biological resources have been identified, the application of specific measures has been recommended to avoid, minimize, and offset adverse effects. These measures include replacing any landscaping in kind post-construction. It is anticipated that this Project will not result in the permanent loss of any native habitats, sensitive, or unique natural communities due to their minimal or lack of occurrence in the BSA. Due to the lack of biological resources and wildlife corridors in the BSA, the Project is not anticipated to contribute significantly to cumulative impacts.

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